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Beyond the intergovernmental regime: recent trends in global carbon governance

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This article reviews recent developments in global carbon governance. The focus is on three emerging trends that result from stalemates in intergovernmental negotiations, but may also further complicate decision-making. First, uncertainties and complexities in global carbon governance have given rise to a stronger role of actors beyond the nation state. Second, this new emergence of multiple-actor governance, along with spatial and functional interdependencies, has stimulated the emergence of new mechanisms of global carbon governance, namely transnational regimes, transnational public policy networks and transnational markets. Third, the overall complexity of global carbon governance, along with the stakes involved and resulting negotiation stalemates, has led to a fragmentation of the policy system with multiple spheres of authority that requires new types of interplay management.

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Introduction

Global carbon governance — that is, the development of global rules and rule-making systems to coordinate national responses to climate change — has become a key challenge for politicians and political scientists alike. Progress in global decision-making and regime formation, however, remains slow. Even though the December 2009 conference of the parties to the United Nations Framework Convention on Climate Change ('climate convention') evolved into one of the largest diplomatic gatherings in history, its success is debatable. At present, it remains doubtful whether the current system of global carbon governance will secure a transition to low-carbon societies and a limitation of greenhouse gas emissions to safe levels, which have recently been described as lying

around an atmospheric carbon dioxide concentration of 350 parts per million [1*].

This tremendous challenge has given rise to governance innovations and the emergence of new actors and mechanisms in world politics, which are the focus of this article. Innovations were largely driven by the particular problem structure in global carbon governance, which is undoubtedly one of the most 'wicked' problems of world politics at present [2,3]. Global carbon governance is marked, first, by high uncertainties both analytically (regarding its scientific basis) and normatively (regarding the political and ethical principles that are applicable). Second, global carbon governance is characterized by high degrees of functional, spatial, and temporal interdependence that require comprehensive coordination and integration of governance responses. Third, global carbon governance is characterized by high degrees of stakes — not the least for governmental actors. The impacts of climate change may be severe for many nations, threatening economic systems or food production and maybe even requiring relocation of affected communities. Conversely, also the need to mitigate will pose high burdens on some nations, in particular those with relatively high emissions. These uncertainties, interdependencies, and high costs of both regulation (mitigation costs) and non-regulation (costs of climate change impacts) place high burdens on negotiations, which makes the development of a global climate regime tedious and fragile.

Recent developments in global carbon governance

Yet this situation has also given rise to new approaches that have made global carbon governance one of the most innovative and experimental areas of world politics today. Three broad clusters of innovation are outlined in the following.

The emerging role of actors beyond the nation state

First, global carbon governance is no longer confined to nation states but is characterized by increasing participation of actors that have so far been largely active at the subnational level. This transnational multi-actor governance includes private actors such as networks of experts, environmentalists, and multinational corporations, but also new agencies set up by governments, including intergovernmental bureaucracies. Novel is not simply the increase in numbers, but the ability of non-state actors to take part in steering the political system. Agency — understood as the power of individual and collective

actors to change the course of events or the outcome of processes — is increasingly located in sites beyond the central governments of nation states.

From all non-nation state actors that at present influence global carbon governance, advocacy groups have been analyzed early and extensively. Research has shown that activist groups provide research and policy advice, monitor the commitments of states, inform governments and the public about the actions of their own diplomats and those of negotiation partners, and give diplomats at international meetings direct feedback [4*,5]. In addition, business lobbyists have received increasing attention [6,7], including the question of civil society oversight over private sector activities [8].

Highly relevant in global carbon governance — and to some extent unique — is the emergence of transnational networks of scientists [9]. Although this new role of experts in world politics is evident in many policy areas, it is particularly prevalent in the field of global climate policy. The initial high uncertainties about causes, timing, and consequences of climate change had stalled negotiations in the late 1980s and 1990s, leading to the increasing institutionalization of scientific assessment and advice through the Intergovernmental Panel on Climate Change, which now comprises several thousands of scientists, who jointly assess the state of knowledge and condense it to succinct policy advice.

The complexity of global carbon governance also increased the role of intergovernmental bureaucracies and their civil servants. Intergovernmental bureaucracies provide in modern global governance important functions in the synthesis and dissemination of knowledge and the shaping of global policy discourses. They also influence negotiations by informing governments about actions and commitments by other actors, by reporting on the overall problem assessment, and by providing compromise solutions that may eventually influence negotiations [10]. In global carbon governance, these roles are largely performed by the secretariat to the climate convention, which also serves the 1997 Kyoto Protocol. This secretariat is largely independent from the overall UN system, and it has evolved into one of the largest intergovernmental bureaucracies in the environmental field [11]. Important sources of influence and political power for the secretariat stem from the overall complexity of the negotiation system and the underlying problems that require in particular smaller countries to rely on information and advice from intergovernmental bureaucracies to the extent that these bureaucracies manage to maintain the trust upon which their formal and informal influence relies.

These new types of actors that have taken a role in global carbon governance reflect both the complexities of the

current political process and the lack of consensus and cooperation among nation state governments. Although it is difficult to reach an overall conclusion as to whether the increasing role of non-nation state actors will help advancing the political process, it is highly likely that the emergence of multi-actor global carbon governance raises the inclusiveness, legitimacy and hence quality and presumably effectiveness of global rule-making in this area.

Emerging governance mechanisms beyond the intergovernmental regime

Furthermore, global carbon governance is marked by the emergence of new mechanisms of global governance in addition to the intergovernmental regime and negotiation system. These mechanisms include transnational regimes, public–private partnerships, and market mechanisms [12,13,14*,15,16].

Over the last decades, many non-state actors became formally part of global norm-setting and norm-implementing institutions and mechanisms, which denotes a shift from intergovernmental regimes to public–private and increasingly private–private cooperation and global policy-making [17–19]. Public–private cooperation has received more impetus with the 2002 Johannesburg World Summit on Sustainable Development and its focus on partnerships of governments, nongovernmental organizations and the private sector — the so-called Partnerships for Sustainable Development. More than 330 such partnerships have been registered with the United Nations around or after the Johannesburg summit [20*,21], and many address climate-related issues.

In the climate arena, it is in particular global networks of (major) cities that have provided most impetus to negotiations, providing new standards for subnational entities even where the national government is unresponsive of global regulation [22*]. In addition, sectoral solutions have been explored in a variety of networks, ranging from agreements on policy measures for particular pollutants (e.g., methane) or industries (such as automobiles) up to novel networks that emerge around new issues such as carbon sequestration or geo-engineering [23]. Many networks of nongovernmental actors and networks also make significant contributions by trying to increase the overall transparency and accountability of the actions of state and non-state actors [24,25].

Global carbon governance is also the most important policy domain in which both governments and nongovernmental actors experiment with markets as new governance mechanisms. Although markets have been used as environmental policy mechanism in a number of national contexts (notably in the United States) and have been experimented with in the 1987 Montreal Protocol

on Substances that Deplete the Ozone Layer (which allowed for limited joint implementation), the 1997 Kyoto Protocol was the first intergovernmental agreement to provide for large-scale development of market mechanisms. These range from joint implementation among industrialized countries to the project-based North-South joint implementation through the Clean Development Mechanism [26,27] and to a future, not yet fully specified global mechanism for emissions trading. In addition to these global mechanisms, a number of regional markets have been developed, including the EU emissions trading scheme [28–30] and regional markets in North America, Australia, and New Zealand [31–34]. A private trading system has evolved around various offsetting schemes that rely on private commitments of private or semi-public actors largely in the industrialized countries [35].

The environmental effectiveness of these new mechanisms of global carbon governance remains subject to academic and policy debate, and a general assessment of the effectiveness of the entire system of non-state regulation is probably impossible in the first place given the variation in mechanisms, commitments, and types of implementation. The effects of these novel mechanisms are likely to be larger than their direct impact on the reduction of emissions. Maybe even more important are the discursive effects that help raise awareness in many countries and that may shape public debates and decision-making. In many countries that have at present rather weak governmental regulations on carbon governance, these new mechanisms beyond the realm of central-government policy-making may also provide a (non-binding) regulatory environment that helps stimulate innovation and action.

Increasing fragmentation of the overall governance architecture

Finally, global carbon governance is characterized by an increasing segmentation of different layers and clusters of rule-making and rule-implementing, fragmented both vertically between supranational, international, national and subnational layers of authority (multilevel governance) and horizontally between different parallel rule-making systems maintained by different groups of actors (multipolar governance) [36].

First, the increasing global institutionalization of carbon governance does not occur, and is indeed not conceivable, without continuing policy-making at national and subnational levels. Global standards need to be implemented and put into practice locally, and global norm setting requires local decision-making and implementation [37,38]. This results in the coexistence of policy-making at the subnational, national, regional, and global levels, with the potential of both conflicts and synergies between different levels of regulatory activity.

Likewise, the increasing global institutionalization of carbon governance does not occur in a uniform manner that covers all parts of the international community to the same extent. Instead, we observe the emergence of parallel policy approaches that include equally important segments of international society and may develop into divergent regulatory regimes [36,39]. Key conflict lines run between North and South [40], but also within the Southern [41–43] and Northern groups of countries [44].

Students of global carbon governance have highlighted the significant challenges that divergent policy approaches within such a horizontally and vertically segmented policy arena pose. First, lack of uniform policies may jeopardize the success of the policies adopted by individual groups of countries or at different levels of decision-making. The possibly strong economic implications of stringent carbon policies adopted by one group of states may have severe ramifications for other policy arenas such as the world trade regime [45]. Likewise, a segmentation of governance may complicate positive linkages with other policies, whereas a universal and coordinated architecture could allow systematic and stable agreements [36]. Since a segmented architecture decreases entry-costs for participants, it is also conceivable that business actors use regulatory diversity to choose among different levels of obligation, thereby starting a race-to-the-bottom within and across industry sectors. Power differentials are also crucial, since fragmented governance gives powerful states the flexibility to opt for a mechanism that best serves their interests, and to create new agreements if the old ones do not fit their interest anymore [46]. On the other hand, segmented governance may also have advantages. Distinct institutions allow for the testing of innovative policy instruments in some nations or at some levels of decision-making, with subsequent diffusion to other regions or levels [47]. Regulatory diversity might increase innovation. Important here is the diffusion of innovation, including innovations of policies, technologies, procedures, and ideas.

Despite this contestation in the literature, fragmentation of global governance architectures appears on balance to bring more harm than positive effects and can generally be seen as a burden on the overall performance of the system [36].

Conclusion

Global carbon governance is unprecedented in its problem structure that combines new types and degrees of uncertainty, interdependence and impacts. This makes the negotiation and development of new institutions and modes of governance conflictive and tedious, but creates at the same time room for new ideas and innovations in governance, many of which have been outlined in this review (see in more detail [48••]).

How do these new modes of governance in the climate realm — which are essentially governance beyond the central governments as key actors — relate to the remaining role of the state? It might well be that networks, markets and partnerships that are populated and pushed forward by non-state actors are a direct response to the complexities of the climate problem, which states can no longer handle without strong non-state involvement. Yet at the same time, it is also possible that the current experimentation with ‘governance beyond the state’ is not related to the incapability of the modern state, but merely to temporary inaction and negotiation stalemates in the intergovernmental system, notably the conflicts around ratification and implementation of the Kyoto Protocol. It may well be possible that once intergovernmental consensus on the key parameters of a strong global regime emerges, also parallel networks, institutions and parameters that have evolved in recent years ‘beyond the state’ might lose their influence and be surpassed by stronger public regulation again.

However, the 2009 conference of the parties to the climate convention in Copenhagen might have, for the time being, rather increased the search for novel mechanisms of governance beyond the traditional intergovernmental process. Stalemates in intergovernmental negotiations, combined with little political progress in many key countries, have reduced in many quarters the optimism that a strong global agreement with quantitative, demanding targets will be in place when the commitment period of the Kyoto Protocol ends. The events in Copenhagen, perceived by many as a failed summit, have spurred a variety of reactions, including a renewed research focus on areas as diverse as geo-engineering, large-scale social transformations and ‘social tipping points’, as well as global climate change adaptation governance, for example with a view to possibly millions of climate refugees [49,50]. Yet in parallel, Copenhagen gave fresh impetus to those research programmes and political projects that focus on the critique of the ‘UN system’ and try to explore novel ways of global governance that go beyond the current core system of multi-lateral diplomacy, legally binding intergovernmental agreements, and regular mega-sized political and diplomatic summits. Many of these mechanisms have been outlined in this article, and it is likely that their relevance will increase because of the Copenhagen event, both as a research object and as a political strategy.

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