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Governing climate change transnationally: assessing the evidence from a database of sixty initiatives

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Department of Political Science, 321 Horton Social Science Center, 20 Academic Way, University of New Hampshire, Durham, NH 03824, USA; e-mail: stacy.vandeveer@unh.edu Received 8 May 2011; in revised form 15 September 2011 Abstract. With this paper we present an analysis of sixty transnational governance initiatives and assess the implications for our understanding of the roles of public and private actors, the legitimacy of governance 'beyond' the state, and the North–South dimensions of governing climate change. In the first part of the paper we examine the notion of transnational governance and its applicability in the climate change arena, reflecting on the history and emergence of transnational governance initiatives in this issue area and key areas of debate. In the second part of the paper we present the findings from the database and its analysis. Focusing on three core issues, the roles of public and private actors in governing transnationally, the functions that such initiatives perform, and the ways in which accountability for governing global environmental issues might be achieved, we suggest that significant distinctions are emerging in the universe of transnational climate governance which may have considerable implications for the governing of global environmental issues. In conclusion, we reflect on these findings and the subsequent consequences for the governance of climate change.

Keywords: climate change, governance, transnational, private authority, public, legitimacy

Introduction

As interest has grown in the politics of global environmental issues, scholars have recognised the important role of transnational relations in shaping the dynamics and outcomes of processes of international negotiation and, more recently, have sought to understand how actors operating transnationally are directly involved in the governing of global environmental issues (Andonova et al. 2009; Bulkeley and Newell, 2010; Cashore et al. 2004; Jagers and Stripple, 2003; Pattberg and Stripple, 2008). Primarily using a case-study approach, this more recent research on transnational governance demonstrates the ways in which transnational initiatives emerge and the various functions which they perform and also analyses the consequent implications for the legitimacy and effectiveness of global environmental governance. However, much of the analysis of the nature and consequences of transnational governance has been limited by its focus on a few, usually high-profile, cases (for example, the Forest Stewardship Council, Regional Greenhouse Gas Initiative, Marine Stewardship Council, The Basel Committee on Banking Supervision, The World Commission on Dams, and the UN Global Compact), making it difficult to establish a more general analysis of the character and importance of transnational governance. This paper extends the debate on transnational governance through an analysis of sixty transnational governance initiatives operating in the climate change domain. Over the past decade, as global concern about climate change has grown and the international negotiations have become ever more cumbersome, there has been a veritable explosion of alternative governance 'experiments' seeking to address the issue, many of them in the transnational sphere (Hoffmann, 2011).⁽¹⁾ Climate change therefore provides an interesting and dynamic field in which to assess a spectrum of transnational governance initiatives and to assess the potential for developing a more coherent picture of this phenomenon.

In the first part of the paper we review debates on transnational governance and its applicability in the climate change domain. We find that while there is a growing debate within the literature about the nature and scope of transnational governance, core analytical challenges remain. The first concerns the basis upon which transnational governance is founded and the ways in which actors seek to bring different forms of authority to bear in governing transnationally. A second relates to the way in which governance has been

⁽¹⁾There is some overlap between our database of transnational climate governance arrangements and Hoffmann's database of climate change experiments. The primary difference is our exclusive focus on transnational initiatives.

conceptualised and the focus on the different functions that transnational initiatives are seen to perform. The third brings into focus the way 'transnational' is conceptualised as residing in between a world of readily identifiable states, with consequences for how the effectiveness and legitimacy of such initiatives might be conceived.

In the second part of the paper we introduce our methodological approach and detail the characteristics of the database of sixty transnational climate governance initiatives which underpins this analysis. We focus analysis on three core issues. First, we examine the role of actors in governing climate change transnationally, considering who initiates such initiatives, the issues upon which they are focused, and their North-South composition. Second, we analyse the functions which transnational climate governance initiatives undertake. As suggested above, this issue has received much attention in the literature, where alternative classifications have been advanced as a means of making sense of what transnational governance initiatives do and how they do it. We find that while some governance functions are so ubiquitous that they offer a defining characteristic of efforts to govern transnationally the sharing of information and the building of capacity—other functions such as rule setting or monitoring, while far from universal, are present across a large number of cases. Indeed, across our database we find two distinct groups of initiatives. The first consists of hybrid initiatives that were established relatively early, and are involved in providing funding. The second includes more recent, largely private initiatives focused on rule setting. Third, we consider how transnational climate governance has been institutionalised, examining the mechanisms in place to establish and maintain this activity. Here, we find a difference between those, predominantly private, initiatives employing 'harder' forms of institutionalisation and the 'hybrid' initiatives whose operation is more informal and voluntary in nature, with potentially significant implications for how accountability and legitimacy to govern transnationally might be established. In the conclusion we reflect on our findings and suggest directions for future research.

The transnational governance puzzle

The term 'global governance' owes much to the work of Rosenau (2000) and his distinction between 'government', here encompassing the world of states, and 'governance', which "occurs on a global scale through both the co-ordination of states and the activities of a vast array of rule systems that exercise authority in the pursuit of goals and that function outside normal national jurisdictions" (page 167). It is within this broad field of research that scholars have recently sought to understand how the governing of global environmental affairs might be organised transnationally. Transnational relations are usually defined as "regular interactions across national boundaries when at least one actor is a nonstate agent or does not operate on behalf of a national government or an international organization" (Risse-Kappen, 1995, page 3). Within the field of transnational governance there has been particular interest in the emergence of forms of private regulation, for some regarded as akin to 'private regimes' (Biermann et al, 2010; Cutler et al, 1999; Falkner, 2003; Hall and Biersteker, 2002; Lipschutz and Rowe, 2005; Pattberg, 2005), on the one hand, and of public-private partnerships, epitomised in the so-called 'type-II' initiatives which emerged in the aftermath of the World Summit on Sustainable Development, held in Johannesburg in 2002 (Andonova, 2010; Andonova and Levy, 2003; Bäckstrand, 2008; Benner et al, 2004; Pinkse and Kolk, 2009), on the other hand. However, recent analysis suggests that the transnational governance phenomenon is not limited to these two ideal types and that a range of other initiatives which fall in between these categorisations have been established which explicitly seek to address environmental issues through constituting new forms of transnational relations (Bulkeley et al, forthcoming; Hoffmann, 2011; Kolk et al, 2010). In particular, the issue of climate change with which this paper is concerned is characterised by a growing diversity of transnational initiatives, operating in a variety of ways and involving various combinations of actors, not all of which could be reduced to the concept of a private regime or regarded as public–private partnerships.

Given this complex landscape, it is perhaps not surprising that, despite a growing interest in this phenomenon, establishing what might count as transnational governance is far from straightforward. Across the multiple definitions of (global) governance found in this literature Andonova et al (2009) identify three common features that could provide the basis for a definition of transnational governance which could operate across the different specific forms which it may take: governance is concerned with *realising public goals* through the process of *steering a particular constituency* of actors⁽²⁾ and is *regarded as authoritative*.⁽³⁾ Recognising this multifaceted definition of governance, they suggest, allows for a distinction to be drawn between

"transnational networks that *influence* the creation and operation of governance institutions but are not recognized as authoritative (as in the case of nonstate actors involved in multilateral negotiations) and those that *govern* 'in the sense of bringing together a sufficient marriage of power and legitimacy to establish, operationalize, apply, enforce, interpret, or vitiate the [network's] behavioral rules' (Conca, 2005, page 190)."

In short, in this approach transnational governance can be distinguished from other forms of transnational relations because of a focus on public goals, an intention to steer or direct the behaviour of members or a broader community, and their authoritative position vis-à-vis their target constituency.

Of course, such definitional distinctions are not without their problems. First, in conceiving of (transnational) governance as a matter of public purpose, the nature, role, and mobilisation of private interest may be questioned and contested. One way beyond such dichotomous readings of actors and their interests is to conceive of the public domain as one where "expectations regarding legitimate social purposes, including the respective roles of different social sectors and actors, are articulated, contested, and take shape as social facts" (Ruggie, 2004, page 504). The 'publicness' of transnational governance comes, in such interpretations, not from the *actors* involved in governing or indeed their motivating interests but rather from their location within the public domain of, in this case, climate change. In this manner it is possible to conceive of transnational governance as involving a range of actors and forms of authority, concerned with establishing what the 'legitimate social purpose' of responding to climate change entails. Indeed, several authors use some combination of actors and the authority they are thought to bring to bear to analyse different forms of transnational governance. For example, Bäckstrand (2008) identifies a spectrum of approaches to governing climate change, with private self-regulation at one end and public regulation at the other, with various forms of partnership, coregulation, and collaboration in between. An alternative approach stems from the management literature, where Kolk et al (2010) report that the type of (transnational) partnership initiatives that have "received

⁽²⁾ This includes 'self-governance', in which a group of actors attempt to steer their own behaviour (eg, Carbon Rationing Action Groups) as well as other forms of governance in which a group of actors seeks to steer the behaviour of other actors (eg, the Carbon Disclosure Project). It is also worth noting that the notion of steering leads to a broader set of practices that might be considered as governance than would be the case from other perspectives. In particular, it opens up the field to include many practices that might otherwise be thought of just as lobbying or 'influence', which are considered here as attempts at governance. As we explain below, the aim of developing the database is exploratory, which we think justifies keeping a relatively open concept so as not to exclude initiative unnecessarily. ⁽³⁾ Here, we use 'authoritative' in the sense that there is a recognition, rather than formal mandate, of the governor.

most attention in the management literature is the one between companies and NGOs: the private–non-profit partnership or social alliance" (page 53) with more recent attention focused on those "between government (agencies) and companies: the public–private partnership" (page 54) and tripartite partnerships involving all three forms of actors. Likewise, in their review of transnational governance in the biodiversity realm Visseren-Hamakers and Glasbergen (2007) suggest that partnerships can be classified as either "private intersectoral partnerships (strategic alliances between civil society and business)" (page 409) or "public–private intersectoral partnerships (strategic alliances between governments and business and/or civil society)" (page 409).

However, the involvement of nonstate actors is not a necessary condition for transnational governance. In the climate change arena Andonova et al (2009, page 59) suggest that *public* transnational governance networks "are established by and for public actors such as sub-units of government, city or local governments, legislators, judges, or units of intergovernmental organizations acting quasi-independently of national decisions" at multiple scales. Bäckstrand (2008, page 91) makes a distinction between transgovernmental networks, primarily operating between different arms of nation-states and, in the case of climate change, focused on "coalitions of the willing", frequently based on technology development and led by the US, and transnational initiatives operating between subnational state authorities, such as cities or regions. Whatever the terminology used, the literature therefore suggests that the types of actors involved *and* the forms of authority—whether they be public, private, or hybrid matter in the constitution and operation of transnational governance. However, what is less clear from these analyses is the explanatory power of such accounts. Given, as outlined above, that most analyses to date have relied upon individual case studies or the examination of one type of arrangement, the agency of different actors in shaping mechanisms of governance and the extent to which the character of transnational governance is determined by the forms of authority involved have yet to be investigated in detail, a point to which we return in our analysis below.

A second problem comes with any focus on governance as an intentional and authoritative activity, which raises questions both about the unintended effects which served to 'govern' climate change and as to whether the term 'steering' adequately captures the process through which governing is achieved. In the main, the analysis of transnational governance has focused on the functions that it is thought to perform. As Andonova et al (2009, page 63) suggest, the

"literature on transnational networks has identified several types of resources that give networks leverage across borders: the diffusion of information, knowledge and norms; the pooling and distribution of financial, managerial and technical resources; and, more recently, the negotiation and establishment of a set of norms, rules, and standards outside of the intergovernmental arena."

While there is significant diversity in the literature in the terms used, a relatively discrete set of functions can be identified: agenda setting; information sharing; capacity building; soft and hard forms of regulation; and integration across different global environmental governance arenas (Andonova et al, 2009; Bäckstrand, 2008; Bitzer et al, 2008; Dingwerth, 2008; Pattberg, 2006; Visseren-Hamakers and Glasbergen, 2007). Much of the controversy surrounding how such functions are determined and the extent to which they are regarded as a form of 'governing' stems from deep-rooted differences in theoretical perspective. Perhaps more than with any of the other functions identified in the literature, there is a considerable grey area concerning whether agenda-setting and knowledge-sharing activities are indeed forms of governance or are more akin to the traditional roles assigned to transnational coalitions and advocacy groups of seeking to influence others. For scholars

of transnational governance such activities can be regarded as governance either where they are explicitly recognised as authoritative, perhaps leading to new learning processes that enable actors to fulfill new roles and take over new responsibilities (Pattberg, 2006), or where governing is regarded as a matter of shaping the conduct of constituents through establishing new norms and practices—for example, of carbon reporting or of offsetting (Paterson and Stripple, 2010). Rather than governance taking place through a direct form of steering members towards explicit goals—through incentives, soft regulation, and so on—this suggests that it may also involve more discursive and normalising practices whereby the exchange of knowledge, ideas, and beliefs is also a critical means through which transnational governance has effect. In this sense the instrumentalism implied by a governance 'function' perhaps belies the ways in which governing is accomplished transnationally.

Nonetheless, the notion of governance functions has served as an important analytic lens. Importantly, the literature suggests that these functions are not undertaken on an either/or basis—many transnational governance initiatives will engage in several functions at once, or may evolve different functions over time. Again, however, the limited empirical basis of work in this area is a limitation. We know little about how such functions may be clustered, the extent of their uptake amongst different types of transnational governance, or indeed of their effectiveness. Below, we undertake an analysis of the governance functions adopted across sixty transnational climate governance initiatives in order to contribute to this debate. While the functions that transnational governance initiatives perform are important, the boundaries between them are often difficult to discern in practice. At the same time, while knowledge exchange and capacity building have traditionally been regarded as 'weaker' functions than those of regulation, engaging with governing as accomplished through the establishment of new norms and forms of conduct may require that this implicit hierarchy of functions is revisited. We also find that it is important to discern whether transnational forms of governance might have a comparative advantage in some functions over others in relation to intergovernmental mechanisms and the resulting consequences for the 'regime complex' of climate governance (Abbott, 2012).

Once the debate on governance is moved into any transnational domain, a third critical problem arises. Working with the notion that the 'transnational' requires the crossing of national boundaries and the inclusion of nonstate actors speaks to a world in which such demarcations between state and nonstate are distinct and where national sovereignty is clearly established. In the main, scholars suggest that the emergence of transnational governance has occurred at a period when there is growing dissatisfaction with the model of 'megamultilateralism' that dominated global environmental politics through the second half of the 20th century and an increasing fragmentation of governance authority (Hoffmann, 2011). This is expressed in a number of different ways. For some, transnational governance has emerged to fill voids created by the absence of national or international intervention. For example, Visseren-Hamakers and Glasbergen (2007, page 409) argue that such initiatives "fill in what governments are not (yet) willing or able to regulate, sometimes to outplay them and to prevent the governments from taking action, and sometimes to show alternatives for public governance or to challenge it to take up more thorough public action." Voluntary initiatives on the part of businesses, whether it is the Cement Sustainability Initiative or the Responsible Care programme of the chemical industry, often aim to demonstrate action in the face of criticism as well as preempt demands for more stringent measures from states or international organisations. In other cases it may not be the lack of governance by other means but rather issues of governance failure or implementation deficit that transnational initiatives seek to address (Bäckstrand, 2008; Kolk and Pinkse, 2008). Initiatives such as the Extractive

Industries Transparency Initiative seek to deal with the lack of transparency in the collection and use of resource revenues, while the Equator Principles govern project financing in a way that goes beyond existing guidelines from international economic institutions. However, the sense of a shift from a world of well-defined states to new forms of political space does little to acknowledge the porous categories of state–nonstate or the varieties of state sovereignty encountered (Jackson, 1990; Sørensen, 2001), especially in the Global South where in some cases defining the boundaries and interests of the state separately from private actors or the international community is fraught with difficulty (Compagnon et al, 2011; Duffy, 2006) and where nonstate actors may have limited autonomy or resources to act in a manner which is separate from the state (Compagnon, 2010). This suggests that, rather than focusing on whether or not governance initiatives are transnational, the more important questions concern *how* they are transnational—the basis upon which they have been initiated, who is involved, to what ends, and for whom, and so on.

One way of assessing this analytically is to examine the basis upon which transnational governance initiatives have been initiated and institutionalised, a theme that we examine below and which in turn has implications for another key debate in the literature—the extent to which they offer a legitimate form of governance. For some, new governance initiatives such as public-private partnerships have the potential to "decrease the legitimacy and accountability deficits by including a diverse set of private and public actors" (Bäckstrand, 2008, page 78). However, whether such potential will be realised is highly contested. Bäckstrand suggests that they could instead lead to "increased business influence, power inequalities and skewed representation of stakeholders, fragmentation of global governance, reinforcement of elite multilateralism and the retreat of state responsibility in the production of public goods" (page 78), which in turn may contribute to reducing the legitimacy of decision making and the scope for accountability. Likewise, in the case of Madagascar, Duffy (2006) finds that new forms of transnational environmental governance have led to the "cooption of local and global/southern and northern environmental NGOs" (page 745) which means that "they can be effectively neutralised in terms of their resistance to external forms of governance" (page 746), in turn reducing the scope for alternative forms of accountability. These related concerns-for the effectiveness, accountability, and legitimacy of transnational governance—are not only central to academic analyses but, as we explore further below, are also critical to the actual configuration and operation of initiatives themselves.

Surveying the transnational climate change governance landscape

In order to develop our understanding of the extent and nature of transnational governance in the climate change domain, we developed a methodology to extend beyond small-*n* case studies or surveys of one particular type of transnational arrangement. To this end we compiled a database of sixty transnational climate governance initiatives that included examples from the well-known types identified in the literature (eg, which were private, public, or hybrid) and that included various combinations of business, government, and NGO actors (see table 1). Cases were included in the database where they met three criteria: (1) they explicitly sought to address climate change; (2) they operated transnationally, in the traditional sense of working across at least one national border and involving at least one non-nation-state actor; and (3) they sought explicitly to govern a constituency, whether that be participating members or a wider audience, in terms of seeking to steer or conduct their actions towards specific ends.

The cases were generated through an iterative process involving eighteen experts participating in the Leverhulme international research network on transnational climate governance, each of whom pursues an active research agenda on different modalities of transnational climate governance across multiple regions of the world. Initially, network

A size Cities Climate Classes Desilions	
Asian Cities Climate Change Resilience Network (Rockefeller)	Green Power Market Development Group HSBC Climate Partnership
Asia-Pacific Emissions Trading Forum	ICLEI: Cities for Climate Protection
Asia-Pacific Partnership	International Emissions Trading
BioCarbon Fund	Association
Business Environmental Leadership Council	International Leadership Alliance for
Carbon Disclosure Project	Climate Stabilization
Carbon Fix Standard	Investor Network on Climate Risk
Carbon Sequestration Leadership Initiative	Johannesburg Renewable Energy
Carbon Sequestration Leadership Initiative	Coalition
Carbon Trade Watch	Major Economies Meeting on Energy
Challenge Europe: British Council	Security and Climate Change
Chicago Climate Exchange Climate Change Champions	Memorandum of Understanding between Victoria (AUS) and California (USA)
Climate Neutral Network	Methane to Markets
Climate Savers	Network of Regional Governments for
Climate, Community and Biodiversity Alliance	Sustainable Development
ClimateWise	Pew Centre on Global Climate Change
ClimateWorks	Red Cross/ Red Crescent Climate Centre
Clinton Climate Initiative	REDD (UN Collaborative Programme on
Collaborative Labelling and Compliance	Reducing Emissions from Deforestation and
Standards Programme	Forest Degradation in Developing Countries)
Conference of New England Governors	Regional Greenhouse Gas Efficiency
and Eastern Canadian Premiers Climate	Regional Greenhouse Gas Initiative
Change Action Plan	Renewable Energy and Energy Efficiency
Connected Urban Development Program	Partnership
CRAGs: Carbon Rationing Action Groups	Roundtable on Sustainable Biofuels
CRed: Carbon Reduction	SlimCity Initiative
e8 Network	Social Carbon
Energie-Cites	The Climate Group
Environmental Resources Trust-Greenhouse	The Climate Registry
Gas Registry (now known as the	The Gold Standard
American Carbon Registry)	Transition Towns
ERC-Pacific Calling Parnership	UK-California Initiative
Green Belt Movement	UN Global Compact 'Caring for Climate'
	UN Fund for International Partnership's
	environment partnerships
	Union of Baltic Cities (Environment
	Commission and Energy Commission)
	Voluntary Carbon Standard
	Western Climate Initiative
	World Business Council
	TOTA Dabileos Couleir

Table 1.	List	of sixty	initiatives	included	in the	database.
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members proposed a set of cases to be included in the database, each drawing on their specific spheres of expertise as well as their reading of the broader case-study literature on transnational governance. This was supplemented by a literature and web search for additional examples, which were then cross-checked with the members of the Leverhulme network. Discussions of the proposed cases helped refine our selection criteria and determine whether a given arrangement met the three criteria for database inclusion as an instance of transnational climate governance. Throughout the process the task of determining whether an initiative was involved in governing proved particularly challenging as the task of governing is more central in some initiatives than others. However, we agreed that the question of governance centrality should be a matter for further investigation, rather than a basis for eliminating an arrangement prior to database analysis. The expert group also had ongoing

discussions about the requirement that initiatives have an explicit focus on climate change. Over time it became clear that this resulted in a bias towards initiatives focused on climate mitigation as opposed to adaptation where the focus is couched in more localised concerns related to vulnerabilities to climate impacts or broader issues of sustainable development. We maintained this requirement for pragmatic reasons.

This method of identifying cases was used in order, firstly, to overcome the dearth of systematic records on transnational governance initiatives for climate change and, secondly, to address the difficulty of capturing the entire range of transnational governance activities which are highly dispersed across jurisdictional boundaries, across institutional settings, and across time. By engaging the expertise of a relatively large network of researchers focusing on a variety of issues and manifestations of transnational climate governance, we sought to maximise the scope and variation in transnational climate governance captured by the database. Information about each case was gathered through an analysis of documents and electronic materials available in English on publicly accessible websites conducted during the period of October 2008 to March 2010. This information was collected, filed, and coded according to: its history; the actors involved; the organisational structure of the initiative; the types of activities that have been undertaken to institutionalise the initiative; its engagement with mitigation and/or adaptation; the issue focus; North-South involvement; regional coverage; and the functions that the initiative undertakes. This information was organised in a database using MS Excel, and analysis was then undertaken to determine patterns and variations using descriptive statistics.

There are, of course, significant limitations to our approach. First and foremost, we make no claim to have gathered a representative sample of transnational climate governance initiatives, largely because the entire population is unknown. As noted above, by requiring that initiatives have an explicit focus on climate change, we are likely to have underrepresented initiatives working on climate change adaptation. We also limited our search to initiatives with an English-language web presence. These two restrictions may help to account for the relative dearth of database initiatives based in the Global South. Nevertheless, the cases in the database present a relatively large set of diverse initiatives, and the discussion that follows provides a window into the general phenomenon of transnational climate governance, even if it is not a perfectly representative sample of the full range of initiatives. It remains the largest set of cases for analysis of which we are aware.

The initiatives included in the transnational climate change governance (TCCG) database are primarily focused on mitigation and are a recent phenomenon. Very few initiatives focus solely on adaptation (3%), and only 10% were founded prior to 1997, with some 38% being founded since the ratification of the Kyoto Protocol in 2005. In seeking to explore the nature and character of transnational climate governance in more depth, in the remainder of this section we focus on three core issues: the basis of transnational initiatives, in terms of the actors, regions, and issues involved; the ways in which transnational governance functions are conducted; and the ways in which initiatives have sought to institutionalise, or establish their authority, and the consequent implications.

Establishing transnational climate governance

As indicated above, the cases included in the TCCG database are relatively recent in origin, predominantly emerging in the period since the Kyoto Protocol entered into force in 2005. There are, however, some significant differences in terms of the actors involved in establishing transnational climate governance initiatives. Our analysis explores the types of actors that initiate transnational governance initiatives as well as the types of actors to whom these initiatives are targeted. In terms of initiating actors, we observe interesting patterns across time. Local government and business organisations set up the first transnational climate

governance initiatives (eg, Climate Alliance, ICLEI Cities for Climate Protection), followed by NGOs (eg, Climate Savers, Carbon Disclosure Project), while national governments and international organisations have more recently become involved.⁽⁴⁾ While a sizeable minority of initiatives in the database have been initiated by companies (18%), the leading actors are nonprofit organisations who collectively initiated 44% [business associations (8%), environmental NGOs (23%), foundations (5%), and community-based groups (8%)] (figure 1). National (17%) rather than regional (12%) or local government (7%) or international organisations (12%) have been the leading public actors involved. Interestingly, while some TCCG initiatives have been founded by more than one actor, we find very few cases (5%) where this has involved actors from across these different actor types.

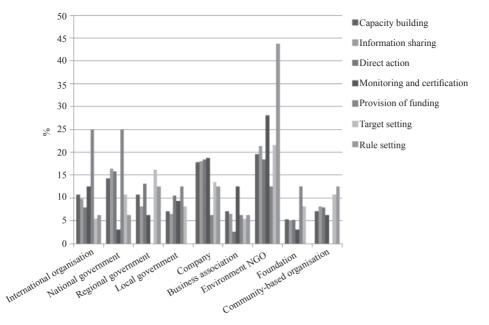


Figure 1. Initiating actors and governance functions (N = 60).

When we combine the type of actors involved with the composition and sources of authority of transnational climate governance initiatives, we can distinguish between public, private, and hybrid initiatives. Amongst the nonstate actors, 45% of initiatives in the database started by companies are hybrid and 55% are private; in contrast, environmental NGOs (71%), business associations (60%), and community-based organisations (60%) make more use of private initiatives, operating solely within the 'nonstate' sphere. Amongst public actors the small number of initiatives started by regional and local governments are aimed only at other public actors, while 60% of initiatives. These different combinations of actors involved in public, private, and hybrid governance initiatives may reflect differences in the authority that initiating actors can bring to bear and the extent to which working with others is necessary in order either to achieve particular outcomes or to gain legitimacy for the activities which they are undertaking. For instance, we find examples of not-for-profit organisations which establish initiatives in order to advance a set of norms as a basis of governance (eg, Gold Standard). Since they draw their legitimacy and authority primarily on

⁽⁴⁾ This is in contrast to the emergence of codes of conduct, which were initiated by international actors, then taken up by business and nonprofit organisations (Kolk and Van Tulder, 2005).

the basis of moral standards and normative capital, we might expect to find that they would be more cautious in safeguarding their independence. Companies, by contrast, may actively seek greater legitimacy of transnational governance initiatives, as well other advantages such as reducing political risk, via collaboration and vetting by public organisations (eg, the ClimateWise network of insurance companies, based in the UK) (Kolk et al, 2010).

Amongst the TCCG initiatives in the database, initiating actors are based predominantly in the Global North. The only recorded initiative to include initiating actors from more than two counties in the Global South is the Methane to Markets partnership, which was established by Australia, Brazil, China, Colombia, India, Italy, Japan, Mexico, Nigeria, Russia, the Ukraine, the United Kingdom, and the United States of America. Five initiatives (Asia-Pacific Emissions Trading Forum; Carbon Sequestration Leadership Initiative; Methane to Markets; Network of Regional Governments for Sustainable Development; Social Carbon) that include initiating actors from a group of rapidly industrialising countries which are widely regarded as significant in terms of their contribution to global greenhouse gas emissions and as critical actors in the international climate regime and which we term 'BRICSAM' (Brazil, India, China, South Africa, and Mexico), but the vast majority (87%) are initiated by actors in the North.

Yet, actors from the Global South are regularly involved in transnational climate governance. We find that 77% of the initiatives in our database include at least one actor and 57% have at least two actors from the Global South. Of the forty-six initiatives which include Global South involvement, in thirteen cases this is from only the BRICSAM group of industrialising countries, in twenty-six cases initiatives involve participation from both BRICSAM and the wider Global South, while in only seven initiatives is there participation from countries in the Global South excluding the BRICSAM group. While this may suggest that TCCG is a phenomenon which is focusing on the inclusion of rapidly industrialising countries, it appears that a broader constituency of actors across the Global South are also being engaged. Although these data do not enable us to examine how and with what effects actors from these different regions are participating in transnational climate governance initiatives, the absence of initiating actors from the Global South combined with their widespread participation in such initiatives may give cause for concern that the transnational governance arena is simply replicating existing patterns of international politics where the interests and agendas of the North are advanced at the expense of those in the South. This may be because the premise of transnational governance-of the presence of state and nonstate actors with sufficient independence, resource, and capacity to engage in governing beyond the national arena—serves to structurally exclude those places in the world characterised by limited statehood (and, indeed, limited nonstatehood), a situation that is exaggerated because of the limited role that international organisations have played in establishing those initiatives included in our database (Andonova and Levy, 2003). However, where issues are of pressing importance there is evidence of the emergence of transnational initiatives—for example, in relation to conflict resolution (Kolk and Lenfant, 2011). The apparently secondary role played by most of the actors from the Global South—in particular, the least developed countries—might be partially explained also by the continued dominance of northern actors in the international politics of climate change and the low number of initiatives focusing on adaptation, which is of more significant concern in these areas. It may also reflect the fact that many developing countries, with the exception of the BRICSAM countries, are under less domestic and external pressure to show leadership on the issue of climate change. Domestic drivers behind the creation of TCCG initiatives including civil society and public pressure to act, perceptions of business opportunities and market openings, or the need to construct regulation, share information, or diffuse technologies are noticeably weaker in countries with lower emissions profiles and which are less integrated into the global economy.

While the initiatives included in the database are focused on mitigation, there is significant variation in the sorts of issues which they are seeking to address, with energy (renewable, efficiency, demand reduction) (63%), carbon markets, and finance (50%) attracting more attention than carbon sequestration/biodiversity (43%), low-carbon infrastructure (transport, waste, water) (43%), clean fossil fuel energy (25%), adaptation (28%), and food (25%) (which crosses the adaptation and mitigation domains) (figure 2). Interestingly, the issues with which initiatives are concerned do vary according to the type of arrangement (public, private, or hybrid) as well as in terms of the actors who have initiated them. Public initiatives play a proportionally greater role in adaptation (40%) and clean fossil fuel energy (33%) domains, while private initiatives are more often concerned with carbon markets and finance (59%), as might be expected. The focus of these private initiatives on carbon markets and finance is driven not only by companies involved in initiating transnational governance initiatives but also by environmental nongovernmental actors who have been responsible for initiating a quarter of these initiatives (figure 3). This may reflect the concern of such organisations with driving up global standards in this area. There are differences, too, in terms of the role of public sector actors. Particularly striking is the role of national governments in initiating those initiatives with a focus on clean fossil fuel energy. Initiatives which include adaptation are somewhat different from the others, with a stronger role being played by community-based organisations and foundations, as well as regional and local government, suggesting that this is predominantly an issue being pursued by organisations with some form of place-based focus. As might be expected, where an initiative includes actors in the Global South outside of the core group of rapidly industrialising countries we term BRICSAM, adaptation and food are more significant issues (figure 4). It is also amongst initiatives in this group that engagement with carbon markets and finance is at its lowest, in contrast to those initiatives whose participants in the Global South include only countries from the BRICSAM group where this issue receives the strongest level of attention, in turn reflecting the emerging geographies of the carbon market and the Clean Development Mechanism whose activities have been concentrated in this group of countries. Further, these findings reflect the growing fragmentation of the Global South in the climate change regime as illustrated by the conferences of parties in Copenhagen and Cancun, and in particular the tensions between emerging countries with rapidly rising emissions, on the one hand, and less-developed countries and small island states, on the other.

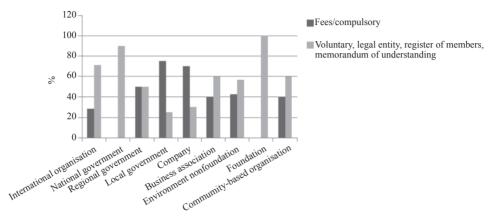


Figure 2. Initiating actors and the use of 'hard' and 'soft' forms of institutionalisation (N = 60).

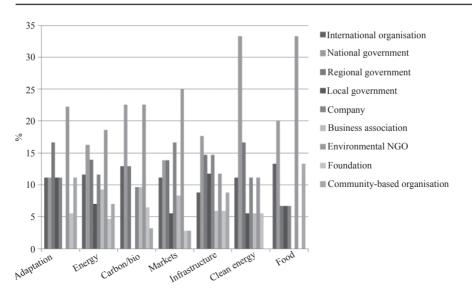


Figure 3. Initiating actors and issue focus (N = 60).

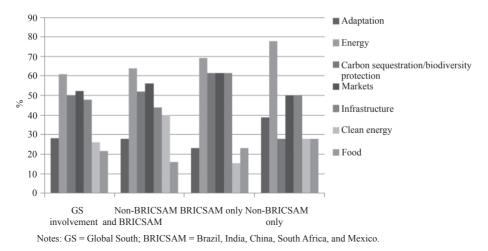


Figure 4. Regional participation and issue focus (N = 60).

Overall, this analysis suggests that the establishment of transnational climate governance has taken place in the 'shadow' of the international regime and is firmly embedded within existing patterns of political economy (Newell and Paterson, 2010). While the emergence of these initiatives at a time when concern for the issue was growing and the international regime was faltering suggests that they are a response to growing dissatisfaction with megamultilateralism, their focus on mitigation, and especially issues of energy and carbon markets, reflects the opportunities afforded by the regime and the emerging carbon market for actors to become involved in novel forms of clean energy and carbon governance. At the same time, the strong role played by national governments and nongovernmental actors in the North in initiating transnational climate governance reflects the pattern of actors involved in the international regime. Rather than operating as a distinct sphere, this evidence suggests that the emergence of transnational climate governance has been intimately connected to the fortunes of the international regime and that its future may therefore be highly dependent upon its continued evolution. At the same time, our analysis suggests that TCCG initiatives may be establishing new constituencies and practices of governance which are serving to establish new agendas in the climate 'regime complex', serving as a means through which ideas and approaches can be tested and common ground can be forged (Abbott, 2012; Hoffmann, 2011; Keohane and Victor, 2010).

Governing transnationally: a matter of function?

As discussed above, much of the discussion in the literature on transnational governance has focused on the functions that such initiatives undertake, focusing on five major categoriesagenda setting, information sharing, capacity building, regulation, and forms of policy integration. Implicitly, the purpose of such assessments has been to establish the extent to which these forms of governing provide alternative, effective means for achieving particular ends and, hence, are worthy of analytical attention in disciplines which have traditionally focused on the activities of nation-states. Debates have centred on the extent to which it is useful to separate 'influencing' from those social relations which are constitutive of 'governing' as well as on the emergence of so-called 'private' regulation. Here, our analysis is concerned with the role of information sharing as a form of governance, rather than with the wider debate on agenda setting, and seeks to drill down into the different ways in which transnational initiatives govern both through building capacity and through forms of regulation. While we analysed initiatives in terms of their expression of general intention to build capacity, we also see the provision of funding and direct forms of action (eg, developing new technologies, members' actions to reduce emissions) as critical to developing capacity. Likewise, we disaggregate the category of 'regulation' to consider different functions that initiatives may adopt: the inclusion of targets; forms of monitoring or certification; as well as setting specific rules in the form of mandatory requirements for members.

Using these categories, we find that capacity building (88%) and information sharing (93%) are the most common functions amongst the initiatives in our database, but there are also a large proportion of initiatives undertaking direct forms of action (60%) and involving setting some form of target for their constituents (60%). In fact, few initiatives undertake only information sharing or some generic form of capacity building (13%), while most have some form of target, monitoring, or rule-setting function (75%). This suggests that, rather than being a purely voluntary matter, the majority of the cases of transnational climate governance included in our database include some form of (soft or self) regulation. However, those initiatives which set mandatory rules (23%) or seek to develop capacity explicitly through providing funding (25%) are relatively rare. This varies significantly in terms of the type of arrangement involved, with over 64% of all rule-setting initiatives being private initiatives, reflecting the fact that at least some of the private climate initiatives arise to fill the regulatory void, while only 20% of those that provide funding are private in character. Examining the differences between initiating actors, we find that rule setting is a key feature of initiatives established by environmental NGOs-50% of the examples included in our database use rules in one way or another (such as the Carbon Fix Standard or the Climate Community Biodiversity Alliance) compared with 20% of the companies and 10% of those started by national governments, and monitoring/certification is important for all of the nonstate actors involved (figure 1). In contrast, international, national, and local public actors as well as foundations have set up initiatives which provide funding (for example, the Asian Cities Climate Resilience Network or the UN Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries), suggesting that the different actors involved in transnational climate governance make a material difference to the way in which it is conducted.

As indicated above, while analyses of transnational climate governance have tended to treat the functions undertaken as discrete categories, it is acknowledged that this is rarely the case in practice. While almost all initiatives in the database undertake information sharing and capacity building, we also find that the functions of target setting, direct action, and monitoring and certification are also closely aligned—of those initiatives taking direct action, 69% include some form of target setting, while for those that undertake monitoring and certifying, 70% also include targets. Similar findings in the analysis of private 'codes of conduct' suggest that such patterns can be found where companies seek to preempt regulation (Kolk and Van Tulder, 2005), but this may also be driven by concerted efforts to address current weaknesses in the regulatory context, as suggested above. In contrast, while the number of initiatives in our database which employ rule setting or the provision of funding is small (fourteen and fifteen, respectively), there is limited overlap between these groups, with only two initiatives-the Renewable Energy and Energy Efficiency Partnership and the Red Cross/Red Crescent—that undertake both of these functions. We can see some patterns starting to emerge when we look in more detail at these different subsets of the database. Of initiatives that set rules, 36% have been established since 2005 and the majority (64%) are 'private' in character with an overwhelming focus on mitigation alone (93%). Those which provide funding tend to have been established earlier (46% before 2005), and 47% are hybrid initiatives in which mitigation dominates but where 26% include some focus on adaptation.

This analysis leads to two important hypotheses. First, rather than thinking of the functions which initiatives undertake in isolation, it may be that it is the cluster of functions that they undertake that is important for understanding their impact and effectiveness. Second, while TCCG is characterised by the use of information, resources, and rules in tandem, two distinct forms may be emerging: one which focuses on the use of funding as its primary mechanism for accomplishing governance; and another which uses mandatory requirements to achieve its ambitions, the consequences of which have yet to be established. While there are clearly limits to what a focus on the functions of governance initiatives can tell us about how in practice it operates—particularly in relation to issues of authority and power—nevertheless. we can draw some conclusions from the sorts of functions we see in TCCG. One implication of the ubiquity of information sharing and capacity building as functions is perhaps that these initiatives all seek to shape the subjectivity of those they govern-one possibility is that, by changing the informational context and the resources available to actors, they seek to ensure that actors internalise more deeply norms about how to act on climate change. This is resonant of accounts of advanced liberal governmentality, where governance is focused on "the way in which an individual questions his or her own conduct so that he or she may be better able to govern it" (Dean, 1999, page 12; see also Miller and Rose, 2008). The other functions may be understood to combine with these core functions-providing clear normative contexts and specific goals within which action is organised and pursued.

Institutionalising transnational climate change governance: on the path to legitimacy?

The level and degree to which transnational governance initiatives adopt some form of institutionalisation can provide insight into the ways in which such initiatives are maintained within what is often regarded as a voluntary sphere of activity. In general, we find that transnational governance initiatives in the database lack formal organisational structure— some 38% had no secretariat, governing body, or advisory panel, while only 5% had all three such mechanisms in place. In terms of their relation with members or constituents, TCCG initiatives are most often voluntary in nature (82%), but also have some form of legal standing (75%, which could reflect the requirements of national governments and funding agencies—that is, that an initiative has to be constituted in order to receive funding). Disclosing membership is also common feature (77%), which may suggest that providing information about the networks of which members are a part is one means through which such initiatives seek to claim a stake in the global landscape of climate governance and gain

standing. We can regard these three most common aspects—voluntary affiliation, the legal establishment of an initiative, and register of membership—as relatively weak forms of institutionalisation, in that they require limited participation from members. Strong forms of institutionalisation, such as membership fees (27%) and compulsory actions (30%) for members, are relatively rare.

In terms of the relationship between the type of arrangement and the forms of institutionalisation that they have adopted, perhaps counterintuitively, 55% of initiatives in the database with compulsory actions and 44% of those with membership fees are private in character. Indeed, this may suggest that private forms of TCCG are in some sense required to adopt more formal forms of institutionalisation, or are seeking to gain standing and legitimacy in this manner, while the low proportion of hybrid initiatives which use compulsory actions (17%) may point to difficulties in establishing such rules between different types of actors. This use of higher-order forms of institutionalisation by the companies and nonprofit actors who initiate TCCG is also evident when we examine how different types of institutionalisation vary by initiating actor (figure 5). Regional differences can also be identified, with those initiatives whose members in the Global South lie outside of the BRICSAM group making limited use of either compulsory actions or membership fees (figure 6). This suggests that such mechanisms are regarded as either unnecessary or unworkable where participation includes the least-developed countries in the world, reflecting both the challenges of the limited institutional resources and the focus of the initiatives in the database on the issues of mitigation for which, as discussed above, there is little mandate for action.

When we examine how these different forms of institutionalisation relate to one another, an interesting picture emerges which challenges the conventional view that such forms of governance are predominantly informal or voluntary in character. The three most common types of institutionalisation used by the initiatives in our database are: register of members; voluntary affiliation; and some form of legal designation. However, few initiatives undertake solely one of these functions—we have recorded one initiative as having only a register of members (Carbon Trade Watch), two as only legal entities (Asian Cities Climate Resilience Network, Reducing Emissions from Deforestation and Forest Degradation in Developing Countries), and five as solely voluntary (CRed, ERC, Green Belt Movement, Zero Carbon City, International Leadership Alliance for Climate Stabilization). In total, thirty-six initiatives involve one or more of the 'weaker' forms of institution—voluntary affiliation, a register of members, legal entity, or a memorandum of understanding. However, twenty-eight of the sixty initiatives also include one or other of the 'harder' forms of institutionalisation—membership

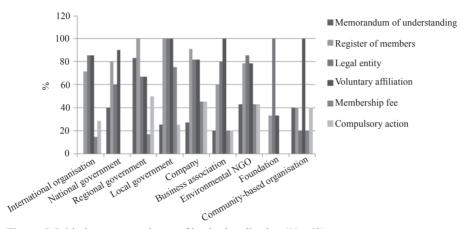
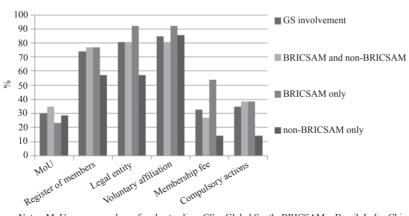


Figure 5. Initiating actors and type of institutionalisation (N = 60).

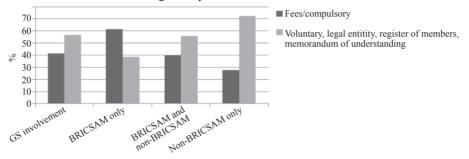


Notes: MoU = memorandum of understanding; GS = Global South; BRICSAM = Brazil, India, China, South Africa, and Mexico.

Figure 6. Regional involvement and types of institutionalisation (N = 60).

fees and compulsory actions. These forms of institutionalisation are often observed together—for those with compulsory actions 61% have a membership fee, and for those with membership fees 69% also have compulsory actions. This suggests that we can identify two different types of transnational climate governance, one which is based on voluntary or symbolic forms of institutionalisation and another which utilises 'stronger' approaches. Some 75% of hybrid initiatives adopt the former, while only 50% of private initiatives and 53% of public initiatives use this approach, indicating that the use of stronger forms of institutionalisation is difficult for hybrid initiatives. Voluntary approaches are, however, most often initiated by national government organisations or NGOs and include countries beyond the BRICSAM group in the Global South, while stronger forms of institutionalisation tend to be led by business organisations and to have a high level of involvement in the BRICSAM group (figures 2 and 7).

The analysis suggests that, at least for those included in our database, a significant proportion of transnational climate governance initiatives are consciously adopting some form of hard or binding form of institutional structure for their constituents. At the same time, as outlined above, there remains limited internal oversight of their processes and outcomes. This may suggest that such forms of governance have only limited legitimacy. However, such an analysis depends on the assumption that TCCG initiatives depend on a broadly democratic set of claims to legitimacy, which emphasises processes of accountability, transparency, representation, and so on. What is perhaps surprising is that a relatively small number of our initiatives base their legitimacy claims on such a democratic discourse. Rather, the



Notes: GS = Global South; BRICSAM = Brazil, India, China, South Africa, and Mexico.

Figure 7. Regional involvement and the use of 'hard' and 'soft' forms of institutionalisation (N = 60).

predominant claim to legitimate authority by the actors organising these initiatives is one of expertise. Figure 8 shows how the actors involved in TCCG claim legitimacy. The six types of claim identified draw on Avant et al (2010), with the addition of the 'jurisdiction' category based on a preliminary reading of a sample of the database. It shows clearly that the predominant type of legitimacy claim is based on expertise, with around two thirds of initiatives claiming legitimacy on this basis. Democratic legitimation is a clear second but a long way behind, with only around a quarter of the initiatives. Given that initiatives can be coded for more than one type, we looked at the relationships between the types.⁽⁵⁾ The major statistically significant relationship showed that initiatives legitimated by expertise tend to not call on democratic legitimacy. This suggests perhaps a broad distinction between technocratic and democratic governance initiatives.

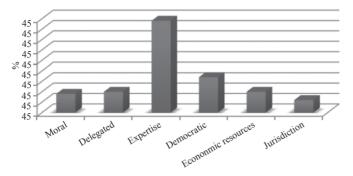


Figure 8. Sources of initiating actors' legitimacy (N = 60).

This impression is also supported by other aspects of legitimacy. We also assessed the overall ideological discourse within which an initiative is embedded [drawing on Clapp and Dauvergne's (2005) typology] (figure 9), and the types of claims about why the actions an initiative engaged in were legitimate (figure 10).⁽⁶⁾ Here, we find statistically significant *positive* relationships between the expertise basis for legitimacy and a motivation for action based on efficiency and an overall market liberal ideology.⁽⁷⁾ Efficiency itself is also clearly positively related to the market liberal ideology. Conversely, market ideology and efficiency have statistically significant *negative* relationships with moral and democratic claims to agency and justice as a motivation for action. Social green and bioenvironmentalist ideologies have statistically significant positive relationships with moral and democratic claims to agency and justice as a motivation for action, but only a small number of initiatives have these heterodox ideologies. So we see a dominant cluster of initiatives whose legitimacy claims are based on market liberal ideology, the pursuit of efficiency, and the expertise of its actors and a smaller cluster that call upon alternative ideologies, the morality and democratic nature of actors, and the pursuit of justice.

⁽⁵⁾ Owing to the nominal nature of the data, we ran a series of crosstabs and χ^2 tests to ascertain whether there is a relationship amongst the different measures of legitimacy.

⁽⁶⁾ This typology was developed inductively through a reading of a sample of the database. Four distinct themes were identified: (1) urgency (need for actions with immediate impact); (2) efficiency (need for cost-effective actions); (3) learning (need to learn from the experience of others and/or gain practical experience); and (4) justice (need to address the needs of marginalised populations).

⁽⁷⁾ Positive in this crosstab and χ^2 analysis refers to when the different legitimacy claims are related and tend to be called upon in the same initiatives (ie, we are more likely to see an initiative that has the market worldview *and* the efficiency motivation). Negative is the opposite (ie, we are not likely to see initiatives with the social green worldview *and* the efficiency motivation).

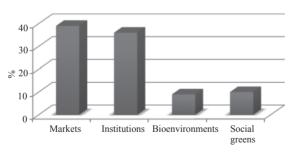


Figure 9. Motivating worldviews of initiating actors (N = 60)

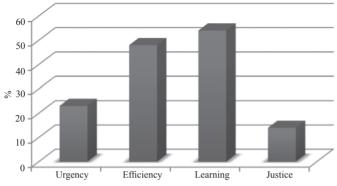


Figure 10. Types of action legitimacy amongst initiating actors (N = 60).

Conclusions

As international efforts to develop global climate change agreements became more complex and stagnant, our analysis suggests that new forms of TCCG emerge. In contrast to analyses that focus on a single type of transnational governance initiatives or in-depth accounts of single case studies, we seek to provide an overview of this field. Although the database through which this analysis has been conducted captures only a limited sample of the overall, dynamic population of TCCG initiatives (the universe of which is unknown), we suggest that it yields some useful insights into this expanding area of activity. We find that such initiatives have some features in common-they are relatively recent; they tend to focus on mitigation and especially the energy domain; they are established by actors in the Global North, but usually involve actors from the Global South in their operation; they use limited institutional structures together with voluntary and 'soft' forms of institutionalisation; and they are engaged in sharing information, capacity building, setting targets, and taking direct action to address this issue. We also identify some key differences. First, we find a difference between those, predominantly private, initiatives employing 'harder' forms of institutionalisation and the 'hybrid' initiatives whose operation is more informal and voluntary in nature. Second, we identify a difference between groups of initiatives in terms of the functions that they employ. We find two distinct groups of actors: the first are involved in providing funding, are hybrid in character, and more often include action on adaptation (on average, these initiatives have been founded earlier); and the second are focused on rule setting, tend to be private, and focused on mitigation (on average, these are the more recent initiatives). These findings point to the importance of considering the patterns emerging across different types of initiatives and the relationships between them as critical in shaping this emerging governance landscape.

As discussed above, a database of this nature has significant limitations. Reliant on a selective sample and discourse analysis of secondary material, it clearly cannot provide evidence about why and how such initiatives aim to govern climate change. In addition,

reliable data on the concrete impacts and effectiveness of transnational climate governance initiatives remain limited. In this regard, our findings remain a small step towards a comprehensive analysis of this phenomenon, which could be considerably strengthened by the addition of interviews with key actors involved in TCCG as well as with other organisations to which their efforts are directed and those engaged in other forms of climate governance. This would help us to discern and disaggregate further the origins of the design of TCCG mechanisms; why they take the form they do and pursue some functions rather than others; and the politics of their everyday operations across regions and sectors. It would also enrich our understanding of the power dynamics within them around priority setting, funding, and implementation strategies, for example. The consideration of these questions, across a range of different types of TCCG initiatives, should be a priority for future research in this field. In addition, the context within which TCCG is taking place has changed considerably since this analysis was begun. It will be interesting to assess what the effect of prolonged stalemate in the climate change negotiations will have on the further evolution of TCCG, where previously it has cast a long shadow over its formation and the sorts of issues it addresses. Despite the financial crisis and failure to date to agree on a commitment period after 2012, high levels of interest remain in carbon markets, despite the failure of the high-profile example of the Chicago Climate Exchange. Technology and the promotion of clean energy and the central role of cities in responding to climate change are also all receiving greater policy attention—all of which suggests that the sorts of actors and modes of governing that we have sought to document and analyse here are set to play an important role in the future transnational governance of climate change. As we set out here, this raises significant issues around the extent to which such initiatives will be able to engage across different areas of the world where state and nonstate capacity is limited and the extent to which the forms of accountability and legitimacy which they have adopted to date will be sufficient to cope with the future challenges of climate change governance.

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