

Global Climate Change and the Fragmentation of International Law

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Born into the wider body of international law, the climate regime needs to be understood in light of preexisting regimes. By drawing on the current debate about fragmentation in international law, this article highlights challenges for international lawyers and policymakers in navigating the relationship between the climate regime and the biodiversity regime, and the relationship between the climate regime and the multilateral trading system. This article concludes that a narrow focus on conflicts misrepresents the multifaceted nature of climate change and precludes an adequate jurisprudential understanding of the relationship between the climate regime and other regimes. An improved understanding, particularly with respect to interactions with the biodiversity regime, requires a broadening of the debate that takes account of the institutional aspects of these relationships that may allow enhanced political cooperation and coordination. Further, international law, and in particular the emerging concept of systemic integration, has the potential to make a positive contribution to the climate-trade interplay.

I. INTRODUCTION

Anthropogenic climate change has a number of wide-ranging impacts on the natural environment and on society, with various human activities and sectors of society contributing to increased concentrations of greenhouse

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gases in the atmosphere (see generally IPCC 2007). Different aspects of the problem are covered by a range of international legal instruments, covering topics such as biological diversity, desertification, ozone depletion, oceans and seas, energy, and trade and investment (see, *inter alia*, Doelle 2004a; Yamin and Depledge 2004: 509–43; van Asselt, Gupta, and Biermann 2005; Oberthür 2006). Notwithstanding these diverse instruments, the main body of international law on climate change is to be found in the United Nations Framework Convention on Climate Change (UNFCCC 1992) and its Kyoto Protocol (Kyoto Protocol 1997), as well as the decisions taken by the Conference of the Parties (COP) to the UNFCCC and the Conference of the Parties serving as Meeting of the Parties (COP/MOP) to the Protocol.

Because of the intricate connections between climate change and other issue areas, one may observe a number of interrelationships between the international climate change treaties and other international legal regimes. Some degree of normative interaction and overlap is likely inevitable given the scope of the phenomenon, and perhaps even necessary for integrated efforts to limit greenhouse gas emissions and mitigate the detrimental impacts of a changing climate. What is more, such overlap can also breed synergies, both substantive and institutional, and may thus have beneficial consequences. However, on a systemic level, normative interaction may give rise to substantive conflicts between different areas of law. In the broader debate among international lawyers, such tensions between regimes have been addressed in the context of what has been described as the fragmentation of the international legal order, a concern that has prompted a special study by the International Law Commission (ILC 2006).

This article aims to place the climate regime within the debate on the fragmentation of the international legal order. While our starting point clearly is an epistemic interest in climate policies and their legal ramifications, we believe this exercise can yield results that will both help better understand the role of the climate regime in the larger body of international law, as well as add new aspects to the current debate on fragmentation. The fragmentation of international law related to climate change is examined through an analysis of two key areas of regime overlap: the relationship between the climate and biodiversity regimes, and the relationship between the climate regime and the multilateral trading system.

Each issue area is representative of a larger body of rules. The biodiversity regime stands for the increasingly autonomous subsystem of international environmental law, which shares many principles and instruments with the climate regime. Given these commonalities, one would anticipate little conflict between multilateral environmental agreements. World trade law has been chosen for its suitability as an example of how regimes with very different objectives and principles can give rise to substantial tensions. While the thorny interaction of environmental and trade policies has been subject to scholarly analysis from a variety of angles, the relationship between climate policies and international trade law is particularly complex

and has not yet been addressed systematically from the perspective of normative fragmentation.

The interactions with the biodiversity regime provide a prime example of how—in the context of fragmentation—international environmental law poses challenges to international lawyers and policymakers, which are often distinct from those raised by general international law, and which the ILC has addressed only marginally to date. First, we find that even the relatively broad definition of conflict as suggested by the ILC does not cover all divergences between environmental treaties. Second, we show that not only treaties can create conflicts, but also decisions by treaty bodies. Third, although different norms may apply in a particular situation, we argue that they do not necessarily point in diverging directions. On the other hand, the interactions between climate policies and free trade present two main challenges: the voluntary nature of certain climate change mechanisms with trade implications and the need to address differences in participation and stringency in commitments. In both cases, recourse to international trade law is likely, and the insights from the ILC only clarify the relationship to a limited extent.

In this article, we argue, first, that a narrow focus on conflicts misrepresents the multifaceted nature of climate change and precludes an adequate jurisprudential understanding of the relationship between the climate regime and other regimes. An improved understanding requires a broadening of the debate to the institutional aspects of these relationships with the aim of enhanced political cooperation and coordination. Second, we posit that international law and in particular the emerging concept of systemic integration are shown to play a potential role in the climate-trade interplay. Finally, by way of inference, we suggest that, in the case of the climate regime, international law provides important mechanisms to deal with the increasing fragmentation of its subsystems, but that states need to examine the extent to which these mechanisms need to be complemented by political strategies to ensure an adequate degree of coherence.

II. THE FRAGMENTATION OF INTERNATIONAL LAW

In a sense, a fragmented international legal order is inevitable given the realities of contemporary international relations. Since the Second World War, states have increasingly opted to organize their international affairs through a number of specialized international organizations, focusing on various issue areas. This has led—mainly in recent years—international legal scholars to focus on the possible implications of the increased specialization and diversification in international law, including the overlap of substantive rules and jurisdictions.

The fragmentation of international law, only touched upon occasionally by academic authors previously (see, notably, Simma 1985; Barnhoorn and

Wellens 1995), came to the forefront of international legal debate in 2000, when it was included in the work program of the ILC. A first study by Hafner (2000) indicated that the issue was one that should be looked at mainly in terms of “risks,” “threats,” or other negative connotations. However, international legal scholars quickly realized that fragmentation might also have positive effects (Simma 2004; ILC 2006).

Fragmentation is seen as detrimental to international law, since, as Hafner (2000: 341) observes: “Doubts could be raised as to whether international law will be able to achieve one of its primary objectives, dispute avoidance and the stabilization of international relations and, thus, achieve its genuine function of law. The credibility, reliability and, consequently, authority of international law would be impaired.” One argument often used is that the growing body of international legal rules threatens the unity and coherence of international law, as various specific rules are created that allow international judicial institutions to come to diverging decisions (Dupuy 1999; Kingsbury 1999). Benvenisti and Downs (2007) argue that another important drawback is that the fragmentation of international legal systems can be used by a handful of powerful states to their advantage. These states have the flexibility to opt for a mechanism that best serves their interests (so-called “forum shopping”; see Hafner 2000: 343; Benvenisti and Downs 2007: 628), and can create new agreements if the old ones no longer serve their interests. Finally, it has been argued that a fragmented international legal system could lead to (some degree of) prioritization of certain fields of international law over others, for example, the dominance of international economic law over international environmental law or—less likely—vice versa (Craven 2003: 5; see also ILC 2006: §493). Indeed, such prioritization may be inevitable, as “each legal regime will naturally assert itself as the proper forum in which to address the situation, claiming superior status for its particular descriptions and concerns” (Khrbtukova 2007: 4).

Nevertheless, in some legal writing, fragmentation is also viewed as a positive indicator of increased diversity in legal norms and the expansion of international law to previously unregulated fields (Lindroos and Mehling 2005: 859). Over time, international law has come to cover important areas of international relations such as international commerce, human rights, and the environment. As Koskenniemi and Leino (2002: 578) aptly put it, “[s]pecial regimes and new organs are parts of an attempt to advance beyond the political present that in one way or another has been revealed unsatisfactory.” The increased specialization in international law arguably is a way of accommodating diverging interests of states. As a result, governments view specialized regimes as better serving their interests and thus have stronger incentives to comply.¹ Furthermore, hopeful lawyers have posited that fragmentation would not endanger the coherence of the wider body of international law, as it would lead to the global diffusion of the “best ideas” (Charney 1999: 700).

In 2006, the ILC Study Group released its final report, which deals extensively with the various issues raised by the fragmentation of international law. It is beyond the scope of this article to provide a full assessment of the many insights provided by the ILC. Nevertheless, we would like to highlight some of the main findings of the report that are relevant for the remainder of our analysis. First, in accordance with the foregoing arguments emphasizing the positive features of fragmentation, one of the main conclusions of the Commission is that the fragmentation of international law does not pose a serious threat, but that “[t]he emergence of new ‘branches’ of the law, novel types of treaties or clusters of treaties is a feature of the social complexity of a globalizing world” (ILC 2006: §222). Second, the ILC shows a firm belief in the ability of legal techniques to resolve conflicts. In the Commission’s own words: “The very effort to canvass a coherent legal-professional technique on a fragmented world expresses the conviction that conflicts between specialised regimes may be overcome by law, even as the law may not go much further than require [sic] a willingness to listen to others, take their points of view into account and to find a reasoned resolution at the end” (ibid.: §487). Finally, the ILC acknowledges the tension that may exist between different branches of special law, recommending that “increasing attention will have to be given to the collision of norms and regimes and the rules, methods and techniques for dealing with such collisions” (ibid.: §493).² It is in this context that we address how norms of different regimes relate to each other.³

Although the ILC provides an in-depth assessment of the difficulties related to the fragmentation of international law and outlines a range of possible ways of how to deal with this phenomenon, its report does not present an exhaustive examination of the issue—nor does it explicitly claim to do so. For one, it consciously focuses on the significance of fragmentation for substantive international law, without addressing the countless implications for international institutions and governance structures (ibid.: §507). Moreover, we posit that in the fragmented realm of international environmental law, highly specific questions of substantive law are raised, which have been insufficiently addressed in the Commission’s report. This applies, in particular, to the issue area of climate change.

III. THE CLIMATE REGIME AND THE CONVENTION ON BIOLOGICAL DIVERSITY

A. LINKAGES BETWEEN CLIMATE CHANGE AND BIODIVERSITY

The numerous and complex interactions between climate change and issues of Land-Use, Land-Use Change and Forestry (LULUCF) and the conservation and sustainable use of biological diversity have received considerable attention (Pontecorvo 1999; IPCC 2002; Jacquemont and Caparrós 2002; CBD Secretariat 2003; Wolfrum and Matz 2003: 79–93; Sagemüller 2006).

First, it has been shown that climate change is a major threat to the preservation of biodiversity and is in fact already having negative impacts on some ecosystems and species (IPCC 2002; CBD Secretariat 2003). Second, research indicates that ecosystems with high biological diversity are more resilient to climate change and climate variability than impoverished ecosystems. Hence, if other pressures on biodiversity⁴ decrease, it is more likely that ecosystems will adapt naturally to climate change (CBD Secretariat 2003: 78). Third, certain ecosystems, such as forests, form either net carbon sinks or sources of emissions. Young, growing trees act as carbon sinks by absorbing CO₂ from the atmosphere. However, most CO₂ is stored in old-growth forests, which form vast reservoirs of carbon over a long period. When forests or harvested wood products are burned or decompose, the biomass loses its function as a sink and becomes a source of carbon (*ibid.*: 48). Tropical deforestation accounts for about 20 to 25 percent of anthropogenic greenhouse gas emissions (IPCC 2000). Hence, avoided deforestation, as well as afforestation and reforestation, have a significant potential for climate change mitigation, although afforestation and reforestation may have positive, neutral, or negative impacts on biodiversity (CBD Secretariat 2003: 58).

There are several multilateral environmental agreements (MEAs) that are relevant with regard to the linkages discussed above between climate change and biodiversity. The focus here will be on the arguably most important MEA, the Convention on Biological Diversity (CBD 1992). The objectives of the CBD, the UNFCCC and the Kyoto Protocol converge to a large extent. The "Rio Conventions"⁵ all aim to contribute to the goal of sustainable development, and the UNFCCC and Kyoto Protocol are cognizant of potential synergies with biodiversity protection. The UNFCCC's objective of stabilization of greenhouse gases at nondangerous levels is to be achieved "within a time-frame sufficient to allow ecosystems to adapt naturally to climate change" (UNFCCC, Art. 2. See also Kyoto Protocol, preamble). Furthermore, parties to the UNFCCC are committed to "promote and cooperate in the conservation and enhancement [. . .] of sinks and reservoirs [. . .], including biomass, forests and oceans as well as other terrestrial, coastal and marine ecosystems" (UNFCCC, Art. 4.1(d). See also Art. 1.1 and Art. 4.8). The Kyoto Protocol calls on its parties to implement policies and measures, "taking into account its commitments under relevant international environmental agreements" (Kyoto Protocol, Art. 2.1(a)(ii)).⁶ Likewise, the goals of the CBD are in line with the UNFCCC objective, as the protection of various components of biological diversity would result in benefits for both climate change mitigation and adaptation.⁷ Climate change as a threat to biodiversity is, however, nowhere mentioned in the CBD.

Although these different treaties can thus be regarded as broadly compatible, there are fears that the ecological dimensions of climate policies are not fully respected, given the prominent role afforded to cost-effectiveness in the climate regime (van Asselt, Gupta, and Biermann 2005: 259). In particular, the implementation of the Kyoto Protocol has been the subject of con-

cern following decisions related to LULUCF and the Protocol's Clean Development Mechanism (CDM) (Kyoto Protocol, Art. 12).⁸ To a limited extent, LULUCF projects can be eligible for credits under the Protocol's CDM.⁹ Critics argue that the rules on the CDM do not ensure the protection of biodiversity, and could hence conflict with objectives and obligations of the CBD. The main concerns raised in this regard are that current rules allow for projects that result in destructive large-scale, monoculture plantations,¹⁰ a lack of protection for existing old-growth forests, and the use of invasive alien species and genetically modified organisms (GMOs) (Meinshausen and Hare 2003). Partly in response to these concerns, one of the general principles governing forestry activities requires that "the implementation of land use, land-use change and forestry activities contributes to the conservation of biodiversity and sustainable use of natural resources" (UNFCCC 2005: Annex, §1 (e)). At the ninth COP in 2003, parties specified this when agreeing on modalities and procedures for forestry projects under the CDM (UNFCCC 2004). However, this agreement does not alleviate all concerns (Sagemüller 2006: 221). First, the decision does not explicitly refer to relevant biodiversity-related agreements, including the CBD.¹¹ Second, the decision's rules on socio-economic and environmental impact assessment of CDM projects are rather ambiguous, leaving discretion to the host country and project participants (UNFCCC 2004: Annex, §12 (c)). Third, the decision does not require that projects be consistent with national sustainable development plans. Finally, the decision also does not expressly exclude the use of invasive alien species and GMOs (see, in particular, Schwartz 2006).

As has become apparent, the treaties as such do not contain provisions directly contradicting each other. On the contrary, both the objectives and several more detailed provisions work towards a common goal, namely sustainable development. However, because of subsequent rule development on forestry and sinks, there is scope for conflict between the Kyoto Protocol and the CBD. This situation leads to a number of challenges for the study of fragmentation.

B. CLIMATE CHANGE, BIODIVERSITY, AND THE NOTION OF CONFLICT

In order for the international rules on conflicts between treaties to apply, an actual conflict must exist. The classic definition reads that a "conflict in the strict sense of direct incompatibility arises only where a party to the two treaties cannot simultaneously comply with its obligations under both treaties" (Jenks 1953: 426; see also Marceau 2001).¹² However, such a definition does not include conflicts involving permissive norms. Pauwelyn (2003: 5–8), in contrast, takes a slightly wider approach to the concept of "conflict of norms," dealing with conflicts of legally binding norms—which can consist of obligations and rights—in international law (see also Vranes 2006: 403). And yet, even this wider construction does not cover all the divergences and inconsistencies between environmental treaties with negative effects,

including the tensions between the CBD and the Kyoto Protocol on sinks (Wolfrum and Matz 2003: 6). Therefore, the ILC's broader concept of conflict "as a situation where two rules or principles suggest different ways of dealing with a problem" seems more appropriate to cover all conflicts involving the climate regime (ILC 2006: §25). However, such a definition would at the same time be overly broad, as "different ways of dealing with a problem" may also lead to mutually supportive and complementary outcomes. It should thus be added that these "different ways" lead to contradictory behavior. This definition seems at least broad enough to cover conflicts between international legal instruments with diverging objectives, such as the climate and trade regimes, although its usefulness for conflicts between environmental treaties remains unclear. In the case of the CBD and the Kyoto Protocol, for instance, the treaties do not suggest different ways of using forestry projects for climate mitigation; in fact, they do not suggest anything specific at all. This is partly due to sensitivities of the Protocol's negotiation process, where important decisions are left to the treaty bodies—and in part because of the more structural reason that the linkages between climate change and biodiversity are so complex that they cannot be comprehensively dealt with in the framework of a treaty.

Along this same vein, it is increasingly evident that not only treaties can be in conflict, but that conflicts may also emanate from decisions by treaty bodies (i.e., COPs and subsidiary bodies).¹³ Still, the international rules on norm conflicts cannot be applied without first addressing the question of whether—and to what extent—the decisions adopted by these bodies constitute international lawmaking in a traditional sense (on this issue, see Prost and Clark 2006). This question has been addressed at length by Brunnée (2002: 4), who argues that "[i]t would seem, then, that the COP is the focal point of climate change law-making activities" (see also Churchill and Ulfstein 2000; Brunnée 2005). But the question remains, albeit slightly rephrased: to what extent can such lawmaking be regarded as equal in standing to more traditional international lawmaking? Here, Brunnée (2002: 23–31) points out that, from a formal point of view, lawmaking by the climate change treaty bodies might be considered to be based on a form of implied state consent. Looking at the Kyoto Protocol, however, COP/MOP decisions on the details of the Protocol's flexible mechanisms, such as the use of forestry projects in the CDM, are not covered by an explicit authorization rendering it binding law (*ibid.*: 24). Whether such specification acquires the guise of binding law thus becomes a matter of interpretation. And yet, COP decisions are clearly not without consequences. *De facto*, these decisions allow the implementation of forestry projects under the CDM. *De jure*, however, if the decisions by treaty bodies are not regarded as international lawmaking, the regime of the Vienna Convention on the Law of Treaties (VCLT 1969) does not apply, thus limiting the usefulness of international law in addressing this consequence of fragmentation arising from the climate regime. If, on the other hand, these decisions were somehow

to be regarded as lawmaking within the ambit of the VCLT, the scope for application of international law on conflicts would substantially expand.

C. CLIMATE CHANGE, BIODIVERSITY, AND ADDRESSING INTERACTIONS

A second point worth noting is that, within the current debate on the fragmentation of international law, little attention has been paid to the actual implications of normative interaction. Although different international environmental norms may apply in a particular situation, they do not necessarily point in diverging directions. Indeed, many environmental treaties have been negotiated in parallel and share certain basic objectives. While the international law literature is primarily preoccupied with conflicts (e.g., Jenks 1953; Czapliński and Danilenko 1990; Mus 1998; Pauwelyn 2003; Wolfrum and Matz 2003; Borgen 2005; ILC 2006),¹⁴ recent literature from the field of international relations highlights the positive effects that different environmental agreements may have vis-à-vis each other (Gehring and Oberthür 2006; see also Chambers 2008). This observation can also be extended to the relationship of the CBD and the climate regime, where great potential for synergy could be exploited, for example in the area of ecosystem adaptation to the impacts of climate change.

Accordingly, one should ask what role international law might have in strengthening the convergence of objectives set out by each treaty “in practice.” van Asselt (2007a) examined the extent to which legal techniques, such as a mutually reinforcing interpretation of current treaty language, and political approaches, such as enhanced institutional cooperation and coordination, could lead to enhanced synergies, concluding that “neither legal nor political approaches are a panacea for interplay management” but that “there is potential for the one approach to address the lacunae in the other” (van Asselt 2007a: 17). Perhaps one potential legal solution would be to apply “conflict clauses” in such a way that they rather become “interaction clauses” in a broader sense.¹⁵ With this, we posit that “conflict clauses” are currently primarily designed to provide a solution in the event of a legal conflict. However, a more unambiguous drafting by parties of such clauses could expressly reflect the intention that different environmental treaties support each other, and could give a mandate to treaty bodies on how such mutual support might be better achieved.¹⁶ Chambers (2008: 247) goes beyond this, and suggests that “[t]here is a need to create a positive rule of cooperation, [. . .], which promotes treaty negotiators and treaty interpreters to maintain consistency between treaties.” Such a “principle of interlinkages” would be particularly appropriate in the realm of international environmental law, including international law on climate change, where the proliferation of treaty regimes, in combination with a lack of case law, leaves room for inconsistencies between regimes (ibid.: 247–48). From these suggestions, it should not be inferred that negotiators should go back to the drawing board and overhaul existing treaties in order to enhance synergies.

However, there may be windows of opportunity, such as the post-2012 climate change negotiations, which allow for explicit consideration of other treaty regimes by negotiators and other actors involved in the drafting of a post-2012 agreement.

The active exploitation of such synergies and inclusion of explicit “interaction clauses” or a “principle of interlinkages” will depend to a large degree on the political will of parties. Parties to one treaty that are not parties to another treaty may have no interest in exploring ways to improve the co-existence of the two regimes. However, in many cases, the positive effects of mutually supportive clauses should benefit both regimes, and thus—essentially as a “win-win situation”—be in the interest of parties on either side.

D. CLIMATE CHANGE, BIODIVERSITY, AND NONPARTIES

Given that membership in different environmental treaties is never entirely congruent, a third potential challenge relates to normative interaction when one of the parties involved is a nonparty in one of the two regimes. As a matter of international law, the doctrine of *pacta tertiis nec nocent nec prosunt* (treaties do not create either obligations or rights for a third state without its consent) set out in Article 34 of the VCLT states that a treaty may only bind parties and may not create obligations for third states without their consent. This doctrine sets out strict boundaries for any attempts to create new obligations in the relationship of two regimes. But often, the constellation of parties and nonparties will not be so clear-cut. For instance, a (fictional) decision by parties to the UNFCCC aimed at ensuring that all policies and measures implemented under the climate regime also comply with rules emanating from the biodiversity regime would not automatically violate the *pacta tertiis* doctrine, because it would be adopted between, and affect, parties to the UNFCCC only. Still, it would likely meet with political opposition from the United States, which is not a party to the CBD. It is improbable that the United States would consent to commitments under the CBD imposed through a “backdoor” in the form of a UNFCCC COP decision. In fact, the mandate for the Joint Liaison Group, a forum for the secretariats of the Rio Conventions to promote mutual cooperation, has already been limited for this very same reason.¹⁷ The issue then becomes a political one, and thus exceeds the scope of this article.

In the context of climate change and biodiversity, several challenges arising from normative interaction have been identified: how to conceptualize divergences between environmental treaties and apply conflict rules to norms other than the treaties themselves, such as decisions adopted by the treaty bodies; how to deal with normative interaction other than outright conflicts; and how to cope with divergent participation in the respective regimes. As the following section will show, the interaction between the climate regime and the rules on international trade may have further implications for the study of fragmentation.

IV. THE CLIMATE REGIME AND INTERNATIONAL TRADE LAW

A. LINKAGES BETWEEN CLIMATE CHANGE AND TRADE

Current human-induced climate variability is linked to past economic patterns, which are responsible for the majority of greenhouse gas emissions. If climate change is to be effectively addressed, solutions will necessarily affect the global economy. International trade has become one of the pillars of the global economic system; overlap between climate change policies and the multilateral trading system administered by the World Trade Organization (WTO) therefore seems inevitable. International trade affects climate change, as it potentially increases economic activities that may in turn lead to increased greenhouse gas emissions. Conversely, taking measures to reduce greenhouse gas emissions might adversely affect competitiveness and hence reduce countries' willingness to participate in such measures (see Charnovitz (2003: 141)).¹⁸

As in the case of the CBD, the multilateral trade system and the climate regime are, *prima facie*, mutually supportive.¹⁹ Upon closer analysis, however, this formal recognition conceals the fact that the political bodies governing each regime have not been particularly sensitive about their potential interrelation. The WTO Committee on Trade and Environment has only dealt with the interactions between climate change and international trade in a limited manner within the Doha Mandate on trade and environment (see WTO 2001: §31–33; and WTO 2003: 78–79). At the same time, climate negotiations have paid very little attention to the relationship of the climate regime to WTO norms. It was not until 2003 that the UNFCCC Secretariat summarized the state of the negotiations in the WTO relevant for the climate regime (UNFCCC 2003).

However, the relationship between climate and trade is likely to change in the near future due to the pressing need to tackle climate change and the broad acknowledgement that abating climate change requires deeper emission reduction commitments. In statements issued during the last months of 2006, the EU Trade Commissioner Peter Mandelson publicly called for further “analytical work on trade policy and climate change” (ICTSD 2006: 1). By the end of 2007, political interest in the debate increased significantly. At the thirteenth COP of the UNFCCC, held in Bali in December 2007, the WTO, for the first time, organized a side event on the possible role of the WTO in supporting climate change mitigation and adaptation efforts. Furthermore, at the same COP, an Informal Trade Ministers Dialogue on Climate Change was held, where thirty-two trade ministers emphasized the need for increased high-level engagement on trade and climate interaction with a view to improve the mutual supportiveness of the climate and trade regimes (Third World Network 2007). Finally, in the first months of 2008 both the European Union and United States have raised the question of the WTO compatibility of possible future climate measures in the discussion of recent legislative packages, highlighting the increased importance of the climate-trade debate.

Against this background, how can the relationship between the climate regime and the WTO be characterized? Despite the fact that the international climate regime does not provide for any *specific* measure that would directly affect international trade, as happens in other MEAs, there is still scope for tensions between the two regimes. For example, trade rules may interact with the market-based mechanisms that are provided for by the international climate regime, such as international emissions trading (Werksman 1999; Zhang 1999; Jinnah 2003) or the CDM (Wiser 1999). They may also interact with domestic policies and measures that stem only indirectly from the climate regime (Zhang and Assunção 2004; Green 2005), such as domestic fiscal measures geared toward mitigation of climate change (Goh 2004).

Three challenges are highlighted in this article: the application of the notion of conflict to the climate and trade interplay; whether international law provides tools for addressing climate-trade-interactions; and the implications for nonparties to one regime. The ways, in which these challenges are being dealt with, as well as some of the possible solutions, differ from the previous analysis of the relationship between environmental regimes.

B. CLIMATE CHANGE, TRADE, AND THE NOTION OF CONFLICT

In Section III.B, we argued in favor of a wide definition of “conflict,” according to which a conflict exists if there is “a situation where two rules or principles suggest different ways of dealing with a problem” (ILC 2006: §25), to which we added that such “different ways” need to lead to contradictory behavior. On the one hand, this definition does not necessarily embrace the relationship between, for instance, international emissions trading allowed under the Kyoto Protocol, and WTO norms, since the Kyoto Protocol provisions do not suggest WTO-incompatible behavior, leaving the design of trading schemes up to its parties. On the other hand, we can also argue that the definition is broad enough to capture at least the relationship between the domestic application of a measure and trade rules.

The situation would change quite substantially if parties to the climate regime attempted to deal with its relationship with the WTO through novel treaty provisions or by means of a COP decision that might result in normative conflicts with the multilateral trade system.²⁰ The need for stronger climate change policies and measures could possibly lead to parties adopting treaty provisions that would affect international trade by both parties and of nonparties to the regime. In other words, the question is: what would happen if the current state of play, in which parties to the climate regime are free to choose the policies and measures to adopt, were to be changed, with a future climate change agreement or decision thereof obliging such states to adopt a specific kind of measure? If new treaty language or a COP decision were to be adopted to this end, the relationship between norms of the climate and trade regimes would be more likely to fall under

the notion of normative conflict that we have outlined above. However, dealing with normative interactions arising from a COP decision by way of international law on conflicts would once again depend on the legal qualification given to decisions taken by the COP.

C. CLIMATE CHANGE, TRADE, AND ADDRESSING INTERACTIONS

A second challenge for the study of fragmentation concerns the role of international law in dealing with these conflicts. In this section, we first examine how international law could address conflicts. Second, we examine the scope for cooperation and coordination.

1. Addressing Conflicts

The ILC (2006) suggests taking recourse to the VCLT as a first avenue for addressing conflicts between norms of different specialized regimes. In particular, the ILC stresses the relevance of Article 31.3 of the VCLT, which encourages adjudicators to take into account “any relevant rules of international law applicable in the relations between the parties.” This interpretative axiom is at the core of what has been termed the principle of systemic integration, a principle that might play a useful role in clarifying the relationship between climate and trade rules (McLachlan 2005: 279; ILC 2006: §410–480). It should be noted, however, that such a principle has not yet been explicitly recognized under general international law and still lacks an authoritative formulation (Lindroos and Mehling 2008). For the time being, therefore, it might be more prudent to consider systemic integration an aspiration or objective rather than a principle. Still, as such, the notion does find support in various rules of treaty interpretation and also past case law, including decisions by the WTO Dispute Settlement Body (DSB) (McLachlan 2005; see also Wouters and De Meester 2008: 232).

One could argue that the principle of systemic integration, if applied more consistently by treaty interpreters, could effectively allow the dispute settlement mechanisms of both the climate regime and the WTO to rely on norms originating in other international regimes. Different constellations are conceivable in this regard.

First, in a dispute before the WTO on the domestic application of a trade-related climate policy measure, the principle of systemic integration could play a role if international environmental law—and international law on climate change in particular—were to be used to interpret obscure WTO norms. Just as the Appellate Body used international environmental documents such as the Agenda 21, the United Nations Convention on the Law of the Sea, the CBD, and the Convention on the Conservation of Migratory Species of Wild Animals to interpret “exhaustible natural resources” in the *Shrimp-Turtle* case (*U.S.-Shrimp*: §130), the climate regime could be of use in the interpretation of other ambiguous or indeterminate WTO norms

as an interpretative context in the sense of Article 31.1 of the VCLT. However, the WTO panel appears to have departed from the reasoning found in *Shrimp-Turtle* in more recent disputes, such as *EC-Biotech* (*EC-Biotech*: §§7.74–7.75, 7.92–7.93). In the latter case, the WTO panel was much more cautious in using provisions from other international treaties to interpret WTO norms.

Second, a party adopting a domestic climate policy measure may invoke the principle to rely on the climate regime in order to defend the noncommercial objectives of its measure under the necessity test of Article XX of the General Agreement on Tariffs and Trade (GATT 1994), or under Article XIV of the General Agreement on Trade in Services (GATS 1994). This test has evolved as a result of past case law and now allows for consideration of the importance of noncommercial interests at stake (*Korea-Beef*: §164). Therefore, if a country uses a climate policy measure specified in the Kyoto Protocol in order to fulfill its commitments under the climate regime, the necessity test will be easier to meet.

Third, the climate regime may be drawn on, again as a result of systemic integration, to show compliance with other specific criteria provided for by past jurisprudence. As interpreted by past panels and the Appellate Body of the WTO, the chapeau of Article XX contains a “prior negotiation efforts” criterion, according to which a unilateral measure will not be considered discriminatory if it has been preceded by serious bilateral or multilateral negotiation efforts (*Korea-Beef*: §172). For example, a domestic act implementing emissions trading is meant to put in practice a measure provided for directly in the international climate regime. Despite the fact that a Kyoto Party is not obliged to rely on emissions trading to tackle climate change, the fact that it is provided for in the international climate regime should make it easier to defend a “unilateral” measure to implement emissions trading before the WTO.

All three cases illustrate a potential role for international law, and the notion of systemic integration, in reconciling climate change and trade objectives; further study of this concept is therefore warranted.

2. *Enhancing Synergies*

In our analysis of the interactions between the climate and biodiversity regimes, we put forward the critique that insufficient attention had been devoted to potential synergies between the two regimes (Section III.C). Seemingly, international law is more useful for solving a conflict than for promoting a solution before a conflict arises. The same can be posited for the debate on the relationship between the international climate regime and the WTO, where only little effort has been invested into finding cooperative and pragmatic solutions to the relationship between the two regimes. However, as indicated in Section IV.A, it seems that at least on the WTO side, this is slowly starting to change. Several WTO members have drafted proposals that suggest liberalizing trade in climate-friendly goods and services,

including, notably, a joint proposal by the European Union and the United States.²¹ The WTO itself believes that the progressive liberalization of environmental goods and services may be a positive way forward in dealing with climate change. For instance, WTO Director General Pascal Lamy acknowledged that the WTO could support international climate policy (Lamy 2007), for example by reducing fossil fuel subsidies.²²

Despite these signs of intensified cooperation between the regimes, the climate community may not yet be willing to embrace the idea put forward by the WTO Secretariat and the World Bank (2007) that international trade policy may actually be an ally in the battle against climate change.²³ Nevertheless, the debate itself underlines that there is scope for a discussion not only about possible conflicts between climate and trade, but also on how trade could bring about climate change benefits. *De lege lata*, international law does not currently provide tools to further promote this cooperation, although *de lege ferenda* different options are conceivable, such as the aforementioned renegotiation of tariffs on climate-friendly products. For the time being, however, it will be left to policymakers to pursue this avenue.

However, just as in the relationship between multilateral environmental regimes, there are a number of ways through which cooperation between the world trading system and the climate regime could be enhanced. For example, the secretariats of the WTO and the Climate Convention could adopt a memorandum of understanding on the competitiveness effects of climate policies (van Asselt, Gupta, and Biermann 2005). Parties to the WTO and the UNFCCC could also create a consultative mechanism (Stokke 2004) to discuss, for example, the competitiveness effects of climate policies or conclude a standstill agreement on climate-friendly subsidies (Buck and Verheyen 2001). Again, the obstacles to such support measures would be, if anything, political, but not legal.

D. CLIMATE CHANGE, TRADE, AND NONPARTIES

The third challenge we deal with at the climate-trade interface concerns the role of international law in addressing conflicts between norms from different fields of international law to the extent that these affect a nonparty to one of the regimes.²⁴ Although a number of interactions are conceivable involving nonparties to the climate regime, we will focus on one pertinent case: the use of border tax adjustment to alleviate competitiveness concerns of industries covered by the Kyoto Protocol.

The nonparticipation of countries in the Kyoto Protocol has triggered competitiveness concerns on behalf of Kyoto parties (van Asselt and Biermann 2007: 498). More specifically, energy-intensive industries in the European Union fear that they have to bear additional costs as a result of climate policies adopted to implement the Protocol (such as the EU emissions trading scheme), while their competitors in non-Kyoto countries are

not subject to similar restrictions. One of the options that have been proposed is the adoption of border tax adjustments (BTA) to offset the competitiveness effects of climate policies in Kyoto countries. However, there is some discussion over whether such measures would be compatible with WTO law (see Goh 2004; Biermann and Brohm 2005; De Cendra 2006; Ismer and Neuhoff 2007; Pauwelyn 2007; Brewer 2008; Genasci 2008).²⁵ What, then, could the role of international law be in the event of a dispute on climate-related BTAs before the WTO DSB?

We first examine whether the notion of systemic integration could be of use in the case of a dispute with nonparties before the WTO DSB. In *EC-Biotech*, the WTO panel took the position that, in order to use a provision from another treaty for interpretative purposes, the latter must be in effect for all the parties to both treaties.²⁶ This position has been strongly criticized by the ILC, since “it makes it practically impossible ever to find a multilateral context where reference to other multilateral treaties as aids to interpretation under article 31 (3) (c) would be allowed” (ILC 2006: §450). The question of membership is thus a very controversial issue. Despite the risks of further fragmentation,²⁷ one could maintain that the treaty need only be in effect between the parties to the dispute, not between all parties to the respective treaties (Pauwelyn 2003: 474–76).

Even if we accept this interpretation of Article 31(3)(c) with a view to greater systemic integration,²⁸ a first look at the international climate regime would exclude its application within the WTO in relation to non-Kyoto parties, such as the United States. Only very pro-environmental interpretations of *Shrimp-Turtle* case law would allow a WTO member to adopt a trade-restrictive measure against another member that is (1) not mandated by the MEA in question and (2) taken to address competitiveness effects of an instrument that is also not mandatory (i.e., emissions trading). In this light, it would be very difficult for the country adopting the BTA to prove that there was no less restrictive measure within the panoply of possible climate measures.

Nevertheless, the provisions of the climate change treaties could still play a role in defending the urgency of dealing with climate change. Although the United States has not ratified the Kyoto Protocol, it is still a party to the UNFCCC²⁹ and is actively involved in the ongoing post-2012 negotiations. Furthermore, in the *Shrimp-Turtle* case, the Appellate Body clearly maintained that negotiations must be promoted but do not necessarily have to succeed in order for a unilateral measure to be compatible with international trade law (*U.S.-Shrimp II*: §§123–124). Therefore, a Kyoto party, even according to WTO law, is not required to wait for nonparties to ratify the Protocol; it can adopt a trade-restrictive measure, provided that negotiations in good faith have been established with the nonparty. These considerations should be taken into account in the event of a dispute before the WTO DSB, and they may open the door to the use of the climate change regime in the WTO even in relation to nonparties to the latter.³⁰

If the BTA were considered a violation of the WTO, an interesting perspective would be to consider the BTA a legal countermeasure. If the country affected by the BTA is able to argue that the measure violates WTO law, and the (Kyoto) party adopting the measure does not change its climate policy, then the former can adopt, according to WTO law (DSU 1994, Art. 22) countervailing measures. It is at this point that the Kyoto party could argue that it did not refrain from using the BTA against the nonparty because the measure itself was a legal countermeasure. In this case, however, the state applying the BTA will have to specify which international legal obligations the nonparty has violated. Would it be possible, for instance, to argue that the no-harm principle of international environmental law has been violated by a failure to participate in the Kyoto Protocol? This would clearly result in a collision between national sovereignty and the obligation to protect the environment, which is undoubtedly an emerging principle of international law (see, e.g., Birnie and Boyle 2002: 109–25). Assuming its willingness to break new legal ground, the country adopting the BTA could possibly seek judicial redress before the International Court of Justice. International law relating to countermeasures would then be crucial, and questions related to proportionality would come into play.³¹ It would be at this point that references from other relevant rules of international law could be important in order to find a solution to the debate between climate and trade in relation to nonparties.

The interface of climate policies and international trade law arguably holds many further, as yet undisclosed challenges. As the foregoing analysis illustrated, one characteristic of the current climate regime is the voluntary or nonprescriptive nature of its mechanisms, such as international emissions trading. From a trade law perspective, this results in a very different legal assessment than mandatory measures would. Once a conflict arises, international law—and notably the emerging concept of systemic integration—may be drawn upon when interpreting trade law and applying its provisions in a dispute. As in the case of environmental regimes at large, enhanced synergies between the climate regime and trade law can be explored *de lege ferenda* and on an institutional level. And finally, the difficulties arising from differences in participation in either regime were shown to be of particular importance in the wake of controversial case law by the WTO judicial bodies.

V. CONCLUDING THOUGHTS

Given the complex and unstructured nature of climate change, international policy efforts to address the problem raise many important questions when considered in the context of the debate on fragmentation of international law. Causes, impacts, and solutions to the problem come from and affect a wide spectrum of specialized international regimes, resulting in inevitable legal overlaps. By drawing on two representative examples, the CBD and

the law of the WTO, we have aimed to show that a wide range of interactions exist, potentially both beneficial and detrimental, between the climate regime and other regimes. The ILC has clearly acknowledged that norms of different regimes can collide and that there is a need to conceive of legal and political techniques to address such collisions. Starting from our preoccupation with the climate regime and its position in the wider system of international law, we argue that its many different interactions also provide an ideal testing ground for the consideration of possible methods to address relations between special regimes.

Our study leads us to two main conclusions. The first one is that climate change, and the way in which the climate regime reflects an increasingly fragmented body of international environmental norms, poses challenges that urge international lawyers and policymakers to rethink the extent to which international law provides the proper tools to deal with fragmentation or whether it lies within the realm of politics, negotiation, cooperation, and coordination to address interactions between environmental treaties.³² The second conclusion is that, while conflicts between distinct issue areas of international law, such as climate and trade, have sometimes been considered difficult to resolve when they affect rights of nonparties to one of the two regimes, in the case of the climate-trade interplay, systemic integration may provide an overarching framework to find solutions regarding nonparties.

Although we agree with the ILC that international law will almost always be able to provide a legal solution to collisions between the climate regime and other international regimes, such solutions may not always be the optimal approach for each affected state. If a state is dissatisfied with a legal solution, it will need to promote political negotiations to change the rules in order to make them mutually supportive. In the area of climate change, steps have already been taken to this effect, although their legal status is not entirely clear. With regard to the relationship between the climate and biodiversity regimes, parties have mandated the secretariats of the respective treaties to engage with each other through the Joint Liaison Group, which is to identify mutually supportive ways of implementing the respective treaties. For climate-trade interactions, no such forum has been established to date, although the heightened attention for the issue of climate change in the WTO may hint at possible changes in this direction.

Systemic challenges to legal governance are rarely amenable to simple, quick solutions, thus calling for an increased understanding of their causes and potential implications. In the context of climate policy, heightened awareness of fragmentation might help avoid tensions and potential conflicts at the negotiation stage, for instance, through inclusion of more explicit interaction clauses. An improved sensibility among policymakers will be of even greater importance if negotiators are to explore and realize potential synergies between regimes or adopt institutional arrangements to advance mutual coherence. Once a conflict has arisen, however, the law will inevitably return to the stage with its established conflict resolution mechanisms,

possibly guided by an emerging principle of systemic integration. Only time can tell whether such a principle will acquire the binding force of law.

Securing an adequate level of coherence will pose a serious challenge for modern international regimes. In the case of the climate regime, in particular, states and negotiators need to think carefully whether they want to leave the resolution of emerging conflicts and exploiting opportunities for synergies to the set of mechanisms afforded by general international law, or whether they want to address these interactions through political cooperation and coordination.

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NOTES

1. Hafner (2004: 859) argues that a “less-than-global approach seems particularly necessary when different States clearly hold different beliefs about what basic values should be preserved by international regulation.”
2. However, it should be noted that the ILC is of the opinion that the emergence of special laws “has not seriously undermined legal security, predictability or the equality of legal subjects” (ILC 2006: §492).
3. The second part of the call of the ILC, to pay more attention to the “rules, methods and techniques for dealing with such collisions,” is not the focus of this article, although some methods and techniques will be touched upon in our analysis on addressing interactions. See, for a more comprehensive discussion, van Asselt (2007a). See also Chambers (2008: 47–94), examining the possibilities and limitations of international legal techniques in the context of international environmental regimes, and Wouters and De Meester (2008), examining the case of interactions between the UNESCO Convention on Cultural Diversity and WTO law.
4. Other notable threats to biodiversity include habitat change, overexploitation, pollution, and the invasion of alien species.
5. The “Rio Conventions” comprise the UNFCCC, the CBD, and the 1996 United Nations Convention to Combat Desertification, all of which were negotiated in

parallel during the 1992 United Nations Conference on Environment and Development (the “Earth Summit”), held in Rio de Janeiro, Brazil.

6. Although this provision does not state *which* agreements need to be taken into account, it is reasonable to assume that, given the role of forests as sinks, the CBD can be considered “relevant.”
7. The CBD has as its goal, *inter alia*, “the conservation of biological diversity [and] the sustainable use of its components” (CBD, Art. 1).
8. Some of the concerns discussed here for LULUCF CDM projects are equally valid for domestic sinks projects, which are not further discussed here.
9. For the first commitment period of the Kyoto Protocol (2008–2012), there is a 1% cap for credits from afforestation and reforestation activities (see UNFCCC 2005: Annex, §14).
10. These projects are cost effective, given that they involve fast-growing trees (such as eucalyptus) that would result in more carbon dioxide being sequestered and hence more credits being generated; however, the projects may have negative impacts on local biodiversity or landscape.
11. UNFCCC (2004: recital) refers merely to “international agreements that may apply to afforestation and reforestation project activities.”
12. The definitions of Jenks and Marceau would deny the existence of a conflict, for example, if the climate regime permitted its Parties to use trade-restrictive measures that violate the General Agreement on Tariffs and Trade (see Marceau 2001: 1086, and Section IV.A).
13. Treaty body decisions are but one example of how the international environmental law-making process is not only taking place through the adoption of binding treaties. The high prominence of nonbinding instruments, such as soft law, has as a result that the main challenge is to identify when the “informal” turns into “formal” (see, for a discussion, Toope 2007). In this regard, another example of the increased use of nonbinding agreements in global climate governance is the 2005 Asia-Pacific Partnership on Clean Development and Climate. Although there may be conflicts between this agreement and the climate regime (van Asselt 2007b), the explicit nonbinding nature of the agreement makes it difficult to see how such interactions would be covered by international rules on treaty conflicts.
14. This emphasis on avoiding and resolving conflicts could be explained by a desire to establish legal certainty as to which norm applies in a particular situation.
15. “Conflict” clauses are generally the starting point to address interactions between treaties (see Pauwelyn 2003: 328–61). The purpose of these clauses in general is to clarify the relation between treaties, thus preventing contradictions.
16. Wouters and De Meester (2008: 238), in the context of the UNESCO Convention on Cultural Diversity and the WTO, argue for a clause “that creates a ‘consultative’ link with other relevant international instruments.”
17. This is reflected by Yamin and Depledge (2004: 527), who note that the UNFCCC COP’s Subsidiary Body on Scientific and Technological Advice “has been at pains to underscore the advisory nature of the JLG, safeguarding the authority of Parties [. . .] to take decisions on inter-convention cooperation.”
18. This article does not aim to provide an overview of the many interactions between the trade and climate regimes, including the questions of compatibility of energy taxation and border tax adjustments, climate subsidies, and energy-efficiency standards with WTO law. For this, see generally Brack, Grubb, and Windram (2000); Chambers (2001); Doelle (2004b); World Bank (2007). See further the Special Issue on climate change and international trade of the *Carbon and Climate Law Review* (Pauwelyn and Sindico 2008), and the papers presented in the World Trade Forum 2007, International Trade on a Warming Globe; the Role of the WTO in the Climate Change Debate, World Trade Institute, Bern.

19. On the one hand, the preamble to the Agreement Establishing the WTO clearly states that the goal of the organization is: “to rais[e] standards of living [. . .] while allowing for the optimal use of the world’s resources in accordance with the objective of sustainable development, seeking both to protect and preserve the environment” (WTO Agreement 1994). On the other hand, the UNFCCC and the Kyoto Protocol reaffirm their commitment to “minimize adverse effects on international trade” in the pursuit of their objective (UNFCCC, Art. 3; Kyoto Protocol, Art. 2.3).
20. UNFCCC, Art. 4.2(d); 7.2(e) and Art. 13.4(a) allow the COP to *validate* an indirect international climate measure. Therefore, the COP decision itself that validates the domestic climate measure can conflict with a WTO norm.
21. For a summary of the proposal, see http://trade.ec.europa.eu/doclib/docs/2007/november/tradoc_136955.pdf (accessed 14 April 2008).
22. In this regard, Bigdeli (2008) suggests to model the reduction of fossil fuel subsidies in a similar way as has been done for fisheries subsidies.
23. Such was the impression at the side-event of the WTO organized at the COP in Bali, where the response of the participants in the room to the WTO and World Bank’s presentations on increasing the role of the WTO in addressing climate change was rather sceptical (personal observation of one of the authors). See also IISD (2007).
24. It should be noted that the discussion of nonparties in this section slightly differs from the discussion of nonparties in the climate and biodiversity regime interactions. In the latter, the main challenge is that a nonparty to one treaty could prevent integration in the negotiation process of another. In the trade-climate regime interactions, the challenge is that, first, nonparties may affect the implementation and achieving the objective of a treaty and, second, that nonparties may be affected by their nonparticipation. We would like to thank an anonymous reviewer for pointing us to this distinction.
25. Although we speak here of border *tax* adjustments, it should be noted that other measures are conceivable that are not taxes. Brewer (2008), for example, discusses two U.S. proposals that would contain an obligation to purchase greenhouse gas emission allowances for goods imported into the United States. In addition, the European Commission proposes to consider such measures to support European energy intensive industries in case no satisfactory international agreement is reached, referring to the use of a “carbon equalisation system” (European Commission 2008: recital, §20).
26. *EC-Biotech*: §§7.65–7.72 and 7.70 in particular.
27. In this regard, McLachlan (2005: 314) states that “it would run the risk of potentially inconsistent interpretation decisions dependent upon the happenstance of the particular treaty partners in dispute.”
28. This interpretation is ad hoc for the climate-trade interplay. If one does not follow this argument, then the nonparty dilemma could possibly be dealt with through the proposal of Voigt (2005: 8), who argues for the use of the concept of sustainable development as a general principle of international law that would enable climate measures to prevail over WTO obligations because of “the integral, non-reciprocal nature of climate obligations.” See also Sindico (2005).
29. Furthermore, according to VCLT, Art. 18(a), the United States is obliged to not undermine the objective and the purpose of the Kyoto Protocol after having signed the latter. This was one of the arguments of the European Community in relation to the Cartagena Biosafety Protocol in *EC-Biotech*: §§7.53–7.55.
30. The analysis that we have just sketched relates to Article XX GATT. However, the principle of systemic integration and the possibility of relying on the climate regime also applies in the analysis of other clauses covered by the multilateral trade agreements, particularly in the case of the environmental exceptions provided

for in the Agreement on Technical Barriers to Trade (TBT Agreement 1994), where many unilateral climate measures may end up being discussed (see TBT Agreement, Art. 2.2).

31. On countermeasures in public international law, see Cassese (2005: 302–07).
32. We acknowledge that, in practice, the distinction between law and politics will not be as straightforward as described here. Attempts to address interactions through legal techniques will also have political ramifications; conversely, coordination and cooperation efforts could have legal implications as well. Nevertheless, the broad distinction applies for different actors in the international arena, with legal approaches being more relevant for judicial bodies, and political approaches more relevant for states and treaty bodies.

REFERENCES

- Asselt, Harro van (2007a) *Dealing with the Fragmentation of Global Climate Governance. Legal and Political Approaches in Interplay Management*. Global Governance Working Paper No. 30. Amsterdam: The Global Governance Project. Available at <http://www.glogov.org> (accessed 14 April 2008).
- Asselt, Harro van (2007b) “From UN-ity to Diversity? The UNFCCC, the Asia-Pacific Partnership, and the Future of International Law on Climate Change,” *Carbon and Climate Law Review* 1: 17–28.
- Asselt, Harro van, and Frank Biermann (2007) “European Emissions Trading and the International Competitiveness of Energy-intensive Industries: A Legal and Political Evaluation of Possible Supporting Measures,” *Energy Policy* 35: 497–506.
- Asselt, Harro van, Joyeeta Gupta, and Frank Biermann (2005) “Advancing the Climate Agenda: Exploiting Material and Institutional Linkages to Develop a Menu of Policy Options,” *Review of European Community and International Environmental Law* 14: 255–64.
- Barnhoorn, L. A. N. M., and Karel C. Wellens (eds.) (1995) *Diversity in Secondary Rules and the Unity of International Law*. The Hague: Martinus Nijhoff Publishers.
- Benvenisti, Eyal, and George W. Downs (2007) “The Empire’s New Clothes: Political Economy and the Fragmentation of International Law,” *Stanford Law Review* 60: 595–632.
- Biermann, Frank, and Rainer Brohm (2005) “Implementing the Kyoto Protocol Without the United States: The Strategic Role of Energy Tax Adjustments at the Border,” *Climate Policy* 4: 289–302.
- Bigdeli, Sadeq Z. (2008) “Will the ‘Friends of Climate’ Emerge in the WTO? The Prospects of Applying the ‘Fisheries Subsidies’ Model to Energy Subsidies,” *Carbon and Climate Law Review* 2: 78–88.
- Borgen, Christoph J. (2005) “Resolving Treaty Conflicts,” *George Washington International Law Review* 37: 573–648.
- Brack, Duncan, Michael Grubb, and Craig Windram (2000) *International Trade and Climate Change Policies*. London: Earthscan.
- Brewer, Thomas L. (2008) *U.S. Climate Change Policies and International Trade Policy Intersections*. Available at <http://www.usclimatechange.com> (accessed 14 April 2008).
- Brunnée, Jutta (2002) “COPing with Consent: Law Making under Multilateral Environmental Agreements,” *Leiden Journal of International Law* 15: 1–52.
- Brunnée, Jutta (2005) “Reweaving the Fabric of International Law. Patterns of Consent in Environmental Framework Agreements.” In *Developments of International Law in Treaty-Making*, edited by R. Wolfrum & V. Röben. Berlin: Springer.

- Buck, Matthias, and Roda Verheyen (2001) *International Trade Law and Climate Change—A Positive Way Forward*. FES-Analyse ökologische Marktwirtschaft. Bonn: Friedrich Ebert Stiftung.
- Cassese, Antonio (2005) *International Law*. Oxford: Oxford Univ. Press.
- Convention on Biological Diversity (CBD) Secretariat (2003) *Interlinkages Between Biological Diversity and Climate Change. Advice on the Integration of Biodiversity Considerations into the Implementation of the United Nations Framework Convention on Climate Change and its Kyoto Protocol*. Montreal: Secretariat of the Convention on Biological Diversity.
- Chambers, W. Bradnee (ed.) (2001) *Inter-linkages: The Kyoto Protocol and the International Trade and Investment Regimes*. Tokyo: United Nations Univ. Press.
- Chambers, W. Bradnee (2008) *Interlinkages and the Effectiveness of Multilateral Environmental Agreements*. Tokyo: United Nations Univ. Press.
- Charney, Jonathan (1999) “The Impact on the International Legal System of the Growth of International Courts and Tribunals,” *New York University Journal of International Law and Politics* 31: 697–708.
- Charnovitz, Steve (2003) “Trade and Climate: Potential Conflicts and Synergies.” In *Beyond Kyoto: Advancing the International Effort Against Climate Change*, edited by E. Diringer. Washington, DC: Pew Center for Global Climate Change.
- Churchill, Robin R., and Geir Ulfstein (2000) “Autonomous Institutional Arrangements in Multilateral Environmental Agreements: A Little-Noticed Phenomenon in International Law,” *American Journal of International Law* 94: 623–59.
- Craven, Matthew (2003) “Unity, Diversity and the Fragmentation of International Law,” *Finnish Yearbook of International Law* 14: 3–34.
- Czapliński, Władysław, and Gennady M. Danilenko (1990) “Conflict of Norms in International Law,” *Netherlands Yearbook of International Law* 21: 3–42.
- De Cendra, Javier (2006) “Can Emissions Trading Schemes be Coupled with Border Tax Adjustments? An Analysis vis-à-vis WTO Law,” *Review of European Community and International Environmental Law* 15: 131–45.
- Doelle, Meinhard (2004a) “Linking the Kyoto Protocol and Other Multilateral Environmental Agreements: From Fragmentation to Integration?,” *Journal of Environmental Law and Practice* 14: 75–104.
- Doelle, Meinhard (2004b) “Climate Change and the WTO: Opportunities to Motivate State Action on Climate Change through the World Trade Organization,” *Review of European Community and International Environmental Law* 13: 85–103.
- Dupuy, Pierre-Marie (1999) “The Danger of Fragmentation or Unification of the International Legal System and the International Court of Justice,” *New York University Journal of International Law and Politics* 31: 791–807.
- European Commission (2008) *Proposal for a Directive of the European Parliament and of the Council amending Directive 2003/87/EC so as to Improve and Extend the Greenhouse Gas Emission Allowance Trading System of the Community*. COM(2008) 16 final. Brussels: European Commission.
- Gehring, Thomas, and Sebastian Oberthür (2006) “Comparative Empirical Analysis and Ideal Types of Institutional Interaction.” In *Institutional Interaction in Global Environmental Governance. Synergy and Conflict Among International and EU Policies*, edited by S. Oberthür & T. Gehring. Cambridge, MA: MIT Press.
- Genasci, Matt (2008) “Border Tax Adjustments and Emissions Trading: The Implications of International Trade Law for Policy Design,” *Carbon and Climate Law Review* 2: 33–42.
- Goh, Gavin (2004) “The World Trade Organization, Kyoto and Energy Tax Adjustments at the Border,” *Journal of World Trade* 38: 395–423.

- Green, Andrew (2005) "Climate Change, Regulatory Policy and the WTO," *Journal of International Economic Law* 8: 143–89.
- Hafner, Gerhard (2000) "Risks Ensuing from Fragmentation of International Law," *Official Records of the General Assembly, Fifty-fifth session, Supplement No. 10 (A/55/10, 2000), Annex*, 326–54.
- Hafner, Gerhard (2004) "Pros and Cons Ensuing from Fragmentation of International Law," *Michigan Journal of International Law* 25: 849–63.
- International Centre for Trade and Sustainable Development (ICTSD) (2006) "Mandelson Calls for Work on Climate, Trade Links," *Bridges Trade BioRes* 6 (20) (17 November 2006). Available at <http://www.ictsd.org/biores/06-11-17/story1.htm> (accessed 16 May 2008).
- Intergovernmental Panel on Climate Change (IPCC) (2002) *Climate Change and Biodiversity*. Geneva: Intergovernmental Panel on Climate Change.
- Intergovernmental Panel on Climate Change (IPCC) (2007) *Climate Change 2007: Synthesis Report. A Contribution of Working Groups I, II, and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge: Cambridge Univ. Press.
- International Institute for Sustainable Development (IISD) (2007) *ENB on the Side* (10 December). Available at <http://www.iisd.ca/climate/cop13/enbots/10dec.html> (accessed 14 April 2008).
- International Law Commission (ILC) (2006) *Fragmentation of International Law: Difficulties Arising from the Diversification and Expansion of International Law. Report of the Study Group of the International Law Commission*. A/CN.4/L.682 (13 April). Geneva: ILC.
- Ismer, Roland, and Karsten Neuhoff (2007) "Border Tax Adjustment: A Feasible Way to Support Stringent Emission Trading," *European Journal of Law and Economics* 24: 137–64.
- Jacquemont, Frédéric, and Alejandro Caparrós (2002) "The Convention on Biological Diversity and the Climate Change Convention 10 Years After Rio: Towards a Synergy of the Two Regimes?," *Review of European Community and International Environmental Law* 11: 139–80.
- Jenks, Wilfred (1953) "The Conflict of Law-Making Treaties," *British Yearbook of International Law* 30: 401–53.
- Jinnah, Sikina (2003) "Emissions Trading under the Kyoto Protocol: NAFTA and WTO Concerns," *Georgetown International Environmental Law Review* 15: 709–61.
- Khrebtkova, Alexandra (2008) *A Call to Freedom: Toward a Philosophy of International Law in an Era of Fragmentation*. Institute for International Law and Justice Emerging Scholars Papers 6. New York: New York Univ. Available at <http://www.iilj.org/publications/documents/KhrebtkovaWP.revised2008.pdf> (accessed 14 April 2008).
- Kingsbury, Benedict (1999) "Is the Proliferation of International Courts and Tribunals a Systemic Problem?" *New York University Journal of International Law and Politics* 31: 679–96.
- Koskenniemi, Martti, and Päivi Leino (2002) "Fragmentation of International Law? Postmodern Anxieties," *Leiden Journal of International Law* 15: 553–79.
- Lamy, Pascal (2007) *Doha Could Deliver Double-win for Environment and Trade*. Available at http://www.wto.org/english/news_e/sppl_e/sppl83_e.htm (accessed 14 April 2008).
- Lindroos, Anja, and Michael Mehling (2005) "Dispelling the Chimera of 'Self-Contained Regimes'. International Law and the WTO," *European Journal of International Law* 16: 857–77.
- Lindroos, Anja, and Michael Mehling (2008, forthcoming) "From Autonomy to Integration? International Law, Free Trade and the Environment," *Nordic Journal of International Law* 77.

- Marceau, Gabrielle (2001) "Conflicts of Norms and Conflicts of Jurisdictions: The Relationship Between the WTO Agreement and MEAs and Other Treaties," *Journal of World Trade* 35: 1081–131.
- McLachlan, Campbell (2005) "The Principle of Systemic Integration and Article 31(3)(c) of the Vienna Convention," *International and Comparative Law Quarterly* 54: 279–319.
- Meinshausen, Malte, and William Hare (2003) *Sinks in the CDM: After the Climate, Biodiversity Goes Down the Drain. An Analysis of the CDM Sinks Agreement at CoP-9*. Available at <http://www.greenpeace.org/raw/content/usa/press-center/reports4/sinks-in-the-cdm-after-the-cl.pdf> (accessed 14 April 2008).
- Mus, Jan B. (1998) "Conflicts Between Treaties in International Law," *Netherlands International Law Review* 45: 208–32.
- Oberthür, Sebastian (2006) "The Climate Change Regime: Interactions with ICAO, IMO, and the EU Burden-Sharing Agreement." In *Institutional Interaction in Global Environmental Governance. Synergy and Conflict Among International and EU Policies*, edited by S. Oberthür & T. Gehring. Cambridge, MA: MIT Press.
- Pauwelyn, Joost (2003) *Conflict of Norms in Public International Law. How WTO Law Relates to Other Rules of International Law*. Cambridge: Cambridge Univ. Press.
- Pauwelyn, Joost (2007) *U.S. Federal Climate Policy and Competitiveness Concerns: The Limits and Options of International Trade Law*. Nicholas Institute Working Paper no. 07-02. Available at <http://www.nicholas.duke.edu/institute/internationaltradelaw.pdf> (accessed 14 April 2008).
- Pauwelyn, Joost, and Francesco Sindico (eds.) (2008) "Editorial," *Carbon and Climate Law Review* 2.
- Pontecorvo, Concetta Maria (1999) "Interdependence between Global Environmental Regimes: The Kyoto Protocol on Climate Change and Forest Protection," *Zeitschrift für ausländisches öffentliches Recht und Völkerrecht* 59: 709–49.
- Prost, Alain, and Paul Kingsley Clark (2006) "Unity, Diversity, and the Fragmentation of International Law: How Much Does the Multiplication of International Organizations Really Matter?," *Chinese Journal of International Law* 5: 341–70.
- Sagemüller, Imke (2006) "Forest Sinks under the United Nations Framework Convention on Climate Change and the Kyoto Protocol: Opportunity or Risk for Biodiversity?," *Columbia Journal of Environmental Law* 31: 189–242.
- Schwartz, Jason (2006) "'Whose Woods These Are I Think I Know': How Kyoto May Change Who Controls Biodiversity," *New York University Environmental Law Journal* 14: 421–80.
- Simma, Bruno (1985) "Self-Contained Regimes," *Netherlands Yearbook of International Law* 16: 111–36.
- Simma, Bruno (2004) "Fragmentation in a Positive Light," *Michigan Journal of International Law* 25: 845–47.
- Sindico, Francesco (2005) *Unravelling the Trade and Environment Debate Through Sustainable Development Law Principles*. Available at <http://www.esil-sedi.eu/english/pdf/Sindico.PDF> (accessed 3 January 2008).
- Stokke, Olav Schram (2004) "Trade Measures and Climate Compliance: Institutional Interplay between WTO and the Marrakesh Accords," *International Environmental Agreements: Politics, Law and Economics* 4: 339–57.
- Third World Network (TWN) (2007) *Trade Ministers Propose more Intensive Trade-Climate Engagement*. Third World Network, Bali News Update (11 December). Available at <http://www.twinside.org.sg/climate.news.htm> (accessed 14 April 2008).
- Toope, Stephen (2007) "Formality and Informality." In *Oxford Handbook of International Environmental Law*, edited by D. Bodansky, J. Brunnée & E. Hey. Oxford: Oxford Univ. Press.

- United Nations Framework Convention on Climate Change (UNFCCC) (2003) *Cooperation with Relevant International Organizations: World Trade Organization. Note by the Secretariat*. FCCC/SBSTA/2003/INF.7 (14 May).
- United Nations Framework Convention on Climate Change (UNFCCC) (2004) *Decision 19/CP.9, Modalities and Procedures for Afforestation and Reforestation Project Activities under the Clean Development Mechanism in the First Commitment Period of the Kyoto Protocol* (30 March) FCCC/CP/2003/6/Add.2.
- United Nations Framework Convention on Climate Change (UNFCCC) (2005) *Decision 16/CMP.1, Land Use, Land-Use Change, and Forestry* (1 August) FCCC/KP/CMP/2005/8/Add.3.
- Voigt, Christina (2005) *Conflicts and Convergence in Climate Change and Trade Law: The Role of the Principle of Sustainable Development*. Available at <http://www.esil-sedi.org/english/pdf/Voigt.PDF> (accessed 14 April 2008).
- Vranes, Erich (2006) "The Definition of 'Norm Conflict' in International Law and Legal Theory," *European Journal of International Law* 17: 395D418.
- Werksman, Jacob (1999) "Greenhouse Gas Emissions Trading and the WTO," *Review of European Community and International Environmental Law* 8: 251–64.
- Wiser, Glenn M. (1999) "The Clean Development Mechanisms versus the World Trade Organization: Can Free-Market Greenhouse Gas Emissions Abatement Survive Free Trade?," *Georgetown International Environmental Law Review* 11: 531–97.
- Wolfrum, Rüdiger, and Nele Matz (2003) *Conflicts in International Environmental Law*. Berlin: Springer.
- World Bank (2007) *International Trade and Climate Change. Economic, Legal, and Institutional Perspectives*. Washington, D.C.: World Bank.
- Wouters, Jan, and Bart De Meester (2008) "The UNESCO Convention on Cultural Diversity and WTO Law: A Case Study in Fragmentation of International Law," *Journal of World Trade* 42: 205–40.
- World Trade Organization (WTO) (2001) *Doha Ministerial Declaration*. WTO Doc. WT/MIN(01)/DEC/120, Doha Ministerial Declaration. Geneva: WTO.
- World Trade Organization (WTO) (2003) *Matrix on Trade Measures Pursuant to Selected Multilateral Environmental Agreements*. WTO Doc. WT/CTE/W/160/Rev.2. Geneva: WTO.
- Yamin, Farhana, and Joanna Depledge (2004) *The International Climate Change Regime: A Guide to Rules, Institutions and Procedures*. Cambridge: Cambridge Univ. Press.
- Zhang, Zhong Xiang (1998) "Greenhouse Gas Emissions Trading and the World Trading System," *Journal of World Trade* 32: 219–39.
- Zhang, Zhong Xiang, and Assunção, Lucas (2004) "Domestic Climate Policies and the WTO," *World Economy* 27: 359–86.

CASES CITED

- EC-Biotech, Doc. WT/DS291/R, WT/DS292/R, WT/DS293/R, *European Communities—Measures Affecting the Approval and Marketing of Biotech Products*, Reports of the Panel, 29 September 2006.
- Korea-Beef, Doc. WT/DS161/AB/R, *Korea—Measures Affecting Imports of Fresh, Chilled and Frozen Beef*, Appellate Body Report, 12 November 2000.
- U.S.-Shrimp, Doc. WT/DS58/AB/R, *United States—Import Prohibition of Certain Shrimp and Shrimp Products*, Appellate Body Report, 12 October 1998.
- U.S.-Shrimp II, WT/DS58/AB/RW, *United States—Import Prohibition of Certain Shrimp and Shrimp Products—Recourse to Article 21.5 of the DSU by Malaysia*, Appellate Body Report, 22 October 2001.

INTERNATIONAL INSTRUMENTS

- Agreement on Technical Barriers to Trade (TBT Agreement), 15 April 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations, 1868 UNTS 120 (1994).
- Convention on Biological Diversity (CBD), 5 June 1992, 1760 UNTS 79.
- General Agreement on Trade in Services (GATS 1994), 15 April 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1B, The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations 284 (1999), 1869 UNTS 183, 33 ILM 1167.
- General Agreement on Tariffs and Trade (GATT), 15 April 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1A, The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations 17 (1999), 1867 UNTS 187, 33 ILM 1153.
- Kyoto Protocol to the United Nations Framework Convention on Climate Change (Kyoto Protocol), 11 December 1997, 37 ILM 22.
- Marrakesh Agreement Establishing the World Trade Organization (WTO Agreement), 15 April 1994, The Legal Texts: The Results of the Uruguay Round of Multilateral Trade Negotiations 4 (1999), 1867 UNTS 154, 33 ILM 1144.
- Understanding on Rules and Procedures Governing the Settlement of Disputes (DSU), 15 April 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 2, The Legal Texts, The Results of the Uruguay Round of Multilateral Trade Negotiations 354 (1999), 1869 UNTS 401, 33 ILM 1226.
- United Nations Framework Convention on Climate Change (UNFCCC), 9 May 1992, 1771 UNTS 163.
- Vienna Convention on the Law of Treaties (VCLT), 22 May 1969, 1155 UNTS 331.