

# Fragmentation vs. Universalism? Assessing Options for the Polity of Post-2012 Global Climate Governance

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The formation of the Asia-Pacific Partnership on Clean Development and Climate (AP6) in 2005 has highlighted one of the main questions in international climate change policy today: can global warming best be addressed through a universal governance architecture, or is it better to follow a strategy that includes a variety of agreements?

In the same year, many observers hailed the entry into force of the Kyoto Protocol as a landmark achievement in the international efforts to deal with global climate change. However, this treaty is but a first step, and compliance with the Kyoto targets will not suffice to prevent “dangerous anthropogenic interference with the climate system”, the main goal of the protocol’s parent convention, the 1992 United Nations Framework Convention on Climate Change (UNFCCC).<sup>1</sup> This situation has led to an extensive debate in policy, academic, business and NGO communities on how international climate policy beyond the first commitment period of the Kyoto Protocol (“post-2012”) should take shape to effectively address this complex problem.

At the meetings of the parties of the Kyoto Protocol in Montréal in December 2005, and in Nairobi in November 2006, steps were taken to negotiate the future of international climate governance. Yet simultaneously, several parallel approaches to the problem have emerged outside of the UN umbrella that may develop into divergent regulatory mechanisms and regimes within this issue area. The AP6, being the most often-cited example, includes some of the world’s current or future top CO<sub>2</sub> emitting countries such as the USA, Australia, China, India and Japan. The partnership takes a different approach than the climate convention and its Kyoto Protocol, focusing on voluntary approaches with an emphasis on technological development. Similar initiatives include the International Partnership for a Hydrogen Economy, the Methane to Markets Partnership, and the Carbon Sequestration Leadership

Forum.<sup>2</sup> Furthermore, the start of the European emissions trading scheme in 2005 marked the launch of another UN-independent initiative: though being based on the Kyoto Protocol, the scheme's start was not depending on the protocol's entry into force.

Taken together, we are witnessing the emergence of an inherently fragmented global governance arena, which can be likened to a mosaic of national, regional and global climate measures and approaches. In this sense, climate governance takes a decidedly different path than other environmental issue areas, which are in general governed by one single regime that unites all actors and that serves as central locus of debate and decision-making.

In the case of climate governance, the mosaic fragments the issue area along several dimensions. First, global climate governance is marked by a mosaic of *policies*, such as the emissions trading system of the European Union, the target-and-timetables approach of the Kyoto Protocol, voluntary partnerships under the AP6, and independent initiatives taken by U.S. states. Second, climate governance includes a mosaic of *actors*, including governments, civil society, science and business, and their corresponding politics in this field. We can distinguish at least three different groups of governmental actors: industrialized countries that have ratified the Kyoto Protocol and committed to limit their greenhouse gas emissions by an average of five percent between 2008-2012; industrialized countries that reject Kyoto, but are developing alternative regulatory approaches; and developing countries that support Kyoto in principle, and have ratified it, but do not need to limit or reduce their emissions, including major Southern nations such as China and India. Within these three core groups, fragmentation further intensifies. In the developing world, we encounter both governments heavily opposed to stringent climate measures, notably

the oil-producing nations, and governments that call for rapid action, such as the small island developing states. Third, and as a consequence, climate governance is marked by a mosaic of *institutions and principles* that indicate how the overall architecture of climate governance should be structured, and how progress at the negotiation table could be achieved. While some nations hope to maintain a universal approach towards climate governance, others seemingly work towards a more fragmented order consisting of many entities with limited membership.

Most existing scholarship has focused on the first two of the aforementioned three dimensions of fragmentation, i.e. on policies and actors—either analyzing them, or proposing and assessing novel answers to them. Against this backdrop, this paper intends to explore the third dimension of *structural or institutional* fragmentation of international climate governance. Starting from the core conflict among the two institutional ideal types—universal architecture or fragmented mosaic—this paper provides a careful mapping of the associated approaches voiced by the proponents of these two alternatives, i.e. by what we call multilateralists on the one hand and “paucilateralists” on the other—from the Latin word *pauci* (few).<sup>3</sup>

Our argument is structured as follows. First, we elaborate on the definition and theoretical underpinnings of fragmentation in global climate governance, by referring to the concepts of “polity” and “interlinkages” among international institutions. Subsequently, we discuss the options of a universal versus a fragmented climate polity with reference to three academic debates: institutional theory, environmental policy, and international law. Finally, we summarize our main argument and sketch out the key conflicts deriving from the current state of affairs.

## Conceptual Approaches to Fragmentation: Polity and Interlinkages

In “classical” post-war political science, the trias of polity, policy and politics was introduced to systematically differentiate the formal, substantial and procedural elements of domestic political systems. Whereas its two kin terms relate to the political software, namely either to causes, contents and consequences of political action (“policy”), or to decision-finding and decision-making processes (“politics”), “polity” refers to the hardware, i.e. the formal dimension of politics. It describes the framework within which political actions and processes are taking place. Although such a framework can be subject to change, “polity” represents the most enduring dimension of the trias. This term hence comes closest to our focus in this paper, i.e. to the *structural* implications of a fragmented climate architecture. More concretely, we understand “polity” as the major constitutional and institutional dimension of politics: “constitutional” since it consists of norms which regulate collective behavior, and “institutional” since it refers to institutions which have been genuinely designed to continuously formulate, implement and enforce these norms.<sup>4</sup>

Regarding the global climate “polity”, we can make two important observations: first of all, global polity in general, and global climate polity in particular, is made up of an increasing number of international institutions which are different in their legal character (organizations, regimes, implicit norms),<sup>5</sup> their constituencies (public and private), their spatial scope (from bilateral to global) and their subject matter (from specific policy fields to universal concerns). Second, unlike in domestic societies, global polity is not hierarchical: there is no such thing as a global state or universally acknowledged central authority, but rather presents a

heterarchical network in which these institutions display different levels of interdependence among each other. In other words, global polity is “a political space in which a vast array of polities overlap, layer, nest, and interact—coexist, cooperate, and conflict in the context of particular issues that often overlap”.<sup>6</sup>

What then are the concrete building blocks of global climate polity? Without being exhaustive, a number of components can be identified. First, the global climate polity includes the UNFCCC and its Kyoto Protocol as the formal international regime. Second, there are a number of additional formal arrangements at different levels of the political system, including international initiatives such as the AP6, as well as regional programmes like the EU emissions trading scheme, or sub-state initiatives at the US state level, such as California’s Global Warming Solution Act. Third, the global climate polity consists of a number of explicit and implicit norms that either directly derive from the international climate regime or from international law in general. Examples include Article 2 of the UNFCCC (its ultimate objective), the principle of common but differentiated responsibilities, and the precautionary principle. Fourth, formal organizations such as the secretariat to the climate convention also belong to the global climate polity. Fifth, one increasingly has to take into account private regimes that regulate issue areas with predominant relevance to the global climate, e.g. the Forest Stewardship Council (FSC). Finally, the global climate polity includes private-public partnerships and initiatives with predominant relevance to the global climate, such as the Futuregen project.

Having used the concept of “polity” to list the different components of international climate architecture, we will also introduce a concept that helps us account for the dynamics among these components. This second concept, of “interlinkages” draws our attention to the fact, that the fragmented climate governance

is not simply a somewhat un-coordinated compound of peacefully co-existing elements; instead, its elements overlap and interact – with either synergetic or disruptive consequences.

Such institutional overlaps are by no means a specific feature of international climate polity. Instead, there is a widespread existence of fragmentation and intersection between international agreements and organizations both within and across policy fields. These interactions should not come as a total surprise—especially not with regard to environmental regimes—for two reasons. First, already since the end of the Second World War, international relations have been marked by a growing interdependence in different policy areas, entailing a corresponding increase in the number of international organizations and regimes, including in the environmental realm. Observers are counting between 200 and over 700 multilateral environmental agreements (MEAs) at the time of writing.<sup>7</sup> Most of these rule systems have been developed independently of each other, cover different geographic and substantial scopes, and are partly marked by very different patterns of codification, institutionalization and cohesion. Second, this fragmentation is considerably advanced in policy fields with a crosscutting nature. With regard to this aspect, the domain of environmental protection plays a prominent role: many issues regulated by MEAs such as biological diversity, climate change or ozone layer depletion touch upon such different fields as health, energy security, technology, investment and trade, inducing interlinkages with respective institutions.

Pursuant to this development, research on interlinkages among international institutions has become widespread and is both empirically rich as well as theoretically compelling.<sup>8</sup> However, this research has mostly focused on interlinkages across issue areas, e.g. among international environmental and trade institutions, or

among regimes of different environmental domains.<sup>9</sup> On the other hand, the interlinkages of *parallel policies and regimes in the same policy area*—such as is likely in climate governance—have been widely overlooked in current research.<sup>10</sup>

This ongoing academic focus on inter-issue—rather than *intra-issue*—interlinkages also explains why an important peculiarity of the global climate architecture has so far not attracted sufficient attention: whereas some overlaps between the global climate regime and non-climate regimes are the unintended results of uncoordinated treaty negotiations,<sup>11</sup> some major overlaps *within* the issue area of climate change are *intentional*. To be more specific: the well researched overlaps of the UN climate regime with, for example, the biodiversity regime and the global trade regime, are the results of nearly parallel negotiations in the early and mid-1990s; but the recent AP6 initiative and similar proposals have not been brought on their way out of ignorance of the global climate regime, but exactly because of it, at a time when the framework convention and the Kyoto Protocol were well established and had entered into force.

This situation is the more problematic since the existence of several divergent climate polities is likely to persist, with the resulting danger of new forms and levels of conflict among major coalitions, including the increasing rift in environmental policies between the European Union and the United States. There is an urgent need, therefore, to explore the likely consequences of interlinkages in climate governance and to analyze what sets of compatible or diverging norms and rules exist in the divergent regimes, how they may predetermine the political opportunities for coordination and what response strategies policy-makers could avail of. The following discussion of the pros and cons of a fragmented vs. a universal climate polity intends to contribute to this pressing research agenda.

# **Mapping of Theoretical Propositions Regarding Consequences of Fragmented and Universal Governance Architectures**

This section provides a review of options for a post-2012 climate polity. We have organized this discussion according to three bodies of literature, namely international relations/institutional theory, environmental policy theory, and international law. In each body of literature, we find arguments that emphasize the advantages of fragmented governance systems, as well as arguments that highlight the disadvantages and threats of fragmentation. Before we consider these arguments in more detail, we review the state of affairs with regard to approaches for a post-2012 climate polity.

With regard to the issue of fragmentation vs. universalism, existing proposals fall in three categories.

First, some proposals explicitly refer to a fragmented and/or alternative regime in addition to the UNFCCC and its Kyoto Protocol. Proposals that fall into this category include: 1) suggestions to convince developing countries to turn away from the Kyoto framework and to adopt some alternative forms of commitments, including voluntary targets of some kind;<sup>12</sup> 2) approaches that focus on alternative, regional agreements between the USA and like-minded countries, in particular in Asia and Latin America;<sup>13</sup> 3) proposals that explicitly focus on a fragmented polity to enhance its overall effectiveness, for example through an “orchestra of treaties” that complements the existing UNFCCC;<sup>14</sup> and 4) proposals that strengthen the role of private actors in addressing the climate change problem.<sup>15</sup>

A second group of proposals *implicitly* includes the possibility of institutional fragmentation. Robert Reinstein, for example, has proposed to start a bottom-up process in which countries—very similar to ongoing trade negotiations—would put on the table acceptable measures in line with national circumstances.<sup>16</sup> Although this proposal is targeted at all nations, it very well could lead to a substantial implicit fragmentation of the global climate polity by setting in motion path-dependencies and creating coalitions of like-minded countries reinvigorating the existing rift in climate governance rather than closing it. In addition, issue-specific agreements could also lead to implicit institutional fragmentation, as they would apply for sectors that are often organized along existing power structures in international politics. A transnational sectoral agreement on the cement or automotive industry may therefore construct novel coalitions of interest that may run counter to established and agreed national climate policies.

The third category consists of the majority of proposals that explicitly make reference to a universal approach towards climate governance such as the frequently discussed per capita convergence or global cap-and-trade schemes. Most of these focus on continuing under the umbrella of the United Nations, advocating a gradual widening and substantial broadening and deepening of the regime.<sup>17</sup>

In sum, a large number of proposals have been put forward that either explicitly address the added value of a fragmented approach or at least implicitly include the possibility of institutional fragmentation. On the other hand, there is still broad support for a more universal architecture in other proposals. The following section will engage in a more theoretical discussion of the generic advantages and disadvantages of different climate polities.

## *Fragmentation in Institutional Theory*

The following part discusses some of the potential promises and pitfalls of a fragmented climate polity from the perspective of institutional theory, largely from the field of international relations.

### **Advantages**

Participation and compliance figure among the key themes of institutional analysis with regard to international regimes.<sup>18</sup> On this account, participation and compliance are necessary but not sufficient conditions for effective climate governance. For example, an international agreement might have universal membership and reach full compliance, however, the agreed upon rules have been watered down in the negotiation process and hence, only incremental changes can be realized. Under these conditions, a “narrow-but-deep” agreement, achieving substantial per-party mitigation with relatively little participation may prove superior to the watered-down full participation, full compliance alternative (“broad-but-shallow”).<sup>19</sup>

Another positive trait of a fragmented global climate polity is underscored by negotiation theory.<sup>20</sup> As small-n agreements are on average faster to negotiate and to agree on, actual reductions of greenhouse gas emissions may occur considerably earlier than under the “full-participation” assumption.<sup>21</sup> With regard to the ongoing negotiation on a post-2012 climate change regime, it may well be concluded that instead of putting more time and energy into reaching a global consensus on climate policy, like-minded countries should rather take the opportunity and negotiate an alternative approach among themselves. Although most proposals for a fragmented architecture have been voiced by US scholars with some bias for non-binding voluntary measures, the idea of a fragmented polity does not foreclose the actual content of a negotiation.

At least from the perspective of effective and efficient negotiations, front-runners in climate policy may potentially agree on an accord that goes beyond Kyoto.

In addition, a fragmented polity may also offer increased chances of side-payments. In particular, bilateral strategies offer the opportunity to reach agreement by concessions that would not be acceptable to a larger group of states or the international community as a whole. Potential bargaining chips that could move central players into the desired direction include, for example, trade concessions, nuclear technology, high-tech weapons or support for enhanced political influence in international institutions like the World Bank. However, as these offers are highly controversial, a bilateral or small-n strategy may very well strike a deal where consensual strategies are likely to fail.

Finally, the role of private actors and new forms of governance beyond the state in general and with regard to climate policy in particular are a key concern in recent institutional scholarship on the environment.<sup>22</sup> Although a fragmented global climate polity is not *per se* more conducive to private forms of governance, the widening of participation of non-state actors in global climate governance has at least been a contentious issue, in particular between North and South. The advantage of a mosaic of approaches would hence be the relative openness to novel institutional arrangements that could incentivize participation of private actors, including major industry and business actors.

### **Disadvantages**

A number of arguments from institutional theory, however, speak against a fragmented global climate polity.<sup>23</sup>

First, a fragmented polity with several independent institutions and regimes will produce solutions that fit the interests only of the few participating countries. It is

not guaranteed that other countries will later join. On the contrary—a certain degree of instant problem-solving through the small-n agreement might provide disincentives for third countries to engage in climate action and could further disintegrate the overall negotiation system.<sup>24</sup>

Second, a quick success in negotiating small-n agreements might run counter to the long-term success, when important structural regime elements (e.g. inclusion of the principle of common but differentiated responsibilities) have not sufficiently been resolved. At a later stage, when interest-constellations change and new situations arise, it might be difficult to reach agreement within the international community without an existing overall agreement that includes those structural elements.

Third, smaller agreements only with few like-minded countries will decrease the opportunity for creating package deals, which will minimize the overall policy acceptance and effectiveness.

Fourth, and related to the third point, a fragmented polity raises concerns of equity and fairness. Negotiation theory can show that bilateral and small-n agreements grant more bargaining power to larger and more influential countries, while large-n agreements allow smaller countries to enter into coalitions that protect their collective interests from the interest of the larger countries. In the end, perceptions of inequity and unfairness are linked to policy effectiveness through its legitimacy—a climate governance system that is not seen as fair by all parts of the international community is likely to lack in overall effectiveness.<sup>25</sup>

Fifth, from a cost-benefit point of view, although a “narrow-but-deep” approach is theoretically possible, a “broad-but-shallow” approach could be more efficient.<sup>26</sup>

Sixth, a fragmented polity in the climate area would further complicate interlinkages with other policy areas. There may be possibly strong economic implications—in terms of international competitiveness—if one coalition of states adopts a stringent climate policy (e.g. binding emission ceilings), while other coalitions opt for a less rigorous way to reduce greenhouse gas emissions (e.g. voluntary pledges). This, in turn, may have severe ramifications for the world trade regime that unites both coalitions under one uniform umbrella. Connected to this observation, the lack of a concerted approach weakens the lobby of climate change issues when overlapping with other regimes. A universal climate polity, on the other hand, would allow systematic and stable agreements between the institutional frameworks of the world trade regime and the climate regime.<sup>27</sup>

### ***Fragmentation in Environmental Policy Research***

Environmental policy theory—which is more related to domestic policy, public administration and political science—provides different propositions on the advantages and disadvantages of a fragmented or universal climate polity.

#### **Advantages**

First, some strands in environmental policy theory suggest that fragmentation and regulatory diversity increase innovation. It has been shown that regulatory competition—for example as seen in some federal states—can allow for the development of different solutions in different regulatory contexts, of which the most effective will then “survive” and be diffused to other regulatory contexts, be it other federal states or other countries. Thus, fragmentation would enhance innovation at both the individual level of the firm or the public agency and in the end the higher

level of innovation in the entire system.<sup>28</sup> One example of this line of thought is Stewart and Wiener who propose that the United States should initially stay outside the Kyoto framework and should seek to establish a new framework with China and, possibly, other key developing countries. This would address the world's two largest GHG emitters and allow for experimentation of alternative international climate regulatory frameworks. The resulting regulatory competition could be beneficial, provided that it "takes place in some sort of a common framework, thereby avoiding a race to the bottom".<sup>29</sup>

Second, a fragmented climate polity might make it easier to link climate policy with other environmental policies or non-environmental policies. Fragmentation within the climate polity would hence circumvent negotiation stalemates among countries in a universal agreement and make synergetic interlinkages possible. For example, the Kyoto Protocol does not yet cover emissions from aviation, whereas the EU emissions trading system may cover this soon.<sup>30</sup>

### **Disadvantages**

Environmental policy theory, however, also provides powerful arguments that advise against a fragmented polity.

First, regulatory competition in combination with free trade and economic competition might result in the general decline of environmental standards, the so-called "race to the bottom". This hypothesis has only limited empirical support regarding current environmental policies. However, proponents of a universal climate polity claim here that the increasing *future* needs of more stringent mitigation measures will also increase costs of regulation, which will then make regulatory differentials in some sectors—for example cement—more relevant for a "race to the

bottom” scenario. In any case, this problem remains a major argument in domestic contexts that raises concerns with energy-intensive industries.<sup>31</sup>

A second argument could be described as the fear of a general regulatory “chaos” in climate policy, but also in related areas such as energy, agriculture or transport. The absence of a universal polity that unites all major nations in one coherent and consistent regulatory framework would send confusing messages to all actors that would eventually have to reduce emissions. For example, investors in the Kyoto Protocol’s Clean Development Mechanism have emphasized the importance of clear signals of a long-term commitment of all actors to one stable process. This may be more difficult in a fragmented climate polity with a diversity of approaches.<sup>32</sup>

A third argument from environmental policy theory is the need to maintain momentum and support in the wider public and with all relevant actor-groups. This would require a stable and coherent polity, while fragmentation would result in the distraction of more and more actors from the core requirements of climate policy. Fragmentation and the ever new need to find new compromises, tailor-made solutions, new coalitions of the willing and alternative solutions would, in the end, largely cost time and effort. It would create a continuous system of fragmented *negotiation* systems, instead of a key focus on *implementation*.

### ***Fragmentation in International Law***

The following part discusses potential promises and pitfalls of fragmented climate governance from an international law point of view. It thereby links to an ongoing broader debate in international law, namely the question to which extent the

fragmentation of international law is either a positive or a detrimental development for its very future.<sup>33</sup>

### **Advantages**

One advantage is that fragmentation can be seen as a sign of the diversity and expansion of international law. In other words, international rules can be applied to fields that were previously unregulated.<sup>34</sup> Over time, international law has come to cover important areas of international relations such as international commerce, human rights, and the environment. Koskenniemi and Leino put it as follows: “[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”.<sup>35</sup>

A related argument is that fragmentation may lead to innovations in international law. For example, the emergence of international environmental law has brought about changes in ways of complying with international law, as well as new avenues for settling disputes between States.

Finally, it has been argued that the increased specialization in international law in fact is a way of accommodating the different interests of states. As a result, states may perceive that the more specialized regimes better serve their interests and have a greater incentive to comply with them.<sup>36</sup>

### **Disadvantages**

One legal scholar summarized the main disadvantages of the fragmentation of international law as follows: “[d]oubts 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”.<sup>37</sup>

One argument that is often used is that the growing body of international legal rules threatens the unity and coherence of international law, as different specific rules are created which allow international judicial institutions to come to diverging decisions.<sup>38</sup> For international environmental law, an additional challenge is posed by possibly inconsistent decision-making in different treaty bodies, which are increasingly involved in rule development.

Related to this is that different enforcement mechanisms for the same situation would lead to different outcomes. States would then opt for the mechanism that would best serve their interests (so-called “forum shopping”).<sup>39</sup>

Finally, it has been argued that a fragmented international legal system could lead to (some degree of) prioritization of certain parts of international law over others, for example, the prevailing of international economic law over international environmental law or vice versa.<sup>40</sup>

## **Conclusions**

In this paper, we have first developed the concept of climate polity as the structural and institutional dimension of international climate governance (as opposed to climate *policy* and climate *politics*). Based on this concept, we have listed the major structural building blocks of global climate polity, including the UN climate regime and the objective and principles it includes, but also other global and regional multilateral arrangements outside the aegis of the United Nations as well as private or public-private initiatives. This list of building blocks indicates a growing tendency towards institutional fragmentation in the global climate domain.

Furthermore, in the first section, we have introduced the concept of institutional interlinkages in order to account for the dynamics among these different

building blocks. These dynamics can lead to synergetic, but also to disruptive consequences. In this regard, we have brought to attention that most academic research on interlinkages has focused on unintended institutional overlaps across policy fields, e.g. climate and trade. This has left a major research gap, namely the consequences of a—partially intentional—fragmentation within one and the same policy field such as climate change.

Addressing this research lacuna, we have reviewed a number of theoretical propositions on the advantages and disadvantages of a fragmented or a universal global climate polity. We have structured this review according to three different research communities, namely international relations/institutional theory, environmental policy theory, and international law. Based on a preliminary assessment, we believe that—across all three bodies of literature—the balance of evidence suggests that a uniform polity appears to have more advantages than disadvantages. To name two of the recurring arguments in favor of a universal climate regime:

The existence of different policy approaches could distract from the more encompassing framework, or even challenge its relevance, both in terms of capacity and political will. What is more, the emerging climate governance mosaic and the lack of uniform policies may also jeopardize the success of the segmented approaches adopted by individual coalitions. For example, the efficiency of a global emissions trading regime, as introduced by the Kyoto Protocol, is undermined in the absence of the United States, the largest greenhouse gas emitter.

Competing multilateral climate arrangements can lead to a so called “race to the bottom”. For instance, fragmented policy approaches within the OECD area might affect the behavior of industry once different climate policies have an impact on

prices. Certain energy-intensive industry operations could migrate to nations with less stringent climate policies, thus jeopardizing the effectiveness of more stringent climate policies of other nations or international agreements.

To conclude, for all three research communities, a universal regime appears to be the most effective long-term polity model to tackle climate change. The best contribution a fragmented climate governance mosaic—as it currently appears to be evolving—can make is therefore: to eventually pave the way back towards such a unified regime. For example, the “Kyoto coalition” and those remaining outside the Kyoto framework could agree on joint action vis-à-vis other countries, e.g. regarding technology transfer to developing countries and capacity building in the South. Innovative policies may assist in the step-by-step convergence of parallel approaches, thus uniting the global climate policy mosaic into a more uniform and possibly stronger global climate regime. The main question that remains to be addressed in this regard then is how and under what conditions these parallel approaches could converge, and hence contribute to more effective climate governance.

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<sup>1</sup> “United Nations Framework Convention on Climate Change”, Rio de Janeiro, 1992, in *International Legal Materials* 31 (1992): 849, Article 2.

<sup>2</sup> On the emergence of these types of agreements, see H. de Coninck, C. Fischer, R. G. Newell, and T. Ueno, *International Technology-Oriented Agreements to Address Climate Change* (Washington, D.C.: Resources for the Future, 2007), <http://www.rff.org/Documents/RFF-DP-06-50.pdf> (accessed 10 March 2007).

<sup>3</sup> For evaluations of different post-2012 proposals see, for example, J. E. Aldy, S. Barrett, and R. N. Stavins, “Thirteen Plus One: A Comparison of Global Climate Policy Architectures”, *Climate Policy* vol. 3, no. 4 (2003): 373-97; D. Bodansky, S. Chou, and C. Jorge-Tresolini, *International*

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*Climate Efforts Beyond 2012: A Survey of Approaches* (Arlington, VA: Pew Center on Global Climate Change), <http://www.pewclimate.org/docUploads/2012%20new.pdf> (accessed 10 March 2007); Y. Kameyama, "The Future Climate Regime: A Regional Comparison of Proposals", *International Environmental Agreements: Politics, Law and Economics* vol. 4, no. 4 (2004): 307-26; N. Höhne, *What is Next After the Kyoto Protocol? Assessment of Options for International Climate Policy Post 2012* (Amsterdam: Techné Press, 2006).

<sup>4</sup> This definition might sound vague, since it does not name concrete institutions such as states, or concrete norms such as laws. But this vagueness is warranted: it accounts for the fact that polity does not only consist of state or public institutions; in fact, also private regimes can be designed to regulate collective behavior. On the other hand, the definition is not too open, since it refers to a steady and purposely designed political *architecture*, thereby excluding such institutions which exert but a sporadic or even non-intentional influence in a given policy domain.

<sup>5</sup> This threefold understanding of "international institutions" is based on a definition by Robert Keohane (R. O. Keohane, *International Institutions and State Power. Essays in International Relations Theory* (Boulder, CO: Westview Press, 1989), page 3). Keohane distinguishes between implicit norms ("conventions"), explicit norms ("regimes") as well as public and private ("intergovernmental and nongovernmental") organizations. Examples for conventions or implicit rules on the international level are diplomatic immunity, but also expectations of treaty compliance ("pacta sunt servanda"). The term "explicit norms" or "regimes" first of all accounts for all sorts of agreements among governments ("from global and cross-issue contracts like the Charter of the United Nations to regional and issue-specific ones. Unlike Keohane, we also like to include increasingly important realm of private regimes, e.g. the Forest Stewardship Council (FSC), or mixed private-public regimes. Finally, unlike regimes, organizations are "purposive entities [...] capable of monitoring activity and of reacting to it" (ibid.). As such, they often fulfill an active role within regimes, since they can initiate, administer or enforce them. In turn, regimes often serve as forerunners or establishers of organizations (e.g. GATT for the WTO). Keohane defines institutions as "persistent and connected sets of rules (formal and informal) that prescribe behavioral roles, constrain activity, and shape expectations".

<sup>6</sup> Y. H. Ferguson, R. W. Mansbach, R. A. Denemark, H. Spruyt, B. Buzan, R. Little, J. Gross Stein, and M. Mann, "What Is the Polity? A Roundtable", *International Studies Review* vol. 2, no. 1 (2000): 3-31, page 29.

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<sup>7</sup> Criteria include the minimum number of states parties, the inclusion of soft law agreements or the definition of which issues are to be considered as environmental, etc. The lower number of MEAs represents the succinct WTO understanding of the (cf. WTO, *CTE Agenda*, [http://www.wto.org/english/tratop\\_e/envir\\_e/cte01\\_e.htm](http://www.wto.org/english/tratop_e/envir_e/cte01_e.htm) (accessed 10 March 2007). The higher number is derived from R. B. Mitchell, *International Environmental Agreements Website*, <http://www.uoregon.edu/~iea/> (accessed 10 March 2007). See also R. B. Mitchell, "International environmental agreements: a survey of their features, formation, and effects", *Annual Review of Environment and Resources* vol. 28 (2003): 429-61.

<sup>8</sup> Likewise, practitioners, and especially treaty negotiators, have gradually grown more aware of fragmentation. In 1998, a United Nations task force recommended that the international community should pursue stronger interlinkages between MEAs to facilitate synergies and promote the coherence of policies (United Nations General Assembly, *Report of the United Nations Task Force on Environment and Human Settlements*, UN Doc. A/53/463 (1998), Annex, para. 30). Another indicator for this attentiveness is a tendency towards implicit or explicit recognition of interlinkages in the text of respective treaties, e.g. in the Convention on Biological Diversity (CBD) and the climate convention (UNFCCC, note 1 above, Articles 3.5 and 4.2(e); "Convention on Biological Diversity", Rio de Janeiro, 1992, in *International Legal Materials* 31(1992): 822, Article 22). See R. Wolfrum and N. Matz, *Conflicts in International Environmental Law* (Berlin: Springer, 2003), page 120-133). Likewise, respective considerations of overlaps with environmental regimes have been built into international trade agreements, such as GATT Article XX on general exceptions.

<sup>9</sup> In this regard, three projects are noteworthy: first, the Inter-Linkages initiative of UN University, which inquires into possible synergies through regime co-ordination, for example of the secretariats of regimes, of scientific bodies or of the activities of private actors involved in the regime. See W. B. Chambers, ed., *Global Climate Governance: Inter-Linkages Between the Kyoto Protocol and Other Multilateral Regimes* (Tokyo: United Nations University, 1998); W. B. Chambers, "International trade law and the Kyoto Protocol: potential incompatibilities", in W. B. Chambers, ed., *Inter-linkages: the Kyoto Protocol and the International Trade and Investment Regimes*, (Tokyo: United Nations University Press, 2001), 87-118. Second, the Institutional Interaction Project conducted by four European research institutions, which has produced a valuable typology of regime interactions and which comprises a remarkable number of case studies mostly concerning the interaction of

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international treaty systems and EU environmental instruments. See T. Gehring and S. Oberthür, “Exploring Regime Interaction: A Framework of Analysis”, in A. Underdal and O. R. Young, eds., *Regime Consequences. Methodological Challenges and Research Strategies* (Dordrecht, Netherlands: Kluwer, 2004), 247-280; S. Oberthür and T. Gehring, eds., *Institutional Interaction in Global Environmental Governance: Synergy and Conflict among International and EU Policies* (Cambridge, MA: The MIT Press, 2006). Finally, a third major project on regime interplay, the Institutional Dimensions of Global Environmental Change (IDGEC) project, focuses on the causality, performance and design of international institutions with regard to global environmental change and thereby also takes into account the horizontal and vertical interaction of institutional arrangements. See L. A. King, *Institutional interplay—research questions: a report for the Institutional Dimensions of Global Change—International Human Dimensions Programme on Global Environmental Change*, <http://fiesta.bren.ucsb.edu/~idgcec/publications/idgcecscience/InstitutInterplay.pdf> (accessed 10 March 2007); O. R. Young, *The Institutional Dimensions of Environmental Change. Fit, Interplay, and Scale* (Cambridge, MA: MIT Press, 2002).

<sup>10</sup> One notable recent exception relevant for the purposes of this paper is J. McGee and R. Taplin, “The Asia-Pacific Partnership on Clean Development and Climate: A Competitor or Complement to the Kyoto Protocol”, *Global Change, Peace & Security* vol. 18, no. 3 (2006): 173-92.

<sup>11</sup> For an overview of cases of interlinkages between UNFCCC/Kyoto Protocol and other institutions see F. Yamin and J. Depledge, *The International Climate Change Regime: A Guide to Rules, Institutions and Procedures* (Cambridge: Cambridge University Press, 2004), 509-543; H. van Asselt, J. Gupta, and F. Biermann, “Advancing the climate agenda: exploiting material and institutional linkages to develop a menu of policy options”, *Review of European Community and International Environmental Law* vol. 14, no. 3 (2005): 255-64; S. Oberthür (2006), “The Climate Change Regime: Interactions with ICAO, IMO, and the EU Burden-Sharing Agreement”, in Oberthür and Gehring, note 9 above, 53-78.

<sup>12</sup> See C. Egenhofer and N. Fujiwara, *The emerging climate change regime: The UNFCCC, the Kyoto Protocol forever, Kyoto modified ... or yet something else?* (Brussels, Belgium: Centre for European Policy Studies, 2003).

<sup>13</sup> See D. Bodansky, *U.S. Climate Policy after Kyoto: Elements for Success* (Washington D.C.: Carnegie Endowment for International Peace, 2002), <http://www.ceip.org/files/pdf/Policybrief15.pdf>

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(accessed 10 March 2007); R. B. Stewart and J. B. Wiener, *Reconstructing Climate Policy: Beyond Kyoto* (Washington, D.C.: The AEI Press, 2003).

<sup>14</sup> See T. Sugiyama and J. Sinton, “Orchestra of Treaties: A Future Climate Regime Scenario with Multiple Treaties among Like-minded Countries”, *International Environmental Agreements: Politics, Law and Economics* vol. 5, no. 1 (2005): 65-88; see also M. Grasso, “An Ethics-based Climate Agreement for the South Pacific Region”, *International Environmental Agreements: Politics, Law and Economics* vol. 6, no. 3 (2006): 249-70.

<sup>15</sup> See R. A. Rinkema, “Environmental agreements, non-state actors, and the Kyoto Protocol: a “third way” for international climate action?”, *University of Pennsylvania journal of International Economic Law* vol. 24, no. 3 (2003): 729-57.

<sup>16</sup> R. A. Reinstein, “A Possible Way Forward on Climate Change”, *Mitigation and Adaptation Strategies for Global Change* vol. 9, no. 3 (2004): 245-309.

<sup>17</sup> See M. M. Berk and M. T. J. den Elzen, “Options for Differentiation of Future Commitments in Climate Policy: How to Realise Timely Participation to Meet Stringent Climate Goals?”, *Climate Policy* vol. 1, no. 4 (2001): 465-80; C. Philibert and J. Pershing, “Considering the Options: Climate Targets for All Countries”, *Climate Policy* vol. 1, no. 2 (2001): 211-27; van Asselt, Gupta, and Biermann, note 11 above, page 255; A. Michaelowa, S. Butzengeiger, and M. Jung, “Graduation and Deepening: An Ambitious Post-2012 Climate Policy Scenario”, *International Environmental Agreements: Politics, Law and Economics* vol. 5, no. 1 (2005): 25-46; H. Winkler, B. Brouns, and S. Kartha, “Future Mitigation Commitments: Differentiating Among Non-Annex I Countries”, *Climate Policy* vol. 5, no. 5 (2006): 469-86.

<sup>18</sup> A. Chayes and A. H. Chayes, *The New Sovereignty. Compliance with International Regulatory Agreements* (Cambridge, MA: Harvard University Press, 1995).

<sup>19</sup> Aldy, Barrett, and Stavins, note 2 above.

<sup>20</sup> M. Zürn, *Interessen und Institutionen in der internationalen Politik. Grundlegung und Anwendung des situationsstrukturellen Ansatzes* (Opladen: Leske+Budrich, 1992).

<sup>21</sup> Small-n agreements are rather tailor-made and reflect the interests of key players within the international arena, and may thus prove easier to implement and also to comply with. The late coming-into-force of the Kyoto Protocol aptly illustrates the weaknesses of a universal approach in this respect,

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as the thresholds for country representation and greenhouse gas emissions that were thought to enhance participation effectively prolonged the ratification process.

<sup>22</sup> R. Falkner, “Private environmental governance and international relations: exploring the links”, *Global Environmental Politics* vol. 3, no. 2 (2003): 72-87; S.C. Jagers and J. Stripple, “Climate Governance Beyond the State”, *Global Governance* vol. 9, no. 3 (2003): 385-399; P. Pattberg, “The Institutionalization of Private Governance: How Business and Non-profit Organizations agree on Transnational Rules”, *Governance: An International Journal of Policy, Administration, and Institutions* vol. 18, no. 4 (2005): 589-610.

<sup>23</sup> F. Biermann, “Between the United States and the South. Strategic Choices for European Climate Policy”, *Climate Policy* vol. 5, no. 3 (2005): 273-90.

<sup>24</sup> For an explanation of possible disincentives provided by the AP6, see McGee and Taplin, note 10 above. They point out that specific features of the AP6 reduce the normative compulsion for Kyoto countries, or give these countries a reason to leave Kyoto on the basis of utilitarian calculations. Evidence for this can already be seen in the fact that two Kyoto parties, Canada and New Zealand, have expressed active interest in joining the AP6.

<sup>25</sup> On the link between legitimacy and effectiveness, see S. Andresen and E. Hey, “The Effectiveness and Legitimacy of International Environmental Institutions”, *International Environmental Agreements: Politics, Law and Economics* vol. 5, no. 3 (2005): 211-26.

<sup>26</sup> In the words of Aldy Barrett, and Stavins, note 2 above, page 378: “[c]urrent understanding of the benefit and cost functions characterizing climate change suggest that the latter type of policy [broad-but-shallow] is more likely to satisfy the dynamic efficiency criterion. Since marginal emissions control costs increase steeply, a broad-but-shallow policy would result in lower overall costs”.

<sup>27</sup> The 1987 Montreal Protocol illustrates most of these problems: Even though the protocol was relatively quickly negotiated within the OECD group, it was subsequently not accepted by the major developing countries. Two years after adoption of the protocol, only 10 had ratified the treaty, and of the 13 developing countries whose CFC consumption appeared to rise in 1987 most sharply, only Mexico, Nigeria and Venezuela had joined. China and India agreed to ratify the treaty only after substantial changes to its basic structure had been made. Only the subsequent agreement on a mode of allocation that was agreeable to *all* countries—and hence the establishment of a *universal* polity for ozone policies—made the ozone case the success story as which it is known today.

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<sup>28</sup> A key tenet of this line of thought is the notion of diffusion of innovation, including innovations of policies, technologies, procedures, and ideas. This is a core element of the theory of the environmentally beneficial consequences of free trade, which would reduce artificial barriers to the free transfer of technologies and products and thus increase efficiency and innovation.

<sup>29</sup> Stewart and Wiener, note 13 above.

<sup>30</sup> In other words, because there are more policy approaches, there is an increased chance that more relevant areas will be addressed which might not be addressed in a universal agreement (because of political feasibility questions).

<sup>31</sup> See H. van Asselt and F. Biermann, "European emissions trading and the international competitiveness of energy-intensive industries: a legal and political evaluation of possible supporting measures", *Energy Policy* vol. 35, no. 1 (2006): 297-306.

<sup>32</sup> On the other hand, there are so many initiatives that may give investors the confidence that climate-related measures will be taken no matter what. In any case, investors definitely want stable signals, so discussion on this point in the end relates to the overall long-term stability of future climate governance.

<sup>33</sup> The fragmentation of international law came to the forefront of the international legal debate in 2000, when it became an issue in the International Law Commission (ILC). A first study indicated that the issue was one that should be looked at in terms of mainly "risks", "threats", or other negative connotations. However, the ILC quickly realized that fragmentation might also have positive effects. For the original report, see G. Hafner, "Risks Ensuing from Fragmentation of International Law", in *Official Records of the General Assembly, Fifty-fifth session, Supplement No. 10 (A/55/10, 2000)*, annex, 326-54. Hafner, seemed to have changed his mind, however, and also discussed the possible advantages of fragmentation in a later piece. G. Hafner, "Pros and cons ensuing from fragmentation of international law", *Michigan Journal of International Law* vol. 25, no. 4 (2004): 849-63.

<sup>34</sup> A. Lindroos and M. Mehling, "Dispelling the Chimera of 'Self-Contained Regimes' International Law and the WTO", *European Journal of International Law* vol. 16, no. 5 (2005): 857-77, page 859.

<sup>35</sup> M. Koskenniemi and P. Leino, "Fragmentation of International Law? Postmodern Anxieties", *Leiden Journal of International Law* vol. 15, no. 3 (2002): 553-79, page 578.

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<sup>36</sup> Hafner (2004), note 33 above, page 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”.

<sup>37</sup> This, in turn, would pose a threat to the credibility and authority of international law. Hafner (2000), note 33 above, page 341.

<sup>38</sup> Lindroos and Mehling, note 34 above, page 858.

<sup>39</sup> See Hafner (2000), note 33 above.

<sup>40</sup> M. Craven, “Unity, Diversity and the Fragmentation of International Law”, *Finnish Yearbook of International Law* vol. 14 (2003): 3-34, page 5.