

Exchange Article

A Tale of Two Copenhagens: Carbon Markets and Climate Governance

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Abstract

Assessments of the UN Climate Change Conference in Copenhagen in December 2009 have tended to see it as a 'return to realism' – as the triumph of hard interstate bargaining over institutional or normative development about climate change. This article contests that interpretation by showing how it focuses too closely on the interstate negotiations and neglects the ongoing development of carbon markets as governance practices and systems to deal with climate change. It shows that there remains a strong normative consensus about such markets, and a deepening set of transnational governance practices. These governance practices only partly depend on the interstate negotiations. Thinking about the future of global climate governance needs to start with the complexity of interactions between these transnational governance systems and the interstate negotiations.

Keywords

carbon markets, climate change, transnational governance

During the 2009 Copenhagen climate change negotiations activists strode through the Bella Center festooned in eye-catching costumes, berated the 'Fossils of the Day' for

obstructing progress on a global accord and sought to inform and influence national delegations (at least until long lines, too little room and strident security severely curtailed civil society access). Harried and exhausted negotiators diligently worked long hours over multiple and conflicting versions of negotiating texts that revealed myriad fault lines separating the nations of the world. Dozens of organisations maintained informational booths seeking to publicise their version of climate-friendly activities. Students and academics huddled in small groups trying to make sense of an enormous and unwieldy negotiating process, the most important aspects of which mainly took place behind closed doors. Cameras and microphones were ubiquitous as the media sought both the main storyline of the negotiations and the smaller personal interest stories that would connect the global summit to the lives of people back home. Heads of state swooped in during the final days of the conference seeking a breakthrough compromise, but left with what many consider to be a disappointing Copenhagen Accord that does little to ensure that significant actions will be taken to address climate change.¹ The eyes of the world focused on the events at the Bella Center and many now despair at what they witnessed.

One scant metro stop south of the Bella Center stands the Crowne Plaza Hotel. There, the International Emissions Trading Association held its events during the conference. The pace and feel of the Crowne Plaza was calm and relaxed in contrast to the frenetic atmosphere of the Bella Center. In two medium-sized conference rooms, representatives from various organisations – banks, corporations, carbon traders, NGOs, think tanks, sub-national governments, as well as nation-states – laid out how existing carbon markets function and the plans for developing and scaling them up in an attempt to address climate change *and* make profit. There was no frenzied aura, long lines, demonstrations, oppressive security or media coverage. There was a greater air of cooperation and sense that things were getting done. The eyes of the world were not tightly focused on the Crowne Plaza. Perhaps they should have been.

Copenhagen as the Return of Realism?

In the popular imagination, and supported by a number of academic commentators, the UN climate change conference in Copenhagen has been widely portrayed as a return to *realpolitik*.² Parties engaged in hard bargaining in pursuit of narrow self-interest and

The Copenhagen Accord is a three-page political document that affirms a goal of limiting warming to 2°C above pre-industrial levels; establishes a bottom-up process for industrialised (Annex 1) countries to set their own, non-binding, emissions reduction targets and developing countries (non-Annex 1) to list proposed emissions reduction activities, which could also include emission reduction targets; and calls for the mobilisation of US\$100 bn/year by 2020 to support adaptation and mitigation measures in developing countries. See the Copenhagen Accord as part of United Nations (2009). Decision -/CP.15. Document UNFCCC/CP/2009/CP.15. Available at http://unfccc.int/files/meetings/cop_15/application/ pdf/cop15_cph_auv.pdf, accessed 8 January 2010.

See for example Navroz Dubash, 'Copenhagen: Climate of Mistrust', *Economic and Political Weekly*, 26 December 2009: 8–11; Daniel Bodansky, 'The Copenhagen Conference: A Post-mortem', 12 February 2010, available at SSRN: http://ssrn.com/abstract=1553167, viewed 4 March 2010; Radoslav Dimitrov, 'Inside Copenhagen: The State of Climate Governance', *Global Environmental Politics* 10, no. 2, (2010: 18–24). This assessment is confined to the Copenhagen negotiations – academic analyses of climate

relative power rather than rationally seeking common interests or enacting shared norms of climate protection. Never have international climate negotiations featured so much drama and raw politics. The 'high point' arguably came when President Barack Obama barged into supposedly private strategy meetings of developing states only to be outmanoeuvred by a China that appears not only able to say 'no', but also to be able to force its counterparts to say no (to binding commitments in this case) – and all this without the Premier even showing up. Thus, pundits and scholars attribute the failure of Copenhagen to the US or China (depending on who is doing the analysis), the world's two largest emitters of greenhouse gases, as they jockeyed for position in a master game of strategy that would have made Bismarck proud.³ More subtly, one could say that the stand-off in Copenhagen resulted from the interactions between the strategy of the new US administration, seeking to demonstrate leadership while constrained principally by the need to have a deal which might be ratified by the US Senate, and the way this created opportunities for China to switch its strategy from pursuing investment under the Clean Development Mechanism (as it had under Kyoto) to engaging in hard bargaining as a 'climate great power' as part of a broader strategy to cement its new central place in global politics.⁴ From this perspective, the Copenhagen Accord is testament to how treaty-making is epiphenomenal to the interests of the most powerful actors in the system – interests that are constituted domestically and materially – or worse, just another game of great power politics.

This thesis of retrenched sovereignty is not implausible, but we argue that such an account of Copenhagen and of the state of global climate governance is mistaken, or at least distinctly limited. To be sure, such shifts in state strategies have already shaped and will continue to shape the multilateral treaty-making process, but they are far from the whole story. In particular, this interpretation overemphasises the centrality of the inter-state negotiations and masks the ongoing development of alternative governance arrangements, in particular the 'global carbon market'. While many scholars have noted their rise in recent years, their dominance in climate governance, persistence and complex relationship with multilateral climate governance received little attention either prior to or in the aftermath of Copenhagen. Even as talks in the Bella Center appeared on the verge of collapse, the discussions at the Crowne Plaza displayed remarkable consensus that the future of climate governance will continue to be organised around the construction of a series of markets that commodify both promises not to emit greenhouse gases and rights to emit a certain amount of greenhouse gases. The virtual breakdown of interstate negotiations poses a

politics more generally are rarely couched in realist terms. Analyses of the interstate regime are mostly through institutionalist or constructivist lenses, and a considerable literature is emerging, including by the present authors, on complex patterns of climate governance 'beyond the international regime'.

^{3.} Mark Lynas, 'How do I know China wrecked the Copenhagen deal? I was in the room', *The Guardian*, 22 December 2009, available online at http://www.guardian.co.uk/environment/2009/dec/22/copenhagen-climate-change-mark-lynas, viewed 4 March 2010. The China Beat, 'What exactly happened in Copenhagen?' 4 January 2010, available at http://www.thechinabeat.org/?p=1298, viewed 29 March 2010. It is worth noting perhaps that Hugh Ward argued presciently in 1993 that the essence of interstate climate politics could be understood as a chicken game between the US and China. See Hugh Ward, 'Game Theory and the Politics of the Global Commons', *Journal of Conflict Resolution* 37, no. 2 (1993): 203–35.

Geoffrey Garrett, 'G2 in G20: China, the United States and the World after the Global Financial Crisis', *Global Policy* 1, no. 1 (2010): 29–39.

minimal threat to the dense transnational links organising and governing carbon markets. The precise nature of the Copenhagen Accord and its follow-on (e.g. the reduction targets ultimately agreed upon) will affect these developments, but carbon markets have their own particular dynamic as well that will in turn profoundly influence the direction and effectiveness of any future multilateral treaty-making over global climate change.⁵

The Rise and Rise of Carbon Markets⁶

Carbon markets have become a dominant feature of global climate change governance, both within and outside of the multilateral treaty process, raising questions about the changing nature of power and authority in global environmental governance.⁷ The initial proposals for carbon markets, promoted heavily by the United States and the OECD in the 1990s, led to the inclusion of three main market mechanisms in the Kyoto Protocol (Joint Implementation, Emissions Trading and the Clean Development Mechanism, or CDM). In each case, the mechanism was justified as a way to achieve emissions reductions costeffectively. Unexpectedly, the CDM emerged as the most important of the three Kyoto mechanisms, and grew much faster than its designers anticipated. It allows industrialised countries to invest in emissions reductions projects in developing countries and count them against their own obligations to reduce greenhouse gases. This is the main example of what are known as carbon offset, or 'baseline and credit' markets – essentially creating credits out of the promises by some actors not to emit greenhouse gases. Voluntary offset markets followed on the heels of the CDM to cater to corporate social responsibility concerns and individuals' desires to offset their own greenhouse gas emissions.8 While the production of offsets to meet emission reduction obligations has come under critical scrutiny, these voluntary and regulated credit markets nevertheless have flourished in the last decade. In 2008, this segment of the carbon market was valued at US\$ 126bn.9

The ascendance of emissions trading as a key tool for addressing climate change has also been rapid, but unexpectedly remains largely outside of the Kyoto agreement, with the exception of some linkages to the CDM. Emissions trading, or 'cap and trade', involves setting an upper limit on greenhouse gas emissions for some target population,

^{5.} Some might view climate governance as symptomatic of a more general crisis of multilateralism. However, we would argue that it is distinctive from most other issue areas in terms of the density and extent of non-state governance projects, many of which pre-date any perceived current crisis and evolved alongside a robust multilateral regime. Thus, the current uncertainty and stresses on multilateral climate governance play out differently than any perceived crises in international trade negotiations or in attempts at global financial governance reform.

^{6.} Note that we leave entirely aside the evaluative question of whether in fact carbon markets actually work to reduce emissions. This is of course a very important question, and clearly the debate around it feeds into the legitimacy dynamics we discuss below. But we do not have space here to take a position on this question.

See also Dauvergne and Lister, 'The Power of Big Box Retail in Global Environmental Governance: Bringing Commodity Chains Back into IR', *Millennium* 39, no. 1 (2010).

Ricardo Bayon, Amanda Hawn and Katherine Hamilton, *Voluntary Carbon Markets* (London: Earthscan, 2007); Adam Bumpus and Diana Liverman, 'Accumulation by Decarbonization and the Governance of Carbon Offsets', *Economic Geography* 84, no. 2 (2008): 127–55.

^{9.} Karan Capoor and Philippe Ambrosi, *State and Trends of the Carbon Market 2009* (Washington DC: World Bank, 2009), 1.

distributing emissions permits among participants and then allowing participants to trade permits amongst themselves to meet their respective commitments. At the insistence of the US, and over the strident objections of the EU, many developing countries and environmentalists, emissions trading was included in the Kyoto Protocol as another tool for states to achieve their emissions reduction commitments cost-effectively.¹⁰ Yet the development of cap and trade has not taken place the way it was originally designed – as a global system for achieving the commitments embedded in the Kyoto Protocol. Stagnation in the multilateral negotiations and the withdrawal of the United States in 2001 led to significant fragmentation in this 'global' market. There are now active cap and trade systems in Europe, North America and the Asia/Pacific region with many other systems under consideration. These systems are organised across a range of political jurisdictions (municipal, sub-national, national and supranational) involving both the public and the private sectors.¹¹ These cap and trade systems have the potential to significantly expand the scope of the global carbon market.¹²

Though it originally objected to the inclusion of 'flexibility mechanisms' in the Kyoto Protocol, the EU has been at the forefront of the developing carbon markets, and its experience is an example of how credit and allowance markets are linked. In allowing companies to buy credits from the CDM to meet their obligations under the EU Emissions Trading System, the EU brought the two types of markets together.¹³ In fact, this linkage between the EU Emissions Trading System and the CDM has become the largest element in a global carbon market worth US\$126bn in 2008.¹⁴

This is but one example of the expansion and linkages evident in the global carbon market. In the area of emissions trading, linkage between distinct trading systems has become a crucial issue as decision-makers seek to create a global market from the bottom up. Such links would allow permits generated in one system to be sold and used for compliance in another system. For example, regional efforts initiated by US states and Canadian provinces (the Regional Greenhouse Gas Initiative [RGGI], which started trading in September 2008, the Western Climate Initiative [WCI], and the Midwest Governors Association [MGA], which will potentially come online in the near future) are actively discussing such a linkage.¹⁵ There will also be significant efforts to expand the credit

^{10.} Steinar Andresen and Shardul Agrawala, 'Leaders, Laggards and Pushers in the Making of the Climate Regime', *Global Environmental Change* 12, no. 1 (2002): 41–51; Anita Engels, 'Market Creation and Transnational Rule Making: The Case of CO₂ Emissions Trading', in eds Marie-Laure Djelic and Kerstin Sahlin-Andersson, *Transnational Governance: Institutional Dynamics of Regulation* (Cambridge: Cambridge University Press, 2006), 329–48; Farhana Yamin, 'Climate Change Negotiations: An Analysis of the Kyoto Protocol', *International Journal of Environmental Pollution* 10, nos 3–4 (1998): 428–53.

Michele Betsill and Matthew Hoffmann, 'The Contours of Cap and Trade: The Evolution of Emissions Trading Systems for Greenhouse Gases,' Unpublished manuscript (2010).

^{12.} Capoor and Ambrosi, State and Trends of the Carbon Market 2009, 14-16.

^{13.} For the fullest account of the EU Emissions Trading System, see Jon Birger Skjærseth and Jørgen Wettestad, EU Emissions Trading: Initiation, Decision-Making and Implementation (Aldershot: Ashgate, 2008). On the CDM and the other Kyoto mechanisms, see Farhana Yamin and Joanna Depledge, The International Climate Change Regime: A Guide to Rules, Institutions and Procedures (Cambridge: Cambridge University Press, 2004).

^{14.} Karan Capoor and Philippe Ambrosi, State and Trends of the Carbon Market 2009.

^{15.} Regional Greenhouse Gas Initiative, Midwestern Greenhouse Gas Reduction Accord and Western Climate Initiative. *Ensuring Offset Quality: Design and Implementation Criteria for a High-Quality*

market and link it to emissions trading as more regulated systems come online. Offsets are seen as the key mechanism for containing costs in cap and trade systems because they provide companies with an alternative means of compliance if permit prices become too expensive, thus providing downward pressure on permit prices. As just one example, one version of the proposed legislation in the United States (known as Waxman-Markey, which passed the House of Representatives in June 2009) includes provisions that allow for the purchase of up to 2 billion tonnes of offset credits annually.¹⁶

To focus on the apparent failure of Copenhagen is to mask the deep consensus that continues around the importance of carbon markets to climate governance. Forged in the Kyoto era, but with roots that date back at least to the early 1990s, this normative consensus continues despite the superficial 'rejection' of Kyoto that Copenhagen represents. Even as the Bella Center descended into chaos, the mood in the Crowne Plaza was strikingly calm as participants recognised that the future of the global carbon market would not rise and fall on the outcome of the multilateral talks.¹⁷ Certainly, a strong agreement with clear emissions reduction targets would send a powerful market signal, but most participants assumed market development and transactions would forge ahead.

This development is not only normative; it also entails a huge range of material practices designed to facilitate market transactions and development. These transnational governance practices will persist despite the Copenhagen result. As markets developed over the last decade, an elaborate set of governance structures has emerged to address concerns around measuring and accounting for emissions and offsets, and tracking the permits and credits across the carbon market. This goes back to the most basic decision that Kyoto created as it went down the market-mechanisms path – the decision to create a 'unit of account' called the tonne of carbon dioxide equivalent, or tCO₂e. This unit has become the basis for almost all existing carbon markets to date,¹⁸ and thus is in effect the unit of 'currency' in carbon markets. The specific commodities in the different markets all refer back to this unit and can thus in principle be exchanged directly with each other.¹⁹

Offset Program (white paper, May 2010), available at: http://www.rggi.org/docs/Three_Regions_ Offsets_Whitepaper_05_17_10.pdf, accessed June 8, 2010.

U.S. Congress. House. American Clean Energy and Security Act of 2009. HR 2454. 111th Congress., 1st session.

^{17.} However, the fragmented nature of the global carbon market does imply that its fortunes now rest in multiple political jurisdictions, multiplying both the technical issues and political debates that will shape market development. The now faltering US federal discussions over cap and trade and its potential impact on the regional, sub-national initiatives is a case in point.

^{18.} The exceptions are the Regional Greenhouse Gas Initiative, which is based on an American, or 'short', ton, and the Alberta (and proposed Canadian federal) system, which is based on an intensity target and thus its credits do not have a fixed measure.

^{19.} The main existing units are: the Assigned Amount Unit (AAU) – Kyoto's basic allocation to states; the Certified Emissions Reduction (CER) – the credit issued under the CDM; the Emissions Reduction Unit (ERU) – the credit issued under Joint Implementation, one of Kyoto's other flexibility mechanisms; the European Union Allowance (EUA) – the allowance in the EU Emissions Trading System; and the Verified Emissions Reduction (VER) – the credit created in the voluntary carbon markets. These are all known by traders through their acronyms to become fungible 'asset classes'.

Registries have been created to track the exchange and holding of credits and allowances in both the regulated and voluntary sectors of the carbon market. Inventory Registries provide protocols for measuring the emissions profiles of entities such as corporations and governments (even personal carbon footprint calculators are now widely available). Two key examples of inventory registries are the EU Emissions Trading System inventory registry for regulated entities, and The Climate Registry, which provides voluntary reporting services in 41 US states and all Canadian Provinces and Territories. Offset *Registries* track and account for the production and consumption of carbon offset credits, by attaching a distinct serial number to each tonne of avoided greenhouse gas emissions. Examples include the American Carbon Registry, Voluntary Carbon Standard and the Climate Action Reserve. Meta Registries like APX and Markit provide the technological infrastructure to make registries work and achieve compatibility across venues and standards. For instance, when a corporation signs up with APX it can track its offset purchases from a variety of offset registries in one place. Some regulated markets combine the role of inventory and offset registries. The EU uses a transaction log, where all exchanges of allowances or credits must be recorded, plus a registry, which records the current holdings of allowances and credits. Registries have become largely a transnational, privately organised affair, the EU experience notwithstanding.²⁰

The carbon market infrastructure is not only concerned with accounting for and tracking emissions permits and credits, but also with their integrity and quality. Certification schemes have developed protocols for measuring and verifying emissions so that the emissions registered are standard across systems – a tonne is a tonne is a tonne. This is an especially large concern for offsets because here the challenge is to credibly measure and certify the integrity of promises to avoid greenhouse gas emissions so they can be commodified.

These challenges confront both the regulated and voluntary sectors of the global carbon market. In the CDM, the need for credit integrity resulted in a highly bureaucratic process for project approval and of methodologies to judge proposals. Those wanting to develop offset projects must meet a complex set of standards by which they demonstrate by how much the project reduces emissions and how their project lives up to the standards of additionality (reductions are beyond what would have occurred without the project) and permanence (reductions will not be reversed). A similar process of standard-setting has emerged in the voluntary carbon markets even without a central authority awarding credits. Non-state actors, including the offset registries mentioned above, have developed a raft of different standards to certify that projects reduce emissions in practice in additional and permanent ways, and to ensure that the emissions reductions are verified by a third-party auditor (as in the CDM).

The uptake of these standards has increased considerably since their introduction.²¹ The Gold Standard is perhaps the best known. It is used both in the voluntary market and the CDM and is restricted to projects in renewable energy and energy efficiency. Other well-known standards are the Voluntary Carbon Standard (developed by The Climate

^{20.} See Matthew J. Hoffmann. *Climate Governance at the Crossroads: Experimenting with Climate Change After Kyoto* (New York: Oxford University Press, forthcoming), for a discussion of registries.

^{21.} Karan Capoor and Philippe Ambrosi, *State and Trends of the Carbon Market 2008* (Washington DC: World Bank, 2008), 41.

Group and the International Emissions Trading Association), VER+ and the Climate Action Reserve protocols. There are also specific standards for forestry projects, such as Social Carbon or the Climate, Community and Biodiversity Alliance standard.²²

Beyond the Realist Narrative: Governance Complexity and Legitimacy

Above, we have demonstrated the centrality of carbon markets to climate change governance. But what this also shows is that the complex interactions between actors and practices in carbon markets blurs the boundaries between 'public' and 'private' governance. It is no longer useful, and perhaps not even defensible, to regard multilateral treaty-making efforts as the dominant mode of responding to climate change. At the very least, the global response to climate change is being driven by the combination of the two Copenhagens, and it is no longer clear that the multilateral process is setting the agenda. Even if regulated state-led carbon markets eventually take hold and squeeze out, incorporate or simply dominate non-state-led markets, standard-setting and registry functions are likely to be shared by public and non-state authorities. This important regulatory role for non-state or market actors raises important questions not only about the accuracy, reach and consistency of measurement, monitoring or auditing, but also about what standards will ultimately prevail, and whose values they will embody. As we have seen recently in global financial regulation, private and public standards may coexist, but when the system comes under stress, pressures mount for the accountability and authority that only public authorities can generally provide. As with responses to the financial crisis, there is no certainty that such pressure will lead to new public regulatory measures, but what is important here to note is that this complex mix of public and private inevitably raises important questions about legitimacy and authority in climate change governance.²³

In the allowance market, governments are generally seen as holding the authority to design trading systems (e.g. set caps, determine how permits should be allocated, etc.) although there is debate about whether that authority should reside with national or subnational governments.²⁴ Increasingly, however, these discussions are structured by the nature of the existing market infrastructure (e.g. registries) which dictate what emissions are reported and how.²⁵ Most allowance markets allow regulated entities to apply offset credits to their reduction commitments, often from the voluntary market where private actors have set the standards to be applied to evaluate the quality of the credits. Furthermore, the development of registries and standards in the voluntary markets are

For an overview of these standards, see Peter Newell and Matthew Paterson, *Climate Capitalism: Global Warming and the Transformation of the Global Economy* (Cambridge: Cambridge University Press, 2010), 118–125.

^{23.} For a general discussion of legitimacy dynamics in state-led versus non-state forms of global governance, including in climate change, see Steven Bernstein, 'Legitimacy in Intergovernmental and Non-state Global Governance', *Review of International Political Economy* (forthcoming 2010).

^{24.} Betsill and Hoffmann, 'The Contours of Cap and Trade'.

^{25.} In other words, private carbon market actors exercise structural and discursive power as discussed in Dauvergne and Lister, 'The Power of Big Box Retail'.

setting the agenda for regulated markets. The Climate Registry is working with the Western Climate Initiative to develop its emissions reporting database²⁶ and participated in a joint effort with the US Environmental Protection Agency to develop the reporting format for the 2009 US Federal Mandatory Emissions Reporting Rule.²⁷ In addition, non-state offset standard-setters like the Voluntary Carbon Standard, the Climate Action Reserve and the American Carbon Registry are vying to have their offset standards adopted when (or if) government-mandated cap and trade systems go online in North America, federally or regionally.

Owing to the blurring of public-private boundaries, standard-setting has become a primary battleground for debates over the legitimacy of carbon markets. The offset market is a case in point,²⁸ with contestation over the quality and integrity of greenhouse gas offsets. Critics worry about whether claims about emissions reductions projects are credible and the appropriateness of buying 'indulgences' to absolve carbon guilt. Critics of the CDM argue that the process focuses too heavily on issues of additionality and baseline measurement while failing to assure that offset projects promote sustainable development as had been promised in the Kyoto Protocol. Many of the standard-setting entities discussed above have attempted to address these concerns by developing more rigorous standards and inserting social and broader environmental or sustainability goals into the markets beyond what action on climate change would strictly require. Indeed, strict adherence to greenhouse gas reduction may even conflict with some norms of sustainable development as identified in the Gold Standard, a problem likely to become even more acute as 'reduced emissions from deforestation and forest degradation in developing countries' (REDD) gains acceptance as a legitimate activity to generate carbon credits.²⁹ Private standard-setters attempt to ameliorate this concern by adding social and biodiversity protocols (e.g., the Climate, Community and Biodiversity Alliance standard) and/or sustainability assessments and stakeholder consultation guidelines (e.g., the Gold Standard) to carbon-offset methodologies.

The blurring of public and private climate governance has meant that these transnational governance practices, and the markets they help regulate and stabilise, are increasingly only tangentially related to the interstate multilateral process. Thus, to regard climate governance as 'stalled' by the 'failure' of Copenhagen is to miss the richness and

^{26.} http://www.westernclimateinitiative.org/wci-committees/reporting-committee, accessed 11 March 2010.

^{27.} US Environmental Protection Agency, 'Mandatory Greenhouse Gas Reporting Rule: EPA's Response to Public Comments, Volume 11: Designated Representative and Data Collection, Reporting, Management and Dissemination' (September 2009): p. 104, available at: http://www.epa.gov/climatechange/emissions/ downloads09/documents/Volume11-DesignatedRepDataCollection-FINAL.pdf, accessed 11 March 2010.

^{28.} For a fuller analysis of these legitimacy conflicts, see Matthew Paterson, 'Legitimation and Accumulation in Climate Change Governance', *New Political Economy* 15, no. 3 (2010): 1–23. For specific critiques of the process, see Heidi Bachram, 'Climate Fraud and Carbon Colonialism: The New Trade in Greenhouse Gases', *Capitalism, Nature, Socialism* 15, no. 4 (2004): 5–20; Kevin Smith, *The Carbon Neutral Myth: Offset Indulgences for Your Climate Sins* (Amsterdam: Carbon Trade Watch, 2007); Larry Lohmann, 'Marketing and Making Carbon Dumps: Commodification, Calculation and Counterfactuals in Climate Change Mitigation', *Science as Culture* 14, no. 3 (2005): 203–35.

Laura Bozzi, Benjamin Cashore, Kelly Levin and Constance McDermott, 'Climate-Related Private Initiatives and their Effects for the Global Forest Sector'. Paper presented to the International Studies Association 2010 Annual Meeting, New Orleans, 17–20 February.

complexity of climate governance that can no longer be reduced (if it ever could) to an interstate process of treaty-making. And it is worth remembering that we have only focused on one sort of alternative climate governance – of and through carbon markets. While this form is crucially important, drawing in a range of powerful financial actors to the process of pursuing climate change mitigation, there are a host of other transnational governance projects in process, including transnational city networks, sector-specific business partnerships and corporate emissions disclosure projects.³⁰

The challenge is how to understand this complexity and to analytically decentre multilateral treaty-making in any analysis of global climate governance. It is no longer sufficient to consider dynamics in the 'other' Copenhagen as a peripheral activity or an input to the development of international agreements. The governance of climate change is not simply a matter of centralised treaty-making augmented by non-state activity. It is instead an amalgam of private and public initiatives at multiple scales. Dauvergne and Lister's contribution to this issue³¹ is a further reminder of this new reality in climate governance, but we contend that it is not *either* the multilateral Copenhagen *or* the nonstate Copenhagen, but rather their combination, that must be understood. We suggest two means of doing so.

One classical account is to situate the emergence of market-led climate governance in the context both of general contradictions between states and markets in capitalist development, and specifically in the context of the neoliberal ideological dominance since the early 1980s. Bernstein shows specifically how such an ideological shift has provided the context for global environmental governance in general,³² while Newell and Paterson demonstrate how this has structured responses to climate change.³³ In this reading, market-led climate governance represents both the legacy of this ideological favouring of markets as well as the crucial importance in the climate change case of getting powerful actors, specifically financiers, on board to counteract the power of those with interests in resisting climate change mitigation. Once created, these markets have taken on a life of their own and exceed the capacities of states to control them, but the contradiction remains: markets rely on states for specific functions – creating property rights (emissions allowances and credits, in this case) and enforcing contracts; but the states that have co-evolved with capitalist markets also compete with each other for investment, creating the sorts of tensions we saw in the diplomacy at Copenhagen.

A different account would focus on the emergence of carbon markets as an instance of a broader fragmentation in global governance, whereby a multitude of actors consider

Liliana Andonova, Michele Betsill and Harriet Bulkeley, 'Transnational Climate Governance', *Global Environmental Politics* 9, no. 2 (2009): 52–73; Karin Bäckstrand, 'Accountability of Networked Climate Governance: The Rise of Transnational Climate Partnerships', *Global Environmental Politics* 8, no. 3 (2008): 74–102; Hoffmann, *Climate Governance at the Crossroads*.

^{31.} Dauvergne and Lister, 'The Power of Big Box Retail'.

^{32.} Steven Bernstein, *The Compromise of Liberal Environmentalism* (New York: Columbia University Press, 2001).

Newell and Paterson, *Climate Capitalism*. See also, Steven Bernstein, 'International Institutions and the Framing of Domestic Policies: The Kyoto Protocol and Canada's Response to Climate Change', *Policy Sciences* 35, no. 2 (2002): 203–36.

themselves authoritative in the global response to climate change.³⁴ This view focuses on the shift in the centre of gravity in climate governance away from traditional state-centric multilateral processes to multilevel governance whereby diverse, decentralised initiatives (like the growing number of emissions trading systems in the 'global' carbon market) form the basis for the global response to climate change. Betsill and Bulkeley³⁵ have demonstrated this dynamic in an examination of municipal climate action, Rabe³⁶ has done similar work with sub-national initiatives, and Hoffmann³⁷ claims that initiatives embedded in the global carbon markets form the foundation for an experimental system of governance outside the traditional multilateral approach.

The fact that these two very different lenses coexist suggests that a deeper struggle may ultimately be at play in global climate governance. In the absence of strong centralised state authority, can markets – or more accurately market actors, whether traders, private regulators and administrators, or firms - be socialised and legitimate the governance created? Or is the transnationalisation of climate governance largely the legitimation of markets and the interests of powerful market players? While there can be little doubt that the *practices* of climate governance continue to be strongly structured by dominant market discourses, which has produced finance carbon capitalists pursuing their interests, their activities also take place in a wider social context of demands - of wider publics, communities, civil society and governments – to address the underlying material problem of climate change. Arguably, the growing importance of big box retailers in global forest governance described by Dauvergne and Lister (this issue), as powerful as well as publicly visible nodes in global forest supply chains, is best understood as occurring within a similar set of dynamics. Their new-found social and environmental concerns arose in the context of public and NGO scrutiny, while their position as market players also structures their overall practices and goals. Both their analyses and ours reveal similar tensions and ambiguity as to whether the activities of market players can be harnessed or, conversely, need to be re-embedded in public authority to produce desired environmental and social change. It is precisely this battleground that a closer look at the two Copenhagens reveals.

Conclusions

We come full circle, then, with the recognition that this deeper battleground will be played out on both the multilateral and transnational stages, and at their intersections. Indeed, with many of the elements in what might be called a 'global climate governance

^{34.} Chukwumerije Okereke, Harriet Bulkeley and Heike Schroeder, 'Conceptualizing Climate Governance Beyond the International Regime', *Global Environmental Politics* 9, no. 1 (2008): 58–78. Michele M. Betsill and Harriet Bulkeley, 'Cities and the Multilevel Governance of Global Climate Change', *Global Governance* 12, no. 2 (2006): 141–59; Henrik Selin and Stacy D. VanDeveer eds, *Changing Climates in North American Politics: Institutions, Policymaking and Multilevel Governance* (Cambridge, MA: The MIT Press, 2009); Steven Bernstein, Jennifer Clapp and Matthew Hoffmann, 'Reframing Global Environmental Governance', Joint CIGI/CIS Working paper (2009); Hoffmann, *Climate Governance at the Crossroads*; Harriet Bulkeley and Peter Newell, *Governing Climate Change* (London: Routledge, 2010).

^{35.} Betsill and Bulkeley, 'Cities and the Multilevel Governance'.

Barry Rabe', States on Steroids: The Intergovernmental Odyssey of American Climate Policy', *Review of Policy Research* 25, no. 2 (2008): 105–28.

^{37.} Hoffmann, Climate Governance at the Crossroads.

complex', the boundary between 'public' and 'private' – whether conceptualised in terms of the actors involved or the purposes of governance – is increasingly useless as a frame for understanding the overall pattern of governance practices. The more interesting question, rather than focusing on the 'failure' of Copenhagen, is thus to ask how we might expect the Copenhagen multilateral outcome and the ongoing development of carbon markets as a form of climate governance to affect one another. On the one hand, while the Copenhagen Accord is unlikely to cause a significant retrenchment in the emphasis on markets as policy measures, and thus the associated transnational governance arrangements discussed above can be expected to continue to flourish and evolve, it will likely lead to a shift in the form of these markets. On the other hand, the development of carbon markets will continue to generate friction and pressure for cooperation, perhaps at the global level, for the following reasons.

Firstly, perhaps unique amongst commodity markets, the global carbon market requires political action to exist. Without commitments to reduce greenhouse gas emissions, there is no commodity to trade and there is also a massively reduced demand for offsets, as just the voluntary offset markets remain. Carbon market advocates in the Crowne Plaza were essentially begging their counterparts in the Bella Center to agree to binding emissions reductions in a way that would provide some certainty for the development of their markets. Without this certainty at the global level, attention will shift to national and sub-national emissions trading systems to drive the global demand.

Secondly, the continued fragmentation of the global carbon market that the Copenhagen Accord did little to avert will have an impact on how the markets develop materially. Linkage of markets will be the key governance frontier. For instance, it is now entirely possible that the basic unit of account that has underpinned carbon markets to date – the $tCO_2 e$ – will cease to be universal in scope. In particular, the potential US federal market may well follow the Regional Greenhouse Gas Initiative and be based on a short ton. As a consequence, the character of linkage between carbon markets will be significantly different. In the Kyoto model, governments agree collectively to a single set of basic infrastructure rules – the unit and its proliferation into specific commodities; the trading rules; relationships between cap and trade and offset markets, and so on. It reflected, if you like, economists' preferences for an abstract universal market. Now, markets are more likely to be built up nationally or regionally, on the basis of domestic political processes, and questions about linkage between markets will be decided afterwards. This may in turn, however, drive demand for cooperation to create, or agree to, international standards.

The sort of political dilemmas that will result (and are arguably already upon us) are exemplified by the discussions under way over the conditions by which different emissions trading systems can be linked. For example, the EU has suggested that it will not be possible to link the EU Emissions Trading System to the emerging Australian Emissions Trading System (due to come on stream later this year or in 2011, depending on progress in the Australian Senate), because the Australians are proposing to allow regulated firms to meet up to 100 percent of their obligations through offset investments. The EU Emissions Trading System limits are much lower. If it did allow linkage, the EU allowance price would be driven downwards because of the Australian offset rules.³⁸ In

^{38.} Observations at side events, Copenhagen COP, December 2009.

the absence of centrally decided rules, such conflicts in negotiating carbon markets linkage are likely to proliferate.

Yet the ongoing integration of market infrastructure governance – registries, standards, and so on - is likely to continue. It is precisely these efforts to link emerging offset and allowance trading systems and to integrate market infrastructure elements that have the potential to catalyse or reinvigorate the multilateral process, perhaps in a different form. The emergence of multiple carbon markets, rather than a unified global system, upsets the traditional means of making climate policy through multilateral treatymaking. In the traditional governing mode, a legally binding global treaty engages all states in common (and ideally enforceable) purpose. International law then translates to national regulation, which directs domestic actions at more local levels. In theory there is a smooth vertical development of policy that draws on the accepted and traditional authority of states, both in constructing the international treaty and formulating national regulations. The actual development of carbon markets belies this traditional account. Instead, as diverse carbon markets and infrastructure elements develop on their own, there will be an increasing need for multilateral cooperation to address issues that arise from the functioning and interaction of these markets. Rather than driving the response to climate change, multilateral cooperation is more likely to be an effective means of guiding and regulating a response driven by existing practices in the carbon markets and other extra-Kyoto initiatives.

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