Transnational Environmental Law, 3:1 (2014), pp. 57–88 © 2013 Cambridge University Press
doi:10.1017/S2047102513000502

SYMPOSIUM ARTICLE

Strengthening the Transnational Regime Complex for Climate Change†

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First published online 14 October 2013

Abstract
The inadequacies of the inter-state institutions and negotiating processes central to international climate policy create a pressing need for governance innovation. This article proposes one promising and feasible approach: strengthening the existing *transnational* regime complex for climate change. Leading organizations could strengthen the regime complex by forging stronger links among institutions, increasing coordination and collaboration, supporting weaker institutions and encouraging the entry of new ones where governance gaps exist. An enhanced regime complex would have a multilevel structure, enabling transnational institutions to *bypass* recalcitrant national governments by directly engaging sub-state and societal actors at multiple levels of authority and scale. It would also help to *manage* recalcitrant states by mobilizing advocacy, demonstration effects and other pressures on governments. Regime entrepreneurs, using the strategy of orchestration, could deploy a range of incentives and other tools of influence to enrol, support and steer transnational organizations.

Keywords: Climate Change, Transnational Governance, Regime Complex, Polycentric Order, Multilevel Governance, Orchestration

1. INTRODUCTION

The failure of the United States (US) to exercise effective global leadership on climate change – the premise of this symposium – has created a pressing need for governance innovation. To be sure, the US has long been active on numerous environmental issues. On the complex global public good of climate change,[1] however, weak leadership by

† This contribution is part of a collection of articles from the conference 'Global Climate Change without the United States: Thinking the Unthinkable', held at Yale University Law School, New Haven, CT (United States (US)), 9–10 November 2012.

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Thanks for valuable comments to Philipp Pattberg, Liesbet Hooghe, participants in the graduate student seminar at the Institute for Environmental Studies (IVM), VU University Amsterdam (the Netherlands), and three anonymous reviewers for the journal.

1 S. Barrett, *Why Cooperate? The Incentive to Supply Global Public Goods* (Oxford University Press, 2007), at pp. 84–102.

https://doi.org/10.1017/S2047102513000502 Published online by Cambridge University Press

the most influential state[2] has almost certainly impeded international collective action.[3] Without that leadership, the multilateral negotiations central to global climate policy-making have produced manifestly inadequate results.

Most observers view the emissions reduction targets and nationally appropriate mitigation actions pledged under the 2009 Copenhagen Accord[4] and formalized in the 2010 Cancún Agreements[5] as clearly insufficient to keep the increase in average global temperatures from breaching the current target of 2°C, much less the more ambitious targets that states have agreed to consider.[6] Following Cancún, the US and other developed countries refused to consider any further climate agreements without a new negotiating process that encompassed developing country commitments. The 2011 Durban Platform[7] is hopeful for the adoption of an inclusive new 'protocol, another legal instrument or an outcome with legal force', but its outcome remains legally and substantively uncertain.[8] The 2012 Doha Climate Gateway decisions and the 2013 Bonn Climate Change Conference laid the groundwork for negotiations under the Platform, but did little to advance its goals.[9] Significant steps have been taken on concrete issues such as financing (for example, by establishing the Green Climate Fund)[10] and technology development

2 The US refused to ratify the Kyoto Protocol (n. 13 below) and will not participate in its second commitment period. It has similarly refused to ratify other significant environmental conventions: see M.J. Angelo, R.M. Bratspies, D.B. Hunter, J.H. Knox, N. Sachs & S.B. Zellmer, 'Reclaiming Global Environmental Leadership: Why the United States Should Ratify Ten Pending Environmental Treaties', Center for Progressive Reform, CPR White Paper 1201, Jan. 2012, available at: http://www.progressivereform.org/whitePapers.cfm.

3 D. Snidal, 'The Limits of Hegemonic Stability Theory' (1985) 39 *International Organization*, pp. 579–614; O.R. Young, 'Political Leadership and Regime Formation: On the Development of Institutions in International Society' (1991) 45(3) *International Organization*, pp. 281–308.

4 Copenhagen Accord, Decision 2/CP.15, FCCC/CP/2009/11/Add.1, 30 Mar. 2010, available at: http://unfccc.int/meetings/copenhagen_dec_2009/session/6262/php/view/decisions.php.

5 'The Cancun Agreements: Outcome of the Work of the Ad Hoc Working Group on Long-Term Cooperative Action under the Convention', Decision 1/CP.16, FCCC/CP/2010/7/Add. 1, 15 Mar. 2011, available at: http://unfccc.int/meetings/cancun_nov_2010/items/6005.php.

6 M.G.J. den Elzen et al., 'Evaluation of the Copenhagen Accord: Chances and Risks for the 2°C Climate Goal', May 2010, available at: http://www.rivm.nl/bibliotheek/rapporten/500114018.pdf; V. Duscha et al., 'Post-2012 Climate Regime: How Industrial and Developing Nations Can Help to Reduce Emissions – Assessing Emission Trends, Reduction Potentials, Incentive Systems and Negotiation Options', Feb. 2010, available at: http://www.umweltbundesamt.de/uba-info-medien-e/3954.html; UNEP, 'Bridging the Emissions Gap', 2011, available at: http://www.unep.org/publications/contents/pub_details_search.asp?ID=6227.

7 'Establishment of an Ad Hoc Working Group on the Durban Platform for Enhanced Action', Decision 1/CP.17, FCCC/CP/2011/9/Add. 1, 15 Mar. 2012, available at: http://unfccc.int/bodies/body/6645.php.

8 D. Bodansky, 'The Durban Platform: Issues and Options for a 2015 Agreement', Dec. 2012, available at: http://www.c2es.org/publications?topic=2531.

9 J. Boyle, 'A Mirage in the Deserts of Doha? Assessing the Outcomes of COP 18', International Institute for Sustainable Development, 2012, available at: http://www.iisd.org/publications/pub.aspx?id51728; J. Morgan, 'Reflections on COP 18 in Doha: Negotiators Made Only Incremental Progress', World Resources Institute, 14 Dec. 2012, available at: http://insights.wri.org; UN Climate Change Secretariat, UNFCCC, 'June UN Climate Change Conference in Bonn Sees Concrete Progress Toward New Agreement and Speeding Up Climate Action', 14 June 2013, available at: http://unfccc.int/press/press_releases_advisories/items/7365.php.

10 UNFCCC, Decision 3/CP.17, 'Launching the Green Climate Fund', FCCC/CP/2011/9/Add.1 (2011).

https://doi.org/10.1017/S2047102513000502 Published online by Cambridge University Press

and transfer (for example, by establishing the Technology Mechanism),[11] but these too remain at early stages.

The US is far from the only barrier to global climate action, even if it is a potential hegemonic leader. China, India, Brazil and other major developing countries, among the largest and fastest-growing greenhouse gas (GHG) emitters and with increasing political influence, have been unwilling to adopt any legally binding mitigation commitments, at least in the short term. Without these countries and the US, there is little chance of forming an effective minilateral 'k-group' of major climate cooperators[12] as an alternative to a multilateral agreement. Again, the Durban Platform is hopeful, but at this point no more than that: although Durban calls for 'the widest possible cooperation by all countries', even a legally binding instrument may include asymmetrical obligations, as the Kyoto Protocol[13] does, and any new instrument will not come into force until 2020. In the interim, although Doha extended Kyoto for a second commitment period, Canada, Japan, New Zealand and Russia will not participate, leaving the Protocol applicable to only 15% of global emissions.[14]

The global policy processes on climate largely ignore these challenging collective action problems. They continue to centre on multilateral, inter-state negotiations under the United Nations Framework Convention on Climate Change (UNFCCC),[15] in which decisions must be taken by consensus, and they continue to pursue a comprehensive, legally binding agreement. Under current political, economic and political economy conditions, such processes cannot produce effective and timely responses.

The inadequacies of inter-state governance extend beyond the climate regime. The 2012 United Nations Conference on Sustainable Development (Rio+20) addressed a broad range of sustainability issues, including climate change. While virtually all states approved the Rio+20 outcome document,[16] unlike Kyoto, on most major issues the document did little more than reiterate previous commitments.[17] In addition, Rio+20 had two specific themes. The first, the institutional framework for sustainable development, was addressed with moderate creativity and commitment. The United Nations (UN) has since approved some significant innovations, restructuring the United Nations Environment Programme (UNEP)[18] and creating a new

11 UNFCCC, Decision 1/CP.16, 'The Cancun Agreements: Outcome of the Work of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention', Section IV.B (2010).

12 Russell Hardin, *Collective Action* (Johns Hopkins Press, 1982).

13 Kyoto Protocol to the United Nations Framework Convention on Climate Change, Kyoto (Japan), 11 Dec. 1997, in force 16 Feb. 2005, available at: http://unfccc.int/kyoto_protocol/items/2830.php.

14 Boyle, n. 9 above; Morgan, n. 9 above.

15 New York, NY (US), 9 May 1992, in force 21 Mar. 1994, available at: http://unfccc.int.

16 United Nations Conference on Sustainable Development, 'Outcome of the Conference: The Future We Want', A/CONF.216/L.1, June 2012, at p. 19. See also A. Powers, 'The Rio+20 Process: Forward Movement for the Environment?' (2012) 1(2) *Transnational Environmental Law*, pp. 403–12.

17 See 'The Future We Want', ibid., e.g., paras 190–2 on climate.

18 F. Dodds & A. Nayar, 'Rio+20: A New Beginning', UNEP Perspectives No. 8, Dec. 2012, available at: http://www.unep.org/civil-society/Portals/24105/documents/perspectives/ENVIRONMENT_PAPERS_DISCUSSION_8.pdf; UNEP, 'United Nations Environment Programme Upgraded to Universal Membership Following Rio+20 Summit', 21 Dec. 2012, available at: http://www.unep.org/newscentre/Default.aspx?DocumentID=2700&ArticleID=9363&l=en.

https://doi.org/10.1017/S2047102513000502 Published online by Cambridge University Press

'universal intergovernmental high-level political forum' to replace the Commission on Sustainable Development.[19]

The second theme, the 'green economy', in principle encompasses a thorough reworking of economic structures and practices, including decarbonization. Here, however, progress was much more limited: the transformative idea of a green economy was reduced to a poorly defined toolbox of policy approaches that governments might voluntarily adopt in line with national priorities. One potentially significant step was the decision to develop global sustainable development goals as part of a normative structure to replace the Millennium Development Goals after 2015. The UN has initiated an extensive goal development process.[20] Yet these will in the end be goals, not actions.

I do not mean to suggest that inter-state processes such as Copenhagen, Durban, Doha, and Rio+20 should be abandoned; they are essential to produce lasting global solutions to climate change and sustainable development. I do suggest, however, that serious efforts should be made to develop innovative, complementary approaches to help fill the governance gaps left by these processes. The more seriously one views the threat of climate change, the more dramatic and rapid such efforts should be.

This article suggests one promising and feasible approach: strengthening the *transnational regime complex for climate change* (TRCCC).[21] Even now, a significant number of transnational institutions address climate issues. They set standards for measuring and reporting carbon emissions and for carbon offsets, structure the voluntary carbon market, manage and finance renewable energy projects, disseminate information and play other important governance roles. These organizations are 'transnational' in that they involve private actors and/or sub-national governments as well as, or rather than, states or inter-state organizations, and operate across borders. Together, they form a transnational 'regime complex', a group of institutions that are loosely connected but are still fragmented.[22] Many transnational institutions are weak, however, and linkages among them are limited. As presently constituted, then, the TRCCC is not sufficiently ordered to take effective collective action.

Leading organizations could strengthen the TRCCC by increasing the level of coordination and collaboration among constituent institutions, while maintaining the benefits of polycentricity. Leading organizations could also support weaker institutions and encourage the entry of new ones where gaps in transnational governance exist. The TRCCC could be further enhanced through cooperation with other non-state institutions, especially relevant international organizations.

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19 'Format and Organizational Aspects of the High-Level Political Forum on Sustainable Development', UNGA Res. A/67/L.72, 27 June 2013.

20 See UN Sustainable Development Knowledge Platform, 'Post-2015 Process', available at: http://sustainabledevelopment.un.org/index.php?menu=1561.

21 K.W. Abbott, 'The Transnational Regime Complex for Climate Change' (2012) 30 *Government and Policy: Environment and Planning C*, pp. 571–90.

22 Ibid.; H. van Asselt, P. Pattberg, F. Biermann & F. Zelli, 'The Fragmentation of Global Governance Architectures: A Framework for Analysis' (2009) 9(4) *Global Environmental Politics*, pp. 14–40.

https://doi.org/10.1017/S2047102513000502 Published online by Cambridge University Press

A strengthened TRCCC would contrast sharply with current international processes. It would not involve multilateral negotiations among states, and it would not seek to adopt comprehensive, binding rules for state conduct. Instead, it would have two principal goals, corresponding with the two major targets of its governance activities:[23]

- The first goal would be to 'bypass' recalcitrant states, as well as states that lack the capabilities for successful climate interventions. By this I mean that the TRCCC would directly engage, address and support sub-state and societal actors at multiple levels and scales within and across states, including through voluntary norms backed by economic and social incentives, rather than interacting with states as such.
- The second goal would be to 'manage' recalcitrant states, at least to a modest degree. The TRCCC could not, of course, manage states in a hierarchical sense, exercising direction and control. It could, however, focus on advocacy, create demonstration effects, promote norms and values, and otherwise mobilize coordinated political pressure on governments to take action on climate change. Because the TRCCC would have a multilevel structure, those pressures would flow from multiple sources and levels, within and without the state.

An enhanced TRCCC would make its greatest contribution as a complement to inter-state actions such as the Kyoto Protocol and any successor under Durban: each would enhance the other. The ideal would be an integrated system that brings together inter-state and transnational governance.[24] Short of that, the TRCCC could independently provide complementary norms and services. Importantly, however, in areas where international negotiations fail or produce inadequate results, the TRCCC could at least partially substitute for them: helping to fill governance gaps, influencing the behaviour of governmental and societal actors, and generating governance innovations that stimulate and inform inter-state negotiations.

Section 2 of this article briefly summarizes the literature on transnational climate governance. Section 3 sets the stage for considering a strengthened TRCCC, defining key concepts and describing the transnational institutions currently in operation. Section 4 sketches the structure of a strengthened TRCCC. It considers the twin imperatives of ordering and polycentricity, inter-institutional linkages, the advantages of a multilevel structure, and the TRCCC's relationship with the inter-state climate regime. Section 5 critically assesses the potential of a strengthened TRCCC. It identifies barriers to transnational governance and inter-institutional cooperation, and considers how enhancing the TRCCC could help to overcome them. Section 6 considers techniques for operationalizing the TRCCC: it calls for the emergence of 'regime entrepreneurs', proposes the strategy of 'orchestration', and suggests incentives and

[23] I take the concepts of bypassing and managing from K.W. Abbott, P. Genschel, D. Snidal & B. Zangl, 'Orchestration: Global Governance through Intermediaries', in K.W. Abbott, P. Genschel, D. Snidal & B. Zangl (eds), *International Organizations as Orchestrators* (Cambridge University Press, 2014 forthcoming).

[24] K.W. Abbott, 'Engaging the Public and the Private in Global Sustainability Governance' (2012) 88(3) *International Affairs*, pp. 543–64.

https://doi.org/10.1017/S2047102513000502 Published online by Cambridge University Press

other tools of influence that regime entrepreneurs could deploy. The final section briefly concludes.

2. THE TRANSNATIONAL CLIMATE GOVERNANCE LITERATURE

An extensive literature on international relations, international law and policy documents the rise of non-state actors and transnational institutions, especially those that advocate policy[25] and make rules,[26] and also those that implement rules or provide operational services. This literature focuses on global governance generally,[27] and climate governance specifically.[28]

Scholars have devoted particular attention to organizations formed by sub-state governments,[29] by private actors including business groups and non-governmental organizations (NGOs),[30] and as public–private partnerships.[31] The literature proposes definitions and typologies of non-state actors and transnational governance modes, and assesses the governance potential of different types.[32] Green analyzes relationships among private climate standards organizations and with public institutions, based on the recognition of other standards.[33]

The most prominent theme of this literature is simply that non-state actors and institutions are here to stay: transnational governance must be taken seriously.

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25 M.E. Keck & K. Sikkink, *Activists Beyond Borders: Advocacy Networks in International Politics* (Cornell University Press, 1998).

26 K.W. Abbott & D. Snidal, 'Strengthening International Regulation through Transnational New Governance: Overcoming the Orchestration Deficit' (2009) 42 *Vanderbilt Journal of Transnational Law*, pp. 501–78.

27 R. Falkner, *Global Governance – The Rise of Non-State Actors* (European Environment Agency, 2011), available at: http://personal.lse.ac.uk/Falkner/_private/2011_EEAreport_GlobalGovernance.pdf.

28 F. Biermann & P. Pattberg, 'Global Environmental Governance: Taking Stock, Moving Forward' (2008) 33 *Annual Review of Environmental Resources*, pp. 277–94; K. Raustiala & N.L. Bridgeman, 'Nonstate Actors in the Global Climate Regime', Nov. 2007, available at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1028603; E. Dannenmaier, 'The Role of Non-state Actors in Climate Compliance', in J. Brunée et al. (eds), *Promoting Compliance in an Evolving Climate Regime* (Cambridge University Press, 2012), pp. 149–76; T. Hale & C. Roger, 'Orchestration and Transnational Climate Governance' (2013 forthcoming) *Review of International Organizations*.

29 M.M. Betsill & H. Bulkeley, 'Cities and the Multilevel Governance of Global Climate Change' (2006) 12(2) *Global Governance*, pp. 141–59; H.M. Osofsky, 'Multiscalar Governance and Climate Change: Reflections on the Role of States and Cities at Copenhagen' (2010) 25 *Maryland Journal of International Law*, pp. 64–85.

30 Abbott & Snidal, n. 26 above.

31 L.B. Andonova, 'Public–Private Partnerships for the Earth: Politics and Patterns of Hybrid Authority in the Multilateral System' (2010) 10(2) *Global Environmental Politics*, pp. 25–53; K. Bäckstrand, 'Accountability of Networked Climate Governance: The Rise of Transnational Climate Partnerships' (2008) 8(3) *Global Environmental Politics*, pp. 74–102; P. Pattberg, 'Public–Private Partnerships in Global Climate Governance' (2010) 1(2) *WIREs Climate Change*, pp. 279–87.

32 L.B. Andonova, M.M. Betsill & H. Bulkeley, 'Transnational Climate Governance' (2009) 9(2) *Global Environmental Politics*, pp. 52–73; P. Pattberg & J. Stripple, 'Beyond the Public and Private Divide: Remapping Transnational Climate Governance in the 21st Century' (2008) 8 *International Environmental Agreements*, pp. 367–88.

33 J.F. Green, 'Order out of Chaos: Public and Private Rules for Managing Carbon' (2013) 13(2) *Global Environmental Politics*, pp. 1–25.

https://doi.org/10.1017/S2047102513000502 Published online by Cambridge University Press

On climate change, the literature bemoans the failures of inter-state processes, sometimes drawing favourable comparisons with more consensual, business-like transnational institutions.[34] Scholars have suggested alternative modes of inter-state action but, until recently, have advanced few specific proposals for transnational governance.

The recent turn reflects a growing interest in 'polycentric' responses to climate change, which involve multiple sites of authority.[35] The Copenhagen conference was a major stimulant to this interest: its failure to reach a binding multilateral agreement was a prod to creative thinking, while its modest success in generating national pledges showed the possibilities of decentralized action. Advocates of polycentric responses argue that climate change, sustainable development and other global issues should be addressed through multiple, decentralized actions by formally independent actors and institutions operating at different levels and scales, rather than (only) through centralized, comprehensive rule-making.

Many proposals for polycentric action focus on 'bottom-up' commitments by states, extending the Copenhagen model. Scholars have suggested varied mechanisms for commitments by individual states or small groups of states (a 'carbon club', for example), with mechanisms to link commitments or ratchet them up over time.[36] Others highlight actions by multiple international institutions, extending the regime complex model: a range of treaties and intergovernmental organizations (IGOs), 'clubs' of like-minded states, and bilateral agreements already address climate change in parallel with UNFCCC processes.[37]

Finally, some scholars suggest polycentric 'assemblages'[38] or 'ensembles'[39] of public and private institutions.[40] Few, however, take the next step of considering how such an assemblage might be structured and operate. Van Asselt and Zelli make a start by suggesting ways to link three groups of climate actors: technology institutions,

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34 S. Bernstein, M.M. Betsill, M.J. Hoffmann & M. Paterson, 'A Tale of Two Copenhagens: Carbon Markets and Climate Governance' (2010) 39 *Millennium – Journal of International Studies*, pp. 161–73.

35 Abbott, n. 21 above; D.H. Cole, 'From Global to Polycentric Climate Governance' (2011) 2 *Climate Law*, pp. 395–413; E. Ostrom, 'Polycentric Systems for Coping with Collective Action and Global Environmental Change' (2010) 20(4) *Global Environmental Change*, pp. 550–7.

36 D. Bodansky, 'A Tale of Two Architectures: The Once and Future U.N. Climate Change Regime' (2011) 43 *Arizona State Law Journal*, pp. 697–713; R. Falkner, H. Stephan & J. Vogler, 'International Climate Policy after Copenhagen: Towards a "Building Blocks" Approach' (2010) 1 *Global Policy*, pp. 252–62; M. Hulme, 'Moving beyond Climate Change' (2010) 52(3) *Environment*, pp. 15–19; D.G. Victor, *Global Warming Gridlock* (Cambridge University Press, 2011).

37 R.O. Keohane & D. Victor, 'The Regime Complex for Climate Change' (2011) 9(1) *Perspectives on Politics*, pp. 7–23; R. Moncel & H. van Asselt, 'All Hands on Deck! Mobilizing Climate Change Action Beyond the UNFCCC' (2012) 21(3) *Review of European Community & International Environmental Law*, pp. 163–76.

38 W. Boyd, 'Climate Change, Fragmentation and the Challenges of Global Environmental Law: Elements of a Post-Copenhagen Assemblage' (2010) 32 *University of Pennsylvania Journal of International Law*, pp. 457–550.

39 O. Perez, 'Private Environmental Governance as Ensemble Regulation: A Critical Exploration of Sustainability Indices and the New Ensemble Politics' (2011) 12 *Theoretical Inquiries in Law*, pp. 543–79.

40 Cole, n. 35 above; E. Orts, 'Climate Contracts' (2011) 29 *Virginia Environmental Law Journal*, pp. 197–236; J. Peel, L. Godden & R.J. Keenan, 'Climate Change Law in an Era of Multi-Level Governance' (2012) 1(2) *Transnational Environmental Law*, pp. 245–80; T. Hale & D. Held, 'Gridlock and Innovation in Global Governance: The Partial Transnational Solution' (2012) 3(2) *Global Policy*, pp. 169–81.

https://doi.org/10.1017/S2047102513000502 Published online by Cambridge University Press

emissions trading systems and unilateral trade measures.[41] Stewart, Oppenheimer and Rudyk propose a 'building block' approach structured around three strategies:[42] (i) forming 'clubs' of states and/or private firms to adopt measures that produce economic benefits while reducing emissions as an incidental co-benefit; (ii) causing organizations with non-climate missions to sponsor initiatives that further those missions while again producing incidental emissions reductions; and (iii) encouraging dominant market actors, public and private, to adopt climate-friendly standards for specific sectors, forcing competitors to follow suit. While these strategies are valuable, the proposal advanced here is broader and less reliant on self-interested non-climate actions.

3. SETTING THE STAGE

3.1. *Key Concepts*

Regime complex

A regime complex is a group of institutions that address similar issues within a governance domain. In principle, its constituent institutions are 'regimes'. As originally defined, a regime is a set of principles, norms, rules and decision-making procedures around which actors' expectations converge within a domain such as climate change.[43] Most regimes, however, are centred on specific organizations and agreements, and much of the regime complex literature focuses on institutions of this kind.[44] Here, I treat transnational climate organizations – which embody principles, norms, rules and decision-making procedures – as constituting a regime complex.[45]

Regime complex theory has focused predominantly on three relationships among organizations. Firstly, institutions are *nested* where one has hierarchical authority over others. For example, the World Trade Organization (WTO) is hierarchically superior to preferential trade agreements, as it has authority to resolve any rule conflicts. Secondly, institutions are *overlapping* where their rules address the same behaviour but none has superior authority. The WTO and a multilateral environmental agreement that authorizes trade sanctions on non-parties, such as the Montreal Protocol on Substances that Deplete the Ozone Layer,[46] are overlapping: both address national trade measures,

41 H. van Asselt & F. Zelli, 'Connect the Dots: Managing the Fragmentation of Global Climate Governance' (2013 forthcoming) *Environmental Economics and Policy Studies*.

42 R.B. Stewart, M. Oppenheimer & B. Rudyk, 'Reaching International Cooperation on Climate Change Mitigation: Building a More Effective Global Climate Regime Through a Bottom-Up Approach' (2013) 14(1) *Theoretical Inquiries in Law*, pp. 273–306. See also R.B. Stewart, M. Oppenheimer & B. Rudyk, 'A New Strategy for Global Climate Protection' (2013) 120(1–2) *Climatic Change*, pp. 1–12.

43 S.D. Krasner, 'Structural Causes and Regime Consequences: Regimes as Intervening Variables', in S.D. Krasner (ed), *International Regimes* (Cornell University Press, 1983), pp. 1–22.

44 K. Raustiala & D. Victor, 'The Regime Complex for Plant Genetic Resources' (2004) 58(2) *International Organization*, pp. 277–309; K. Alter & S. Meunier, 'The Politics of International Regime Complexity' (2009) 7 *Perspectives on Politics*, pp. 13–24; Keohane & Victor, n. 37 above.

45 Abbott, n. 21 above.

46 Montreal (Canada), 16 Sept. 1987, in force 1 Jan. 1989, available at: http://ozone.unep.org/new_site/en/montreal_protocol.php.

https://doi.org/10.1017/S2047102513000502 Published online by Cambridge University Press

perhaps inconsistently, but neither has authority to resolve any conflict between them. Thirdly, institutions are *parallel* where they have neither relationship; they are not part of a regime complex. Agreements in disparate issue areas, such as the UNFCCC and the Geneva Convention Relative to the Treatment of Prisoners of War,[47] are parallel.

Overlap has been the core concern of regime complex theory. As issue areas and institutional mandates are redefined and new issues arise, institutions that previously operated in parallel can come to overlap. In other instances actors knowingly create overlap.[48] In either case, inconsistent rules create costs for institutions and their members; these are particularly acute among inter-state institutions that administer legally binding rules.[49]

A broader understanding of regime complexes views them as assemblages of institutions that are 'loosely coupled' but lack an overarching architecture. In this view, the regime complex stands near the midpoint of a continuum that runs from a single integrated organization to a wholly fragmented array of institutions with no significant linkages.[50] Although certain constituents may have a particularly strong influence, a regime complex is fundamentally polycentric, consisting of multiple centres of authority, each involving different actors or actor combinations.[51]

This broader version of regime complex theory, which I adopt here, downplays the traditional focus on overlapping rules; instead it considers the causes and effects of institutional fragmentation or multiplicity and the means of managing it, like those proposed here.[52] It is also better suited to transnational institutions, which adopt voluntary rather than legally binding rules and engage in operational activities in addition to rule-making.

Transnational

An institution, regime or regime complex is *transnational* when (i) private actors (such as environmental NGOs, business enterprises and technical experts) and/or sub-national governmental units (cities or provinces, for example) play significant roles in its governance, instead of or in addition to states and/or IGOs; and (ii) it operates across national borders. The growing literature on transnational law and governance includes many understandings of the 'transnational' – far more than can be reviewed here. These are more or less encompassing, sometimes including public

47 Geneva (Switzerland), 12 Aug. 1949, in force 21 Oct. 1950, available at: http://www.icrc.org/applic/ihl/ihl.nsf/Treaty.xsp?documentId=77CB9983BE01D004C12563CD002D6B3E&action=openDocument .

48 L.R. Helfer, 'Regime Shifting: The TRIPs Agreement and New Dynamics of International Intellectual Property Lawmaking' (2004) 29 *Yale Journal of International Law*, pp. 1–83.

49 Traditional regime complex scholarship focuses heavily on such institutions.

50 Keohane & Victor, n. 37 above.

51 Abbott, n. 21 above; Ostrom, n. 35 above.

52 Cf. van Asselt, Pattberg, Biermann & Zelli, n. 22 above; F. Zelli, 'The Fragmentation of the Global Climate Governance Architecture' (2011) 2(2) *WIREs Climate Change*, pp. 255–70; F. Zelli & H. van Asselt, 'The Institutional Fragmentation of Global Environmental Governance: Causes, Consequences and Responses' (2013) 13(3) *Global Environmental Politics*, pp. 1–13.

https://doi.org/10.1017/S2047102513000502 Published online by Cambridge University Press

international law and inter-state institutions, sometimes excluding them. These understandings also focus on varied categories and aspects of legal rules, legal processes, political actors, institutions and governance.[53] For present purposes, however, the relatively simple definition set out above is apt. It is widely used in scholarship on transnational governance, including transnational climate governance.[54]

Transnational institutions vary widely in terms of actor composition. Private actors establish and make up many institutions. Often those actors are relatively homogeneous: for example, environmental NGOs (Climate, Community & Biodiversity Alliance (CCBA)[55]) or business groups (Verified Carbon Standard (VCS)[56]). A significant number of institutions bring together sub-state governments (ICLEI – Local Governments for Sustainability (ICLEI)[57]), often of a particular type (C40 Cities Climate Leadership Group[58]).

In other cases heterogeneous actors combine to establish and govern institutions: for example, NGOs and business associations together (Greenhouse Gas Protocol (GHGP)[59]), or broader multi-stakeholder groupings (Roundtable on Sustainable Biomaterials (RSB),[60] Forest Stewardship Council (FSC)[61]). In addition, IGO and/or national officials participate in transnational public–private partnerships (Global Gas Flaring Reduction Partnership,[62] Renewable Energy Policy Network for the 21st Century (REN 21)[63]). This is consistent with the definition of 'transnational', which leaves room for participation by states, IGOs and other public entities.

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53 See, e.g., P. Jessup, *Transnational Law* (Yale University Press, 1956); H.H. Koh, 'Transnational Legal Process' (1996) 75 *Nebraska Law Review*, pp. 181–207; G. Shaffer, 'Transnational Legal Process and State Change' (2012) 37 *Law & Social Inquiry*, pp. 229–64; G. Shaffer & D. Bodansky, 'Transnationalism, Unilateralism and International Law' (2012) 1(1) *Transnational Environmental Law*, pp. 31–41; T. Hale & D. Held (eds), *Handbook of Transnational Governance: Institutions and Innovations* (Polity Press, 2011); E. Dannenmaier, 'Constructing Transnational Climate Regimes', in G. Handl, J. Zekoll & P. Zumbansen (eds), *Beyond Territoriality: Transnational Legal Authority in an Age of Globalization* (Martinus Nijhoff, 2012), pp. 519–50; P. Zumbansen, 'Transnational Legal Pluralism' (2010) 10(2) *Transnational Legal Theory*, pp. 141–89. See also V. Heyvaert & T.F.M. Etty, 'Introducing Transnational Environmental Law' (2012) 1(1) *Transnational Environmental Law*, pp. 1–11.

54 See, e.g., T. Risse-Kappen (ed), *Bringing Transnational Relations Back In: Nonstate Actors, Domestic Structures and International Institutions* (Cambridge University Press, 1995); P. Pattberg, *Private Institutions and Global Governance* (Edward Elgar, 2007); Pattberg & Stripple, n. 32 above, at p. 367 n. 3; Andonova, Betsill & Bulkeley, n. 32 above; B. Eberlein et al., 'Transnational Business Governance Interactions: Conceptualization and Framework for Analysis' (2013 forthcoming) *Regulation & Governance*; H. Bulkeley et al., 'Governing Climate Change Transnationally: Assessing the Evidence from a Database of Sixty Initiatives' (2012) 30(4) *Environment and Planning C: Government and Policy*, pp. 591–612; Abbott, n. 21 above.

55 http://www.climate-standards.org.

56 http://www.v-c-s.org/who-we-are.

57 http://www.iclei.org.

58 http://www.c40cities.org.

59 http://www.ghgprotocol.org/about-ghgp.

60 http://rsb.org/sustainability/rsb-certification.

61 https://ic.fsc.org.

62 http://go.worldbank.org/Q7E8SP9J90.

63 http://www.ren21.net.

https://doi.org/10.1017/S2047102513000502 Published online by Cambridge University Press

Increased cooperation with IGO officials and organs, including treaty secretariats, would greatly enhance the TRCCC, while furthering complementarity.[64] While IGO officials and organs fall outside a strict definition of 'transnational', they are non-state actors. States often grant them modest independence,[65] and they gain further autonomy and influence from their expertise and focality.[66] IGO officials administer climate-relevant norms for private actors (such as the Organisation for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises[67]) and encourage private commitments (such as the UN Global Compact[68] and its Caring for Climate Initiative[69]). IGO officials can also be effective regime entrepreneurs. They have catalyzed the formation of transnational institutions such as the Global Reporting Initiative (GRI),[70] Principles for Responsible Investment (PRI)[71] and the Equator Principles;[72] they support those institutions on an ongoing basis.[73] The UNFCCC Secretariat has generally limited itself to supporting intergovernmental processes, in line with its narrow mandate.[74] Recently, however, it launched the Momentum for Change Initiative, promoting climate partnerships that benefit the poor.[75]

Bypassing and managing

A TRCCC would bypass states by addressing norms and programmes directly to sub-state and/or societal actors, rather than to states. For example, transnational institutions could adopt and promote coordinated emissions standards for city governments, business firms and other public and private actors. Such standards would not be legally binding, but could be backed by economic, political or social incentives. This represents a governance model that differs greatly from arrangements such as those under the Kyoto Protocol, which are adopted by

64 Another valuable ally would be a *transgovernmental network* on climate. A transgovernmental network is an association of government agencies, e.g., environment ministries; it is not formed by or made up of states as such: see A.-M. Slaughter, *A New World Order* (Princeton University Press, 2005). Transgovernmental networks share information, coordinate rule-making and other domestic activities, and support weaker member agencies. They are important centres of governance in many areas. Unfortunately, national and supranational environment agencies have not created strong trans-governmental relationships on climate policy.

65 K.W. Abbott & D. Snidal, 'Why States Act Through Formal International Organizations' (1998) 42(1) *Journal of Conflict Resolution*, pp. 3–32.

66 F. Biermann & B. Siebenhüner (eds), *Managers of Global Change: The Influence of International Environmental Bureaucracies* (The MIT Press, 2009).

67 http://www.oecd.org/daf/inv/mne/oecdguidelinesformultinationalenterprises.htm.

68 http://www.unglobalcompact.org.

69 http://caringforclimate.org.

70 https://www.globalreporting.org/Pages/default.aspx.

71 http://www.unpri.org.

72 http://www.equator-principles.com.

73 C. van der Lugt & K. Dingwerth, 'Governing Where Focality Is Low: UNEP and the Principles for Responsible Investment', in Abbott, Genschel, Snidal & Zangl, n. 23 above.

74 UNFCCC, n. 15 above, Art. 8.

75 See http://unfccc.int/secretariat/partneships/items/6621.php. It has also joined the Global Compact as co-convenor of Caring for Climate, discussed below at Section 5.1.

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states, apply to states and rely on national governments for implementation vis-à-vis non-state actors. Beyond standard-setting, transnational institutions could engage with cities, firms and other actors, providing them with information, disseminating their expertise, providing them voice, creating learning opportunities and strengthening their commitment. Transnational institutions could also assist actors that lack capacity for complex mitigation and adaptation measures.

A TRCCC would manage states – in a modest sense – by persuading and pressuring national governments to make and implement international climate commitments and to take relevant domestic action. To influence state behaviour, it is necessary to modify cost/benefit calculations, domestic political interests, and/or principled beliefs or values. Transnational institutions can effectively do all three. Many transnational organizations provide information and knowledge that influence state interest calculations, as in traditional lobbying. Many are experienced in advocacy, which changes domestic political calculations by educating and mobilizing NGOs, consumers, business leaders and the public to demand government action and raise the political costs of inaction. Transnational organizations frequently invoke norms and values, applying 'shaming' strategies that lead governments to redefine their interests and identities over time.

An important strategy that draws on all three approaches is the creation of 'demonstration effects'.[76] Voluntary standards for business, operational projects and other transnational activities, if successful, can have a range of significant political effects. They vividly demonstrate the benefits, feasibility and cost-effectiveness of norms and activities, as well as their normative appropriateness and appeal.[77] At the same time, they reveal shortcomings in public rules and programmes, highlighting advantageous opportunities that governments have failed to seize (perhaps as a result of cozy relationships with private interests),[78] and generating public demand to do so. Advocates can also leverage extreme weather events and other natural demonstration effects, highlighting government failures and mobilizing public demand.

3.2. *Transnational Climate Institutions*

Transnational climate governance has blossomed in the last two decades. A recent special issue[79] identifies 60 transnational climate institutions, applying the definition used here.[80] Abbott modifies that database, analyzing nearly 70 institutions.[81]

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76 W. Mattli & N. Woods (eds), *The Politics of Global Regulation* (Princeton University Press, 2009).

77 The Momentum for Change programme adopts similar goals: see http://unfccc.int/secretariat/momentum_for_change/items/6214.php.

78 Mattli & Woods, n. 76 above, at pp. 22–6.

79 H. Bulkeley (ed), 'Between Public and Private? Governing Global Environmental Issues Transnationally' (2012) 30(4) *Government and Policy: Environment and Planning C*, pp. 556–674.

80 Bulkeley et al., n. 54 above. See also T.F.M. Etty, V. Heyvaert, C. Carlarne, D. Farber, J. Lin & J. Scott, 'Transnational Dimensions of Climate Governance' (2012) 1(2) *Transnational Environmental Law*, pp. 235–43.

81 Abbott, n. 21 above.

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Hoffman catalogues some 60 'climate experiments', most involving IGOs or transnational organizations.[82] Hale and Roger combine these databases, identifying 75 transnational climate initiatives.[83] Green analyzes relationships among 30 transnational institutions that set standards for carbon measurement and management.[84] Transnational organizations operating in related issue areas also take climate-relevant actions: for example, on biofuels (RSB), agricultural practices (GlobalGAP,[85] Sustainable Agriculture Network[86]), and social/environmental reporting (GRI).

These institutions already engage in numerous activities that 'bypass states'. Of particular significance, they adopt and administer rules for non-state actors, including rules for carbon-offset projects (VCS, CCBA), emissions accounting (GHGP), and disclosure (GRI). While these rules have regulatory purposes, virtually all are voluntary. I refer to them as 'regulatory standards'.[87] Again, institutions in other domains also adopt climate-relevant standards in areas such as forest management (FSC, Natural Forest Standard[88]).

Transnational institutions also perform important operational functions that engage and benefit non-state actors. Notably, they manage the voluntary carbon market, which complements the Clean Development Mechanism (CDM),[89] the European Union (EU) Emissions Trading System (ETS),[90] and other public efforts.[91] The voluntary market is structured by private offset and accounting standards,[92] such as VCS and CCBA, and by private organizational structures, including carbon credit registries (The Climate Registry,[93] Markit Environmental Registry[94]) and trading platforms (Carbon TradeXChange,[95] Chicago Climate Exchange until 2010[96]).

In addition, many transnational institutions produce and disseminate information that is valuable to non-state actors. The Carbon Disclosure Project[97] disseminates

82 M.J. Hoffmann, *Climate Governance at the Crossroads* (Oxford University Press, 2011).

83 Hale & Roger, n. 28 above.

84 Green, n. 33 above.

85 http://www.globalgap.org.

86 http://sanstandards.org/sitio.

87 K.W. Abbott & D. Snidal, 'The Governance Triangle: Regulatory Standards Institutions and the Shadow of the State', in Mattli & Woods, n. 76 above, pp. 44–88. Some sub-state government associations, such as the Regional Greenhouse Gas Initiative (RGGI), promulgate binding rules, but most do not.

88 http://www.naturalforeststandard.com.

89 http://unfccc.int/kyoto_protocol/mechanisms/clean_development_mechanism/items/2718.php.

90 http://ec.europa.eu/clima/policies/ets/index_en.htm.

91 Bernstein, Betsill, Hoffman & Paterson, n. 34 above; W. Boyd & J. Salzman, 'The Curious Case of Greening in Carbon Markets' (2011) 41 *Environmental Law*, pp. 73–94; M. Peters-Stanley & K.E. Hamilton , 'Developing Dimension: State of the Voluntary Carbon Market 2012', May 2012, available at: http://www.forest-trends.org/publication_details.php?publicationID=3164.

92 J.F. Green, 'Private Standards in the Climate Regime: The Greenhouse Gas Protocol' (2010) 12(3) *Business and Politics*, Article 3.

93 http://www.theclimateregistry.org.

94 http://www.markit.com/en/products/environmental/markit-environmental-registry.page.

95 http://carbontradexchange.com.

96 https://www.theice.com/ccx.jhtml.

97 https://www.cdproject.net/en-US/Pages/HomePage.aspx.

https://doi.org/10.1017/S2047102513000502 Published online by Cambridge University Press

data on firms' environmental performance, aiming to spur continuous improvement. The World Business Council on Sustainable Development (WBCSD) provides a forum for companies to 'analyze and debate views and experiences on all aspects of sustainable development'.[98] ICLEI provides learning opportunities, technical assistance and capacity building for local governments.

Transnational organizations also engage in activities designed to 'manage' states. Many activities of the 'bypassing states' variety, including successful regulatory standards and operational programmes, simultaneously produce demonstration effects. Informational activities disseminate these lessons, stimulating demand for public action.

In addition, transnational organizations engage in governance innovation by promoting new policy solutions and by sponsoring and financing demonstration projects (Clinton Climate Initiative,[99] Global Sustainable Electricity Partnership,[100] Renewable Energy & Energy Efficiency Partnership (REEEP)[101]). Some programmes are explicitly experimentalist: the Rockefeller Foundation's Asian Cities Climate Change Resilience Network (ACCCRN) focuses on 'experimenting and testing' approaches to building resilient institutions for the poor, and on 'demonstrating, and disseminating knowledge' about innovative solutions.[102] Finally, transnational organizations engage in varied forms of advocacy aimed at states and non-state actors (Climate Action Network,[103] International Emissions Trading Association,[104] Center for Climate and Energy Solutions[105]).

4. STRUCTURING THE TRANSNATIONAL REGIME COMPLEX

4.1. *Polycentric Ordering*

Transnational climate institutions are products of self-organization; they constitute a 'polycentric order' in a field where hierarchical authority and strong coordination are lacking.[106] Yet transnational institutions as a group are very weakly ordered.

Galaz et al. distinguish four ideal-typical levels of ordering based on the characteristic functions performed in each.[107] Higher levels support more ambitious activities, but require stronger relationships among participants, more coordination and collaboration,

98 http://www.wbcsd.org/about/organization.aspx.

99 http://www.clintonfoundation.org/main/our-work/by-initiative/clinton-climate-initiative/about.html.

100 http://www.globalelectricity.org.

101 http://www.reeep.org.

102 http://www.acccrn.org/about-acccrn/background.

103 http://www.climatenetwork.org.

104 http://www.ieta.org.

105 http://www.c2es.org.

106 V. Galaz, B. Crona, H. Österblom, P. Olsson & C. Folke, 'Polycentric Systems and Interacting Planetary Boundaries – Emerging Governance of Climate Change – Ocean Acidification – Marine Biodiversity' (2011) 81 *Ecological Economics*, pp. 21–32.

107 Ibid.

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and thus greater trust and investment. In polycentric ordering no external authority can impose coordination: influential and committed participants must generate it.

Individual transnational climate institutions operate at all four levels of ordering:

1. At level 1, actors merely exchange information about common problems and activities, enabling them to adjust their policies and actions to one another if they wish, but without express coordination. NGOs, business enterprises, sub-state governments, IGO officials and other actors share climate and governance information in this decentralized fashion.
2. At level 2, actors coordinate informally, without explicit agreement. These relationships too are based on information exchange, but here actors anticipate coordinated decision-making. Relatively loose institutions such as the World Mayors Council on Climate Change[108] and Green Economy Coalition[109] resemble this level of ordering.
3. At level 3, actors establish formal agreements, organizations or partnerships to collaborate on joint projects. Galaz et al. refer only to 'field' projects and knowledge production, but adopting and administering regulatory standards reflects a similar degree of ordering. Here, because joint projects require collaboration, 'a few central actors emerge to coordinate the activities and communication of the partnership'.[110] Major transnational climate institutions – including CCBA, VCS, RSB and REEEP – operate at this level.
4. Finally, at level 4, relationships among actors are strong enough to address novel and dynamic problems and to manage conflicts. Formal agreements and partnerships remain central, and core actors still steer collaboration. Yet fewer actors are willing to participate in these demanding arrangements; some remain outside, maintaining weaker links. Established transnational organizations such as the FSC, GHGP and GRI operate at this level.

Many individual transnational institutions, then, reflect relatively high levels of ordering – levels 2, 3 and 4. Collectively, however, their ordering is much weaker. Transnational climate institutions may constitute an organizational field, observing and acting in relation to one another.[111] They may even constitute a regime complex, 'loosely coupled' by common principles and relationships such as 'conscious parallelism', but without any overarching architecture.[112] Yet they remain highly fragmented, with limited coordination and collaboration.

Weak ordering is most clearly manifested in institutional overlap (governance gaps are equally symptomatic, but less easily identified). Multiple organizations

108 http://www.worldmayorscouncil.org.

109 http://www.greeneconomycoalition.org.

110 Galaz, Crona, Österblom, Olsson & Folke, n. 106 above, at p. 23.

111 T. Bartley, 'Institutional Emergence in an Era of Globalization: The Rise of Transnational Private Regulation of Labor and Environmental Conditions' (2007) 113(2) *American Journal of Sociology*, pp. 297–351; K. Dingwerth & P. Pattberg, 'World Politics and Organizational Fields: The Case of Transnational Sustainability Governance' (2009) 15(4) *European Journal of International Relations*, pp. 707–44.

112 Abbott, n. 21 above.

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certify carbon offset credits and seek emission reduction pledges. Multiple organizations address sectors such as forestry and renewable energy – through standards, demonstration projects and other activities – from modestly differing perspectives. Multiple associations of sub-state governments, even of city governments, address mitigation. In all these areas, overlapping institutions operate independently, often competitively. New organizations continue to enter crowded, high-profile areas such as forestry rather than underserved areas such as adaptation.[113]

To be sure, transnational institutions frequently define their missions to limit overlap: for example, the Natural Forest Standard considers only non-commercial offset projects in natural forests. Many offset schemes explicitly recognize other standards, including CDM standards, as satisfying some of their requirements.[114] A few – such as GRI and the Carbon Disclosure Project – are informally aligning their standards, thus reducing the burden on actors that adhere to both.[115] However, these are relatively weak forms of ordering; stronger collaboration is rare.

Enhancing the TRCCC would entail strengthening linkages among transnational institutions, promoting coordination and collaboration. The primary linkages would be *horizontal*, involving relationships among organizations of a particular type, such as private standard-setting or project institutions based in civil society and/or business, public–private partnerships, and sub-national government associations. Such relationships would move the regime complex to a higher level of ordering, allowing constituent organizations to engage in governance activities characteristic of levels 2 to 4.

Vertical linkages between organizations of different types would also be valuable. In addition to direct collaboration in public–private partnerships, these would include support for weaker organizations, catalyzing new institutions in underserved areas, and steering institutions at lower levels. These are tasks for which IGO officials are especially well suited.[116]

To be clear, I do not argue for a tightly integrated regime complex, far less a true regime. As discussed further below, strong integration is unlikely, as a result of divergent preferences and organizational incentives for independence. More importantly, decentralization offers important advantages that would be sacrificed by tight integration. These include the flexibility to address new and dynamic issues and to fine-tune standards and operations to specific situations; the ability to create productive 'clubs' of actors with common interests and values; and opportunities for experimentation and learning.[117] In general, I favour a version of the principle of

113 K.W. Abbott, J.F. Green & R.O. Keohane, 'Organizational Ecology and Organizational Strategies in World Politics', 9 July 2013, available at: http://ssrn.com/abstract=2293678.

114 Green, n. 33 above.

115 GRI, 'How do GRI and the Carbon Disclosure Project Align in 2011?', 5 July 2011, available at: https://www.globalreporting.org/information/news-and-press-center/Pages/How-do-GRI-and-the-Carbon-Disclosure-Project-align-in-2011.aspx.

116 K.W. Abbott & D. Snidal, 'International Regulation without International Government: Improving International Organization Performance through Orchestration' (2010) 5 *Review of International Organizations*, pp. 315–44.

117 Abbott & Snidal, n. 26 above; Keohane & Victor, n. 37 above.

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subsidiarity – that is, to establish the lowest level of institutional ordering that enables the performance of desired social functions.

4.2. *Multilevel Governance*

Horizontal linkages among organizations of particular types will produce a multilevel governance system.[118] Transnational organizations will operate in coordinated and collaborative fashion, as networks or even as integrated institutions, at different levels of authority (for example, province, city, industry or firm) and different physical scales. Vertical relationships will promote coordination across levels.

Hooghe and Marks contrast two broad types of multilevel governance.[119] Type I, exemplified by federal systems, includes few levels; institutions at each level have multiple functions, and only one institution is relevant at any scale. Type II, exemplified by current transnational governance, includes many functionally differentiated institutions operating at fine gradations of scale, even at the same scales. The two types have contrasting benefits: Type I systems are clear, provide economies of scale, and are stable and durable; Type II systems are highly flexible and allocate tasks to specialized institutions, but are fluid and impermanent. A strengthened TRCCC could be structured to combine the best of both systems: Type 1½ multilevel governance.

The literature on multilevel governance highlights its ability to match the scale of governance with that of externalities, public goods and other policy problems, and with the preferences of distinct populations.[120] In the present context, however, multilevel governance has additional virtues. It facilitates *bypassing* states by enabling linked transnational institutions and networks to penetrate the state at multiple levels, directly engaging and targeting societal and sub-state actors. In addition, it facilitates *managing* states by enabling linked transnational institutions and networks to apply political and normative pressures from multiple levels and directions. Cooperation with IGO officials and organs would add an additional level, expanding both impacts.

4.3. *Relations with the Climate Regime*

An enhanced TRCCC would function best as a complement to the inter-state climate regime and other relevant international institutions and agreements. Most transnational climate organizations already play complementary roles. Transnational standards for offsets, emissions accounting, REDD projects[121] and similar matters are consistent with international principles and rules, although often more stringent; some

118 L. Hooghe & G. Marks, 'Unraveling the Central State, But How? Types of Multi-Level Governance' (2003) 97(2) *American Political Science Review*, pp. 233–43; Peel, Godden & Keenan, n. 40 above.

119 Hooghe & Marks, ibid., at pp. 236–9.

120 Ibid.

121 'REDD' refers to projects for 'Reducing Emissions from Deforestation and Forest Degradation'. 'REDD+' projects also address sustainable forest management. See: http://www.unep.org/climatechange/reddplus/Introduction/tabid/29525/Default.aspx. Transnational organizations such as the CCBA have developed specific standards for national programmes and projects: see, e.g., http://www.redd-standards.org/index.php?option=com_content&view=article&id=91&Itemid=136.

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explicitly recognize international rules. But transnational standards target non-state actors rather than states; they are 'force multipliers' for international regimes, extending their rules and policies into the private sector and enhancing national implementation. Transnational operational activities are similarly complementary. Voluntary carbon market registries parallel CDM procedures in the private sector; organizations managing renewable energy projects aid implementation of national commitments.

Transnational governance can also facilitate inter-state action. Transnational demonstration effects reveal the feasibility, benefits and appropriateness of rules, programmes or activities. Transnational norms and programmes modify the political calculations of interest groups within states, converting participants from potential opponents to supporters. Finally, transnational standards and programmes provide focal points that facilitate inter-state agreement.

Conversely, the 'shadow of hierarchy' is an essential driver of non-state action.[122] Business enterprises, in particular, often lack incentives for meaningful voluntary regulation unless they believe 'the state' will otherwise intervene. Advances in international climate negotiations thus increase the impact of transnational standards. Such advances also provide incentives for inter-institutional coordination: by aligning standards and programmes with expected public action, transnational institutions can reduce future switching costs for participants. Here, too, predictable state action provides focal points that facilitate transnational coordination.

Ideally, international institutions would integrate transnational organizations into an integrated global governance system. To date, however, international institutions have failed to recognize the value of transnational governance.[123] Major environmental conventions acknowledge the role of non-state actors in policy formulation and implementation, but make few provisions for transnational action. Decisions under the UNFCCC and Kyoto Protocol endorse stakeholder involvement, but mainly in areas such as finance and technology. The Durban Platform simply envisions an inter-state process leading to an inter-state instrument. Sustainable development institutions are more receptive, although the Rio+20 decisions on the institutional framework remain highly state-centric. The 2002 World Summit on Sustainable Development promoted 'Type II partnerships' to implement sustainability norms.[124] However, many see these as having little impact: eligibility criteria were lax; there was no effective supervision or support and little coordination among partnerships. Rio+20 turned to 'voluntary commitments',[125] but criteria, supervision, support and coordination remain weak.

Transnational institutions could also partially substitute for inter-state action. Some substitution occurs naturally: for example, while transnational standards complement

122 T. Börzel & T. Risse, 'Governance Without a State: Can It Work?' (2010) 4(2) *Regulation & Governance*, pp. 113–34; T. Büthe, 'Private Regulation in the Global Economy: A (P)review' (2010) 12(3) *Business and Politics*, Article 2.

123 Abbott, n. 24 above.

124 L.B. Andonova & M. Levy, 'Franchising Global Governance: Making Sense of the Johannesburg Type II Partnerships', in O.S. Stokke & O.B. Thommessen (eds), *Yearbook of International Cooperation on Environment and Development* (Earthscan, 2003), pp. 19–31. The UN maintains a registry of partnerships, available at: http://sustainabledevelopment.un.org/index.php?menu=1500.

125 http://sustainabledevelopment.un.org/aboutcommitments.html.

https://doi.org/10.1017/S2047102513000502 Published online by Cambridge University Press

the Kyoto Protocol within states that have ratified it, they (partially) substitute for Kyoto in those that have not. Many transnational standards both complement and substitute: CCBA standards are consistent with CDM rules in areas such as mitigation and additionality, but also address social and biodiversity issues that the CDM largely ignores.

Transnational institutions help to fill governance gaps left when international negotiations fail or produce inadequate results. For example, the FSC adopted sustainable forest management standards after states failed to adopt binding forest rules at Rio in 1992. The World Resources Institute[126] and World Business Council on Sustainable Development jointly adopted the GHGP measurement standard when UNEP failed to produce a similar tool.[127] VCS recently adopted a standard for 'jurisdictional REDD' because international rules were lagging behind a recognized need.[128]

These actions can also be seen as complements: they generate and test governance innovations, serving as reservoirs of ideas and knowledge on which international institutions can later draw.[129] Unlike reservoirs, however, transnational institutions are active agents. They engage in advocacy and create demonstration effects that generate political pressure. In a real sense, transnational institutions provide intellectual and political leadership for inter-state negotiations.

5. ASSESSING THE POTENTIAL OF THE TRANSNATIONAL REGIME COMPLEX

An enhanced TRCCC would have significant benefits for climate governance, although it would be no panacea. Many transnational institutions have significant weaknesses, and transnational governance faces difficult challenges. Inter-institutional cooperation also faces serious barriers. Yet these are not reasons to abandon efforts to strengthen the transnational regime complex, merely to moderate expectations. Efforts to strengthen the regime complex would also help transnational organizations to overcome some of the problems they face, as discussed below.

5.1. *The Impact of Transnational Institutions*

A number of transnational institutions appear to be substantial on important metrics. Their actual impact, however, is uncertain. For example, Caring for Climate is an initiative of the UN Global Compact, which UNEP and the UNFCCC now co-manage. Nearly 350 companies from 65 countries, many large and prominent, have endorsed its principles.[130] But those principles are very general and not subject to auditing or enforcement. Similarly, 40 leading insurance companies have adopted the Climate

126 http://www.wri.org.

127 Green, n. 92 above, at p. 14.

128 VCS, 'Groundbreaking Jurisdictional REDD+ Requirements Released', 4 Oct. 2012, available at: http://v-c-s.org/news-events/news/groundbreaking-jurisdictional-redd-requirements-released.

129 J.F. Green & G. Auld, 'Unbundling the Regime Complex: The Effects of Private Authority', Working Paper, 24 July 2012, available at: http://ssrn.com/abstract=2116296.

130 http://caringforclimate.org/about/list-of-signatories.

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Wise principles, which include supporting climate awareness among customers, incorporating climate into investment strategies and public reporting.[131] But concrete effects are difficult to identify. The GHGP is the most widely used corporate-level emissions reporting standard: in 2007, nearly two-thirds of Global 500 companies issuing sustainability or social responsibility reports utilized the GHGP standard.[132] Yet the practical impact of those reports is unclear. The same can be said of the GRI reporting standard, used by nearly 5,500 organizations.[133] ICLEI has over 1,000 member governments,[134] yet it imposes no mandates and the impact of its tools and information exchanges is difficult to judge.

Other transnational climate institutions produce benefits that are real but modest; they can be viewed as glasses half full or half empty. For example:

- VCS has registered over 1,000 offset projects. It has issued verified credits for over 800 of these, representing a total of 120 million tonnes of carbon dioxide (CO_2) equivalent emissions reductions;[135] 43 million tonnes were contracted in 2012 alone.[136]
- The CCBA standard for offset projects addresses social and biodiversity impacts of forestry and agriculture projects; it supplements mitigation standards such as those under VCS. The standard is rigorous and includes independent audit requirements. CCBA has validated 70 projects in 34 countries, representing 40 million tonnes of CO_2 reductions annually. Additional projects are under review.[137] Other organizations are developing standards that address additional social aspects of offset projects.[138]
- REEEP has financed 180 clean energy projects in 58 developing countries, with some functioning as demonstration projects. It has disbursed over US$28 million and attracted twice that amount in co-financing.[139]
- Three hundred cities from around the world have registered mitigation/adaptation plans and/or climate commitments on the Carbon*n* Cities Climate Registry.[140]
- The Carbon Disclosure Project gathers information on the carbon emissions and mitigation programmes of major enterprises, based on annual questionnaires subject to verification standards, and distributes this information to over 700 institutional investors.[141]
- The Global Gas Flaring Reduction Partnership, led by the World Bank, brings together nearly 20 countries that produce natural gas, leading global oil

131 http://www.climatewise.org.uk/about.

132 http://www.ghgprotocol.org/about-ghgp.

133 http://database.globalreporting.org.

134 http://www.iclei.org/get-involved/join-iclei.html.

135 http://www.vcsprojectdatabase.org.

136 M. Peters-Stanley & D. Yin, 'Maneuvering the Mosaic: State of the Voluntary Carbon Markets 2013', Forest Trends, June 2013, available at: http://www.forest-trends.org/publication_details.php?publicationID53898.

137 https://s3.amazonaws.com/CCBA/CCB_Standards_FactSheet.pdf.

138 Peters-Stanley & Yin, n. 136 above, at p. 35.

139 http://www.reeep.org/reeep-brief-overview.

140 http://citiesclimateregistry.org/home.

141 https://www.cdproject.net/en-US/Programmes/Pages/CDP-Investors.aspx.

https://doi.org/10.1017/S2047102513000502 Published online by Cambridge University Press

companies and other IGOs. Most members have pledged to reduce flaring and develop alternatives that benefit the poor; members have in fact achieved significant reductions.[142]

Again, the achievements of these organizations may be small compared with the scale of the problem, but they are achievements nonetheless, especially for young institutions.

The same balanced assessment must apply to the voluntary carbon market. While the voluntary market is substantial, it is much smaller than 'compliance' markets such as the EU ETS and the CDM. But both of those schemes have undergone major recent upheavals, as a result of excess credits and the end of the first Kyoto Protocol commitment period respectively, leading carbon prices to collapse.[143] The voluntary market, in contrast, has been relatively stable: volumes in 2012 increased somewhat from 2011, although remaining below all-time highs, while prices decreased only moderately.[144]

Finally, some transnational climate institutions have limited impact by any measure. For example, SocialCarbon, established in Brazil over a decade ago, only certified its first offset project outside that country in 2011.[145] The Climate Fix standard for climate forestation projects has been used for only 11 projects.[146]

5.2. *Challenges for Transnational Governance*

The modest scale and impact of many transnational climate institutions reflect the challenges they face. Many of these stem from the voluntary nature of transnational governance. Regulatory standards schemes, for example, must attract voluntary adherents from business and other targets of regulation. To do so, they must offer benefits, such as enhanced reputation, improved access to consumers, lower transaction costs or avoidance of mandatory regulation. Similarly, the voluntary carbon market depends on buyers motivated by reputation, industry leadership, potential regulation or climate risks to suppliers, as well as environmental values.[147] Most transnational schemes similarly depend for financing on foundations and private donations, as well as fees from parties receiving certification. As long as the incentives for voluntary action are limited, the scalability of transnational governance will be constrained.[148]

142 http://tiny.cc/GGFRP.

143 World Bank, 'State and Trends of the Carbon Market 2012', 30 May 2012, available at: http://tiny.cc/carbonmarket2012. New carbon trading programmes in, e.g., California and Australia, should increase demand for compliance credits.

144 Offsets covering 101 million CO_2 equivalent tons were contracted in 2012, increasing 4% year-over-year; total market value declined by 11% to $523 million: Peters-Stanley & Yin, n. 136 above.

145 http://www.southpolecarbon.com/_downloads/PR110705_354SocialCarbon.pdf.

146 http://www.carbonfix.info/Project.html?PHPSESSID=4g0kp5isbpd4d9i0ufl4vij957. Carbon Fix was acquired by the Gold Standard in 2012.

147 Ibid.

148 T. Büthe, 'Global Private Politics: A Research Agenda' (2010) 12(3) *Business and Politics*, Article 12; Green, n. 92 above.

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Consumer and public demand are significant limiting factors. Consumers, for example, must be educated as to the nature of a problem (such as carbon emissions embedded in products) and the mechanism designed to address it (such as a carbon label); they must also be stimulated to choose labelled products, even at higher prices.[149] Consumers may be confused by multiple issues, institutions and labels, and easily deceived by self-serving programmes.[150]

A second contributing factor is the make-up of transnational climate institutions. Many are managed by homogeneous sets of actors, such as environmental NGOs or business enterprises.[151] Yet single-actor institutions have characteristic weaknesses. Business schemes, for example, may possess financial resources and management expertise, but are often relatively undemanding; NGO schemes typically are more stringent, but are viewed with suspicion by targets, thus limiting uptake.[152]

Finally, states may resist transnational governance. Even voluntary norms addressing private actors can reduce state control of domestic economic activity or be perceived as invading sovereignty; even governments generally favourable to environmental action sometimes oppose them.[153] The problem is worse in authoritarian states, including China, where civil society is tightly controlled. There, transnational institutions may be unable to operate at all, may be isolated from local society, or coopted by governmental bodies.[154] Many developing countries do not perceive transnational institutions as providing sufficient benefits to overcome antipathy to interventions from abroad. As the regime complex becomes stronger, state resistance may well increase.

Institutional linkages and cooperation could, however, help transnational organizations to overcome some of these challenges. I consider several potential benefits in the remainder of this subsection.

Information sharing

Information sharing and learning are core components of polycentric ordering.[155] Transnational governance is evolving rapidly; most regulatory standards schemes have

149 NGOs and other norm entrepreneurs frequently perform these tasks.

150 Büthe, n. 148 above; Büthe, n. 122 above. Some observers see labelling programmes as inappropriately extending market structures: e.g., D. Fuchs & A. Kalfaggiani, 'The Causes and Consequences of Private Food Governance' (2010) 12 *Business and Politics*, Article 5.

151 Abbott, n. 21 above.

152 Abbott & Snidal, n. 87 above.

153 See, e.g., L.H. Gulbrandsen, *Transnational Environmental Governance: The Emergence and Effects of the Certification of Forests and Fisheries* (Edward Elgar, 2010), pp. 127–8 (Norwegian resistance to the Marine Stewardship Council).

154 For recent examples from China, see S. Chan, 'Partnerships for Sustainable Development: Global Diffusion and Local Adaptation', Institute for Environmental Studies, Newsletter No. 2, June 2013, available at: http://www.ivm.vu.nl/en/news-and-agenda/IVM-Newsletter/latest-issue-newsletter/Environmental-Policy-Analysis/index.asp.

155 Galaz, Crona, Österblom, Olsson & Folke, n. 106 above.

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been created since the 1980s,[156] climate schemes even more recently.[157] They can rightly be seen as experiments.[158] Information exchange and collaborative knowledge production are important for organizational learning. In addition, transnational institutions exhibit vast capacity differentials. Information sharing can increase the capacities of weaker institutions, and thus of the regime complex as a whole. Information sharing can also lead to adjustments that limit the adverse effects of fragmentation, including inefficient duplication and high costs for targets and consumers.

Bypassing states

Cooperation would benefit standards organizations throughout the regulatory process.[159] Coordination allows organizations to adopt consistent and mutually supportive standards, minimizing transaction costs, gaps and overlaps. Collaboration can improve implementation through support for targets; it can similarly improve monitoring for both compliance and learning. Coordination also helps organizations to monitor one another, helping to protect against 'sham' schemes and capture. Finally, coordination enhances material and reputational incentives for adherence to voluntary standards, by promoting common, widely recognized labels and facilitating public communication and peer pressure. Information dissemination to public audiences facilitates inter-scheme comparisons by consumers, NGOs and other interested groups, driving a race to the top.[160] Collaboration increases the potential of demonstration projects, providing economies of scale.

Managing states

Managing states turns centrally on information. As Keck and Sikkink observe, advocates use shared information, knowledge and ideas to change the contexts in which states make policy – for example, through cognitive framing, the provision of politically useful information, and 'symbolic politics' (dramatizing an issue for public audiences).[161] More concretely, advocacy organizations can heighten their influence by sharing information on strategies and tactics and coordinating campaigns. Demonstration effects similarly turn on information, in planning, execution, collaboration and dissemination.

156 Abbott & Snidal, n. 87 above.

157 Most of the transnational organizations identified in Bulkeley et al. (n. 54 above) and in Hoffman (n. 82 above) were created since 2001–02. Most voluntary carbon market organizations were established even more recently: Green, n. 92 above.

158 Hoffman, n. 82 above.

159 Abbott & Snidal, n. 87 above.

160 C. Overdevest, 'Comparing Forest Certification Schemes: The Case of Ratcheting Standards in the Forest Sector' (2010) 8(1) *Socio-Economic Review*, pp. 47–76.

161 Keck & Sikkink, n. 25 above, at p.16.

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The literature on transnational advocacy networks highlights the importance of linkages.[162] When NGOs face recalcitrant governments in areas such as human rights or environmental protection, transnational linkages allow them to reach out to allies abroad. In what Keck and Sikkink call the 'boomerang' approach, organizational allies respond by exerting material and normative leverage on governments. When allies operate at multiple levels, as in a multilevel governance system, they can exert leverage at multiple points. Allies also provide material and ideational resources, thus influencing domestic politics. Diverse organizations, not only NGOs, can utilize boomerang processes.

Vertical linkages

Relationships between institutions at different levels can increase effectiveness and legitimacy. IGOs and other highly legitimate organizations can 'steer' lower-level and less established institutions.[163] Such steering can help to keep transnational standards consistent with publicly approved norms.[164] It can also encourage 'good governance' within transnational institutions, promoting principles such as transparency, public consultation and the incorporation of Southern voices. Finally, steering can promote inter-institutional coordination, offsetting organizational incentives.

Vertical linkages also allow for the transmission of information, concerns and ideas from individuals, communities and organizations 'on the ground' to higher-level institutions. Upward flows improve the information available to decision-makers, while enhancing voice for marginalized groups. In polycentric governance, even global problems such as climate change must be addressed at multiple scales, including small local scales: small-scale communities have important advantages in collective action, and take actions appropriate to their social and ecological contexts.[165] Vertical information flows allow higher-level institutions to disseminate the results of replicable local actions and scale up widely applicable local solutions.

5.3. *Barriers to Institutional Collaboration*

As ordering moves from information exchange and informal coordination (levels 1 and 2) to collaboration on standards and projects (levels 3 and 4), actors and organizations must invest significant resources in relationship building.[166] Higher ordering also involves reciprocal commitments, which expose organizations to risks of non-performance and require mutual trust. An articulated TRCCC organized on the basis of subsidiarity should moderate these requirements. Nonetheless, while

162 Ibid., at pp. 12–3, 14–6.

163 Abbott, n. 24 above; Abbott & Snidal, n. 116 above.

164 Most private climate standards recognize or hew closely to public rules, to enhance legitimacy and minimize switching costs for adherents.

165 Ostrom, n. 35 above; E. Ostrom, 'Beyond Markets and States: Polycentric Governance of Complex Economic Systems' (2010) 100(3) *American Economic Review*, pp. 641–72.

166 Galaz, Crona, Österblom, Olsson & Folke, n. 106 above.

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committed organizations may willingly make the necessary commitments, others may choose not to participate. Even among committed actors, deep collaboration may require costly 'confidence building measures'.

In addition, like all institutions, transnational institutions pursue two sets of goals, which they must constantly balance. Firstly, institutions pursue *substantive goals*, here relating to climate change. In general, as just discussed, cooperation helps institutions to achieve their substantive goals. However, institutions are composed of actors with varied interests and values; even organizations with similar overall goals may disagree over priorities, strategies and activities.[167] In particular, climate institutions based in business and in civil society are unlikely to see eye-to-eye, thus making cooperation challenging. Secondly, institutions pursue *organizational goals*, seeking to ensure their own continuance and to increase their resources and influence. Transnational institutions, for example, compete for adherents, resources and reputation, potentially producing pathological effects such as institutional proliferation, overlap and a focus on high-profile issues.

6. OPERATIONALIZING THE TRANSNATIONAL REGIME COMPLEX

To overcome the barriers to inter-institutional cooperation and enhance the impact of transnational institutions, leading organizations need a strategy and a toolbox of techniques. The first subsection below calls for 'regime entrepreneurs' to take the lead in strengthening the regime complex; the second proposes the strategy of orchestration; and the third suggests incentives and tools of influence that regime entrepreneurs or orchestrators can deploy to strengthen institutional linkages and induce non-state actors to accept transnational norms and programmes.

6.1. *Regime Entrepreneurs*

Given the barriers to institutional cooperation, self-organization is unlikely to produce a more highly ordered TRCCC. Yet, in the polycentric setting of transnational governance, higher levels of ordering cannot be externally imposed; they must be internally generated. 'Regime entrepreneurs' must take the lead in building and maintaining inter-institutional linkages.

Regime entrepreneurs require many skills of the 'norm entrepreneur'[168] and 'policy entrepreneur'.[169] But regime entrepreneurs must also build and manage institutions and institutional relationships: helping to create new organizations, encouraging coordination and collaboration, providing support, solving problems and resolving

[167] This helps to explain why international and transnational climate institutions are so numerous and diverse: Keohane & Victor, n. 37 above.

[168] C.R. Sunstein, 'Social Norms and Social Roles' (1996) 96 *Columbia Law Review*, pp. 903–68; M. Finnemore & K. Sikkink, 'International Norm Dynamics and Political Change' (1998) 52(4) *International Organization*, pp. 887–917.

[169] N.C. Roberts & P.J. King, 'Policy Entrepreneurs: Their Activity Structure and Function in the Policy Process' (1991) 1(2) *Journal of Public Administration Research and Theory*, pp. 147–75.

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conflicts. Entrepreneurs can operate successfully across levels: for example, an influential IGO might support private offset schemes and encourage them to coordinate standards. In polycentric ordering, however, entrepreneurship is more often horizontal: committed, capable and influential organizations engage with institutions of the same type.[170]

Some potential regime entrepreneurs can be easily identified:

- A leading organization of cities, such as the C40 Cities Climate Leadership Group, or the mayor of a major city with an international profile, could take the lead in building relationships among the several associations of sub-national governments that address climate issues, seeking to harmonize and strengthen their commitments and standards and to enhance learning, advocacy and other joint activities. The entrepreneur would also recruit additional participants, increasing the network's impact.
- A leading private standards scheme, such as the FSC in forest management and VCS or the Gold Standard[171] in carbon offsets, could take the lead in aligning overlapping standards within an issue area and strengthening them over time. Alignment could in theory be achieved through a new umbrella organization or through merger.[172] More realistically, it would be achieved through coordination on standards and collaboration on certification, monitoring and labelling.
- Alternatively, a cross-sectoral association of leading standards schemes, akin to the ISEAL Alliance[173] – which already operates as a regime entrepreneur[174] – could promote coordination, high standards and sound procedures among climate-oriented schemes operating in multiple issue areas, from forest management to emissions reporting.
- IGO officials – in the UNEP Secretariat, for example – could take the lead in creating vertical linkages. UNEP has a mandate for coordination, and has long collaborated actively with business and other private organizations.[175] It could work to ensure that transnational climate standards are consistent with global public norms and policies, and that lessons from transnational programmes flow into international deliberations. It could also encourage standards schemes to coordinate, support weaker institutions and promote new ones where gaps exist. UNEP could also promote an expanded role for transnational institutions in international governance.

To be sure, willing entrepreneurs with appropriate mandates and sufficient resources do not always appear when needed. Advocates for climate action must therefore be alert to the need for effective regime entrepreneurs, actively identify appropriate organizations and persuade them to step forward.

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170 Galaz, Crona, Österblom, Olsson & Folke, n. 106 above.

171 http://www.cdmgoldstandard.org.

172 For example, the Gold Standard acquired the standards organization CarbonFix in 2012.

173 http://www.isealalliance.org.

174 A. Loconto & E. Fouilleux, 'Politics of Private Regulation: ISEAL and the Shaping of Transnational Sustainability Governance' (2013 forthcoming) *Regulation & Governance*.

175 Abbott & Snidal, n. 116 above.

https://doi.org/10.1017/S2047102513000502 Published online by Cambridge University Press

6.2. *Orchestration: a Strategy for Regime Entrepreneurs*

Regime entrepreneurs need a feasible and effective strategy for building and managing institutional relationships. My own work (with Snidal and others) proposes the strategy of 'orchestration' for managing assemblages of institutions without hierarchical authority.[176] In orchestration, an entrepreneur with significant authority, legitimacy and/or resources – like those identified above – acts as 'orchestrator', enlisting the cooperation of other organizations within its own cohort and at other levels of governance, and steering their structure, activities and relationships.[177] Lacking hierarchical authority, the orchestrator utilizes incentives and soft tools of influence rather than mandatory controls. Orchestration is the most feasible strategy in the polycentric setting of transnational climate governance.[178]

An orchestrator influences institutions throughout their life cycles. Firstly, by using the convening power its authority and legitimacy provide, it catalyzes the establishment of new organizations. Where appropriate institutions exist, it 'enrols' them in cooperative relationships.[179] Secondly, it provides material and ideational support for institutions, strengthening their capacity. Thirdly, through incentives and other soft forms of influence, it steers organizations to collaborate, further global norms and adopt sound governance practices. These three facets of orchestration address some of the major challenges facing the TRCCC.

Because orchestration relies on soft modes of influence, it fits well with relatively loose forms of ordering. Orchestrators do not directly establish new organizations, but catalyze their formation. They do not control other organizations, but enrol them voluntarily. The strategy requires that the goals of orchestrator and enlisted organizations be aligned, but it can help to overcome disagreements over priorities and tactics.

6.3. *Tools of Influence for Regime Entrepreneurs*

Regime entrepreneurs or orchestrators must perform two related functions. Firstly, they must create or enrol constituent organizations, develop linkages among them, support them and steer their actions. Secondly, entrepreneurs must induce business enterprises and other non-state targets to adhere to and participate in voluntary

176 Ibid.; Abbott, n. 21 above; Abbott & Snidal, n. 26 above; cf. Abbott, Genschel, Snidal & Zangl, n. 23 above.

177 Orchestration theory hypothesizes that successful orchestrators are 'focal', with an accepted leadership position in an issue area (Abbott, Genschel, Snidal & Zangl, n. 23 above) and strong connections with other institutions (Hale & Roger, n. 28 above).

178 In orchestration theory, orchestrators engage intermediaries to influence the behaviour of target actors: Abbott, Genschel, Snidal & Zangl, n. 23 above. Here I de-emphasize targets and focus on the role of orchestrators in supporting and coordinating other organizations, many of which will operate as intermediaries.

179 On 'enrolling', see B. Latour, 'The Powers of Association', in J. Law (ed), *Power, Action and Belief: A New Sociology of Knowledge?* (Routledge & Kegan Paul, 1986), pp. 264–80; J. Braithwaite & P. Drahos, *Global Business Regulation* (Cambridge University Press, 2000); J. Black, 'Enrolling Actors in Regulatory Systems: Examples from UK Financial Services Regulation' (2003 Spring) *Public Law*, pp. 63–91.

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transnational standards and programmes. Although transnational regime entrepreneurs, and even IGOs, lack authority for mandatory controls, they can deploy a variety of incentives and tools of influence. Stewart, Oppenheimer and Rudyk emphasize arrangements that provide non-climate incentives (such as reducing energy costs) while generating incidental climate benefits.[180] While such arrangements are important, orchestration encompasses a wider range of incentives and tools, some related directly to climate performance.

Advancing institutional missions

Many constituent organizations of the TRCCC have mandates or missions that call for action on climate change and related issues. The list includes environmental NGOs, environmental public–private partnerships and some sub-national governments, as well as environmental IGOs. It even includes many business organizations structured around climate or social and environmental responsibility (for example, VCS and the WBCSD). To be sure, organizational interests may still produce pathological behaviour,[181] and private sector organizations will still pursue win-win solutions and market-oriented approaches.[182] Yet the leaders and staff of these institutions retain significant commitments to their environmental missions.[183]

For committed actors, opportunities to advance their missions more effectively provide significant incentives for participation and cooperation. As described above, both horizontal coordination and collaboration and vertical linkages increase the effectiveness of transnational institutions in many ways. Regime entrepreneurs must maximize these benefits and communicate them to potential participants as they work to strengthen the regime complex.

Persuasion

Regime entrepreneurs can use persuasion to promote cooperation among institutions uncertain of its benefits and to increase the uptake of voluntary standards and programmes. In both cases, persuasion will frequently be interest-based: entrepreneurs provide information, demonstration effects and learning opportunities that reveal the benefits of institutional coordination and collaboration. Peer organizations with relevant experiences can be particularly persuasive; arrangements for peer interaction and review are thus valuable tools. Information, demonstration effects and learning opportunities similarly reveal to targets the possibilities for participation in voluntary

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180 Stewart, Oppenheimer & Rudyk, 'Reaching International Cooperation', n. 42 above.

181 M. Barnett & M. Finnemore, *Rules for the World: International Organizations in Global Politics* (Cornell University Press, 2004).

182 R. Falkner, 'Private Environmental Governance and International Relations: Exploring the Links' (2003) 3(2) *Global Environmental Politics*, pp. 72–87; D. Levy & P. Newell, 'Business Strategy and International Environmental Governance: Toward a Neo-Gramscian Synthesis' (2002) 2(4) *Global Environmental Politics*, pp. 84–100.

183 Biermann & Siebenhüner, n. 66 above.

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programmes to produce profits, reputational gains and other benefits. Technical experts can be persuasive on relevant scientific issues.[184]

Regime entrepreneurs may also engage in normative persuasion, asserting the appropriateness or otherwise of particular actions and conveying the normative expectations of the community. Normative persuasion generally seeks initially to modify the discourses available to (resistant) target actors; ultimately it seeks to modify their preferences and perceptions of identity. Normative persuasion is helpful in promoting inter-institutional cooperation, but it is essential in persuading target actors to accept voluntary standards. Because normative assertions are rarely free of resistance and conflict, persuasion may also involve 'harder' tactics, such as exercising material leverage, stimulating external scrutiny and mobilizing shame.[185]

Support for institutions

Support is a central technique of orchestration. It creates incentives for cooperation even as it strengthens constituent organizations. Regime entrepreneurs may provide material support, such as financial contributions or administrative assistance. They may also provide ideational support, including information, guidance and endorsement for organizations that meet substantive or governance criteria. Endorsement by a respected orchestrator provides a reputational incentive, initiates a 'race to the top' among potential endorsees, and strengthens endorsed organizations.

Entrepreneurs can direct support horizontally to peer organizations, and vertically to organizations at different levels of governance. Private foundations and other funding organizations, as well as IGOs, can provide significant vertical support. In addition to building capacity, support is an instrument of steering, providing incentives for institutional cooperation, good internal governance and consistency with publicly accepted norms. Orchestrators can either condition support on desired activities, or target support directly to those activities.

Engaging actors at risk

Many actors face risks from climate change. The US Securities and Exchange Commission recently identified a range of risks to business in calling for climate-related company disclosures.[186] These include risks from potential regulation and risks to customers from price increases, risks from changes in consumer demand and other market developments, and physical risks to facilities and personnel, including those in supply chains. More recently, UNEP identified a similar set of business risks along

184 P. Haas, 'Introduction: Epistemic Communities and International Policy Coordination' (1992) 46(1) *International Organization*, pp. 1–35.

185 Keck & Sikkink, n. 25 above; T. Risse, S.C. Ropp & K. Sikkink, *The Power of Human Rights: International Norms and Domestic Change* (Cambridge University Press, 1999).

186 Securities and Exchange Commission, 'Commission Guidance Regarding Disclosure Related to Climate Change' (2010) 75(25) *Federal Register*, at p. 6290.

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with a number of opportunities.[187] Alone, these risks provide some incentive for action on climate change, including adherence to transnational standards. Regime entrepreneurs can strengthen those incentives by highlighting risks and providing opportunities to address them.

Another way to strengthen incentives is to engage influential third parties that face climate risks, especially insurers and institutional investors. Such organizations possess strong monitoring capacity as well as leverage over firms and other targets. Several transnational institutions now engage investors and insurers to influence the behaviour of firms with which they (might) do business; these include Climate Wise, 'the global insurance industry's leadership group to drive action on climate change risk';[188] for European investors, the Institutional Investors Group on Climate Change;[189] and the Investor Network on Climate Risk[190] (coordinated by the NGO CERES), as well as PRI and the Principles for Sustainable Insurance,[191] both sponsored by UNEP. Regime entrepreneurs could increase the impact of these groups by supporting them and promoting coordination among them.

Material and reputational incentives

Stewart, Oppenheimer and Rudyk demonstrate that 'clubs' of public and private actors can realize material benefits through actions that produce incidental climate benefits. Orchestrators can create similar incentives by directly tying varied material and reputational benefits to climate action.

Financial programmes show particular promise. Institutions that finance firms and other non-state actors have unique levels of influence that can be exercised to promote climate-friendly actions. For example, the International Finance Corporation (IFC)[192] finances private firms in developing countries. Firms that receive IFC financing must accept its Performance Standards, which require environmental management systems, environmental and social impact assessments, and public reporting.[193] The World Bank's Climate Investment Funds,[194] the Global Environmental Facility (GEF)[195] and other institutions also finance projects that directly or indirectly benefit non-state actors. These institutions already apply environmental and social safeguards, but they could be strengthened, more effectively implemented and better coordinated. Private foundations, major donors and commercial financing organizations can be encouraged to apply similar standards, as the Equator Principles, PRI and other transnational schemes do.

187 *GEO-5 for Business: Impacts of a Changing Environment on the Corporate Sector* (UNEP, 2013), available at: http://www.unep.org/geo/geo5.asp.

188 http://www.climatewise.org.uk.

189 http://www.iigcc.org.

190 http://www.ceres.org/investor-network/incr.

191 http://www.unepfi.org/psi.

192 http://www.ifc.org/wps/wcm/connect/corp_ext_content/ifc_external_corporate_site/home.

193 http://www1.ifc.org/wps/wcm/connect/Topics_Ext_Content/IFC_External_Corporate_Site/IFC+Sustainability/Sustainability+Framework.

194 https://www.climateinvestmentfunds.org/cif/home.

195 http://www.thegef.org/gef.

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Certification and labelling programmes also tie material and reputational benefits to climate performance. A certification scheme like FSC allows firms to communicate to consumers and buyers along the supply chain that they, and frequently their suppliers, comply with stated standards. Carbon offset schemes such as VCS, CCBA and the Gold Standard do the same for voluntary carbon markets. To the extent that potential consumers base purchasing decisions (including price) on such information – or can be persuaded to do so – certification programmes create positive market and reputational incentives.[196] Coordination among certification and labelling organizations could ameliorate many of the limitations they face.

Orchestrators could also deploy other reputational incentives. Regime entrepreneurs could develop coordinated mechanisms for reputational sanctioning: singling out and endorsing institutions, firms and other actors that perform well and publicizing those that perform poorly. While Stewart, Oppenheimer and Rudyk focus on firms that are 'levelers of the playing field',[197] this complementary strategy would engage firms that seek to be leaders, for reputational, material or normative reasons. IGOs have been reluctant to traffic in the reputations of non-state actors,[198] but transnational institutions – especially those based in civil society – are more amenable to, and more skilled at, reputational sanctioning.

7. CONCLUSION

With the Durban Platform in place, inter-state negotiations on climate change are entering an optimistic period. Overall, however, international climate policy-making has proven to be inadequate to the problem, creating a pressing need for governance innovations. This article proposes an approach that is both feasible and promising.

This approach starts from the premise that a loose regime complex of transnational climate institutions already exists; those organizations are formed by diverse private actors and sub-national governments, sometimes in partnership with international organizations and national governments. To enhance the transnational regime complex, regime entrepreneurs should strengthen weaker organizations, promote the formation of new organizations to fill governance gaps, and increase inter-institutional cooperation.

With stronger linkages, networks of transnational institutions could penetrate states at multiple levels, directly engaging sub-state, societal and even governmental actors, and targeting them with voluntary norms backed by social and economic incentives, demonstration projects and other governance activities. Linked transnational institutions could, moreover, mobilize coordinated pressure on governments.

196 Advocates can create negative incentives through mechanisms such as consumer boycotts.

197 Mattli & Woods, n. 76 above, at pp. 35–6.

198 A few have become more active in this area. The UN Global Compact, which has long avoided any suggestion of 'enforcement', now publicly identifies firms that fail to submit timely communications and those expelled for failure to disclose. In addition, its 'differentiation programme' encourages NGOs to assess participants' performance, so that it can single out superior performers: see: http://www.unglobalcompact.org/COP/differentiation_programme.html.

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An enhanced transnational regime complex would function best as a complement to a robust international regime, extending its norms into the private sector and sponsoring parallel programmes. The TRCCC could, however, function independently, providing at least some forward movement on climate issues.

To be sure, a stronger transnational regime complex – like any governance approach – is no panacea. Transnational institutions face serious challenges, especially in regulation, as they depend on voluntary adherence, driven by uncertain consumer and public demand. Efforts by regime entrepreneurs to strengthen linkages, provide support, mobilize public demand and steer transnational organizations would ameliorate some of these limitations, but not all. In addition, inter-institutional cooperation faces significant barriers, resulting from differing actor preferences and organizational interests.

The proper point of comparison, however, is not the perfect, but the actual. So long as inter-state agreements remain weak, an enhanced transnational regime complex can provide a valuable complement. So long as inter-state processes remain inadequate, the transnational regime complex can serve as a partial substitute. It can, moreover, generate political pressures and introduce governance innovations, providing leadership for transnational processes and strengthening global climate governance as a whole.

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