Chapter 3
Exploring the Landscape of Climate Law and Scholarship: Two Emerging Trends

Kati Kulovesi

Abstract Exploring the landscape of climate law, this chapter identifies two emerging trends increasingly visible in climate law scholarship. The first relates to the multi-layered nature of climate law. Here, the chapter argues that our understanding of the complex web of legal norms that address climate change necessitates research that also takes into consideration interactions between various sources of legal authority in regulating climate change, including their hierarchies, synergies and tensions. In addition to benefitting those implementing climate law on the ground, such an approach makes it possible to analyse the global implications of climate law, including its effectiveness and the mutual supportiveness of its various layers. The second relates to deformalization of climate law; the expanding role of non-state actors, soft law instruments and informal collaboration in global efforts to address climate change. While climate law scholarship is increasingly paying attention to this phenomenon, this chapter argues that accounting for the role of non-state actors and voluntary regulatory initiatives involves some important doctrinal challenges, including how to avoid becoming overtly descriptive and retain a normative focus.

3.1 Introduction

The emergence of the notion 'climate change law' reflects the growing volume and complexity of regulatory activity around climate change. Lawyers have begun to specialize in climate change issues, and they often do so by familiarizing themselves

Kati Kulovesi is Adjunct Professor in Climate Law. She holds a Ph.D. from the London School of Economics and Political Science. The author would like to thank Harro van Asselt, Tuomas Kuokkanen, Elisa Morgera, Michael Mehling and Tapio Määttä for their helpful comments on the manuscript. All mistakes and omissions remain my own responsibility.

K. Kulovesi (✉)
Department of Law, University of Eastern Finland, P.O. Box 111, 8010 Joensuu, Finland
e-mail: kati.kulovesi@uef.fi

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with legal norms related to climate change across jurisdictions and legal regimes. While the United Nations Framework Convention on Climate Change (UNFCCC)[1] and its Kyoto Protocol[2] have played a key role in driving and guiding the development of climate law,[3] climate change is governed and regulated at multiple levels, from the international, regional and national to the local and transnational ones, and with the involvement of diverse actors. Such regulatory diversity is understandable given the complexity of the underlying problem. As Held and Hervey indicate, the climate change challenge is "multifaceted and multi-layered" and it demands "effective policy at the level of both the nation-state and global governance."[4] The expansion of climate law can also be seen as a sign of the increasing mainstreaming of climate change; its integration into other policy domains; and its uptake by a range of organizations.[5] Thus, already in its current form, the territory of climate change law extends far beyond the UNFCCC and international law.[6]

From the scholarly perspective, climate law is still in its infancy. In line with the present book's attempt to charter the doctrinal territory of this emergent legal discipline, this chapter identifies two trends increasingly reflected in climate law scholarship and discusses their research implications. The first trend is the growing recognition that climate change, a global problem requiring local action, is governed and regulated at multiple levels. Given the transboundary nature of the underlying problem, climate law appears to have a tendency to cross legal and geographical boundaries. As a result, questions concerning the interplay between various sources of legal authority, including their hierarchies, synergies and tensions, are particularly relevant for climate law research and would arguably benefit from increased doctrinal attention. The second trend relates to deformalization; the involvement of a multitude of non-state actors in global efforts to address climate change and the increasing reliance on soft law instruments and informal collaboration.[7] Global climate change cooperation encompasses a range of local and regional initiatives,

[1] United Nations Framework Convention on Climate Change, 9 May 1992, New York, in force 21 March 1994, 31 *International Legal Materials* (1992), 849.

[2] Kyoto Protocol to the United Nations Framework Convention on Climate Change, Kyoto, 10 December 1997, in force 16 February 2005, 37 *International Legal Materials* (1998), 22.

[3] For a comprehensive overview, see Farhana Yamin and Joanna Depledge, *The International Climate Change Regime: A Guide to Rules, Institutions and Procedures* (Cambridge, UK: Cambridge University Press, 2004).

[4] David Held and Angus Hervey, "Democracy, Climate Change and Global Governance: Democratic Agency and the Policy Menu Ahead", in David Held, Angus Hervey and Marika Theors (eds), *The Governance of Climate Change: Science, Economics, Politics & Ethics* (Cornwall: Polity Press, 2011) 89, at 89.

[5] Harriet Bulkeley and Peter Newell, *Governing Climate Change* (London and New York: Routledge, 2010), at 106.

[6] For an overview of the multifaceted nature of climate change governance, see Liliana B. Andonova et al., "Transnational Climate Governance", 9 *Global Environmental Politics* (2009), 52.

[7] Ibid., at 54–56. See also Michele M. Betsill and Harriet Bulkeley, "Cities and the Multi-level Governance of Global Climate Change", 12 *Global Governance* (2006), 141, at 144; Chukwumerije Okereke, Harriet Bulkeley and Heike Schröder, "Conceptualizing Climate Governance Beyond the International Regime", 9 *Global Environmental Politics* (2009), 58.

cooperation between the public and private sectors, voluntary private sector initiatives and activities by civil society.[8] Accounting for the plural mix of regulatory initiatives around climate change involves, however, some important theoretical and ideological challenges, including how to avoid becoming overtly descriptive and retain a normative focus.

Overall, the landscape of climate law is characterised, *inter alia,* by multiple layers, overlapping sources of legal authority, deformalization and recurrent interactions between legal systems, regimes and actors involved. This regulatory complexity presents challenges for the emergent climate law scholarship.[9] Such questions are not, however, limited to the sphere of climate law. Globalization has impacted most fields of law, prompting scholars to develop new approaches focusing on themes, such as global legal pluralism,[10] global administrative law,[11] fragmentation[12] and constitutionalization[13] of international law, and so on. Given its close links with

[8] Bulkeley and Newell, *Governing Climate Change,* supra, note 5; Karin Bäckstrand, "Accountability of Networked Climate Governance: The Rise of Transnational Climate Partnerships", 8 *Global Environmental Politics* (2008), 74; Liliana B. Andonova, "Public-Private Partnerships for the Earth: Politics and Patterns of Hybrid Authority in the Multilateral System", 10 *Global Environmental Politics* (2010), 25; Elisa Morgera and Kati Kulovesi, "Public-Private Partnerships for Wider and Equitable Access to Climate Technologies", in Abbe Brown (ed.), *Environmental Technologies, Intellectual Property and Climate Change: Accessing, Obtaining and Protecting* (forthcoming, Edward Elgar, 2012); Kristine Kern and Harriet Bulkeley, "Cities, Europeanization and Multi-Level Governance: Governing Climate Change through Transnational Municipal Networks", 47 *Journal of Common Market Studies* (2009), 309; Betsil and Bulkeley, "Cities and the Multi-level Governance of Global Climate Change", supra, note 7.

[9] On research challenges related to transnational environmental law in general, see Elizabeth Fisher, "The Rise of Transnational Environmental Law and the Expertise of Environmental Lawyers", 1 *Transnational Environmental Law* (2011), 1 Transnational Environmental Law (2012), 43 at 45–47.

[10] For an overview, see Simon Roberts "After Government? On Representing Law without a State", 68 *Modern Law Review* (2005), 1. See also Günther Teubner, "Global Bukowina: Legal Pluralism in the World Society", in Günther Teubner (ed.), *Global Law without a State* (Aldershot: Dartsmouth, 1997), 3; Oren Perez, *Ecological Sensitivity and Global Legal Pluralism. Rethinking the Trade and Environment Conflict* (Oxford and Portland, Oregon: Hart Publishing, 2004); and Paul Schiff Berman, "Global Legal Pluralism", 80 *Southern California Law Review* (2007), 1155.

[11] Benedict Kingsbury, Nico Krisch and Richard B. Stewart, "The Emergence of Global Administrative Law", 68 *Law and Contemporary Politics* (2005), 15; Nico Krisch and Benedict Kingsbury, "Introduction: Global Governance and Global Administrative Law in the International Legal Order", 17 *European Journal of International Law* (2006), 1.

[12] *Fragmentation of International Law*: *Difficulties Arising from the Diversification and Expansion of International Law*. Report of the Study Group of the International Law Commission finalized by Martti Koskenniemi, UN. Doc. A/CN.4/L.682, 13 April 2006; Frank Biermann et al., "The Fragmentation of Global Governance Architectures: A Framework for Analysis", 9 *Global Environmental Politics* (2009), 14. See also Harro van Asselt, "Managing the Fragmentation of International Climate Law" in Chapter 13 of the present volume.

[13] Jan Klabbers, Anne Peters and Geir Ulfstein, *The Constitutionalization of International Law* (Oxford et al.: Oxford University Press, 2009); Jeffrey L. Dunoff, "The Politics of International Constitutions: The Curious Case of the World Trade Organization", in Jeffrey L. Dunoff and Joel P. Trachtman (eds), *Ruling the World? Constitutionalism, International Law, and Global Governance* (Cambridge et al.: Cambridge University Press, 2009), 178, at 179; Mattias Kumm,

many of the underlying questions, climate law appears to present ample opportunities to further explore and engage with these themes.

This chapter begins by illustrating in Sect. 3.2 the multi-layered nature climate change law and the diversity of actors involved. By describing the multitude of legal sources that commonly apply in parallel to a single carbon transaction under the Clean Development Mechanism (CDM), established under the Kyoto Protocol, it highlights the complexity of the regulatory landscape that lawyers and various other actors working on the CDM must navigate. Section 3.3 considers interactions between various sources of legal authority in regulating climate change, arguing that such questions are increasingly relevant for climate law research. This is partly due to the growing tendency of some actors, including the European Union (EU), to try to influence legal developments outside their territory, especially concerning climate change mitigation. However, legal norms related to climate change interact also in other ways, as the chapter shows. For example, national legislation on Green Investment Schemes in some Central and Eastern European countries complements international rules on emissions trading under the Kyoto Protocol. Finally, Sect. 3.4 addresses the trend of deformalization and the role of the private sector and other non-state actors in the field of climate change law. Non-state actors play a critical role in the battle against dangerous climate change both because they are effectively responsible for global greenhouse gas emissions and also because it has been estimated that they will be responsible for the vast majority of future financial flows to address climate change. They are also increasingly engaging in various public-private partnerships and voluntary regulatory activities around climate change. Ignoring these initiatives and the various associated soft law instruments would mean painting an incomplete picture of the landscape of climate change law. However, the argument here is that accounting for the role of the private sector and voluntary regulatory initiatives also involves some important theoretical and ideological challenges.

3.2 Mapping the Landscape of Climate Change Law

3.2.1 Role of the UNFCCC

International law has played an important role in driving the development of climate change law. In its first resolution on climate change in 1988, the United Nations (UN) General Assembly recognized climate change as "a common concern

"The Cosmopolitan Turn in Constitutionalism: On the Relationship between Constitutionalism in and beyond State", in Jeffrey L. Dunoff and Joel P. Trachtman (eds), *Ruling the World? Constitutionalism, International Law, and Global Governance* (Cambridge et al.: Cambridge University Press, 2009), 258, at 260.

of mankind."[14] It agreed that "necessary and timely action should be taken to deal with climate change *within a global framework*."[15] The UNFCCC, adopted in 1992, has attracted 195 Parties, thus becoming universal in scope. It forms the basis for a dynamic and rapidly evolving international legal regime. One of the key arguments supporting universal climate change cooperation is that it addresses the problem of free riding and reduces the costs of both mitigation and adaptation.[16] Furthermore: "No two countries will face exactly the same situation in terms of impacts or the costs and benefits of action, and no country can take effective action to control the risks that they face alone."[17] The international legal response to climate change also involves fundamental questions concerning justice, equity and fairness. Countries that have contributed least to the problem are projected to suffer the most serious consequences of climate change, especially the small island developing States, African countries and least developed countries. Given that it brings together both those responsible for the problem and those suffering its most severe consequences, my argument is that the UNFCCC enjoys a high degree of legitimacy as a negotiating forum and legal framework for addressing climate change.

Despite its significant evolution over the past 20 years, the UNFCCC regime is yet to deliver a robust legal architecture that ensures the ultimate objective enshrined in Article 2 of the Convention of avoiding dangerous anthropogenic climate change and is in line with the global long-term goal of limiting temperature increase to 2°, formally adopted by UNFCCC Parties in 2010.[18] In fact, the effectiveness of the UN climate regime and its ability to engage key countries in meaningful mitigation action have been questioned a number of times over the years.[19] Especially in the aftermath of the 2009 UN Climate Change Conference in Copenhagen, several mostly complementary venues of international climate change cooperation have emerged[20] although the argument has also been made that instead of trying to reach consensus among 195 Parties, efforts to enhance climate change mitigation should

[14] UN General Assembly Resolution, Protection of global climate for present and future generations of mankind, UN Doc. A/RES/43/53, 6 December 1988, para. 1.

[15] Ibid., para. 2. Emphasis added.

[16] Nicholas Stern, *The Economics of Climate Change. The Stern Review* (Cambridge et al.: Cambridge University Press, 2006), at 510.

[17] Ibid.

[18] UNFCCC, supra note 1, Art. 2; Decision 1/CP.16, The outcome of the work of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention, UN Doc. FCCC/CP/20010/7/Add.1, 15 March 2011.

[19] See, for example, Gwyn Prins and Steve Rayner, "Time to Ditch Kyoto?", 449 *Nature* (2007), 973; and Rafael Leal-Arcas, "Top-Down Versus Bottom-Up Approaches for Climate Change Negotiations: An Analysis", 24 January 2012, available at: http://ssrn.com/abstract=1950210 (last accessed on 1 March 2012).

[20] For an overview of such claims, see Camilla Bausch and Michael Mehling, "Addressing the Challenge of Global Climate Mitigation. An Assessment of Exiting Venues and Institutions", August 2011, available at: http://library.fes.de/pdf-files/iez/08466.pdf (last accessed on 29 February 2012).

focus on major emitters.[21] Meanwhile, long-term negotiations continue under the UNFCCC, with the current deadline of concluding a new global climate treaty by 2015, to be implemented from 2020.[22] The argument here is that even accomplishing this important but challenging task, the landscape of climate change law will remain multi-layered and colourful. The following example concerning the CDM illustrates that taking into account a plural mix of legal sources is necessary even where the legal mechanism is firmly founded in an international climate treaty. Furthermore, a global climate agreement may well prove elusive concerning some sectors or actors. All this highlights the need for climate law research to take into consideration legal initiatives both within and outside the UNFCCC framework, exploring their linkages, synergies and tensions.

3.2.2 Regulation of the CDM: Multiple Layers, Diverse Actors and Deformalization

The CDM is a good way to illustrate my argument that climate law often derives from a plural mix of normative sources. Legal norms applicable to a single carbon transaction under the CDM under the CDM often originate from a variety of overlapping sources, including the Kyoto Protocol, Marrakesh Accords, CDM Executive Board, the project host country and possibly also the purchasing country. In addition, the Emission Reductions Purchase Agreement (ERPA) typically lays down a number of contractual obligations for the seller and buyer of Certified Emission Reductions (CERs), effectively creating a second legal layer, dominated by private international law and running parallel with the CDM project cycle regulated under the Kyoto Protocol.[23] CDM project participants sometimes also choose to seek compliance with voluntary standards, such as the CDM Gold Standard, that have been produced through civic regulatory initiatives. Finally, CERs themselves are typically subject to a multitude of norms, including accounting rules and practices, taxation rules, as well as rules on ownership and liability.

The legal foundation of the CDM is in Article 12 of the Kyoto Protocol. This general treaty provision did not include the necessary details for operationalizing the CDM. Instead, the text of the Kyoto Protocol tasked the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (COP/MOP) with elaborating "modalities and procedures with the objective of ensuring transparency, efficiency and accountability through independent auditing and verification of

[21] Leal-Arcas, "Top-Down Versus Bottom-Up Approaches for Climate Change Mitigation", supra, note 19, at 2.

[22] Decision 1/CP.17, Establishment of an Ad Hoc Working Group on the Durban Platform for Enhanced Action, UN. Doc. FCCC/CP/2011/9/Add.1, 15 March 2012, paras. 2 and 4.

[23] For critical discussion, see Anne-Marie Klijn, Joyeeta Gupta and Anita Nijboer, "Privatizing Environmental Resources: The Need for Supervision of Clean Development Mechanism Contracts?", 18 *Review of European Community and International Environmental Law* (2009), 172.

project activities."[24] Detailed rules for the CDM were subsequently adopted as part of the 2001 Marrakesh Accords and they regulate key aspects of the project cycle, including baseline development, validation and registration of the CDM project as well as verification and certification of CERs.[25] The general CDM rules adopted in Marrakesh have been subsequently complemented by decisions laying down rules for sink[26] and small-scale projects[27] under the CDM, and further COP/MOP guidance on various other issues related to the CDM.

Article 12 of the Kyoto Protocol also established the CDM Executive Board, tasked with supervising the CDM.[28] The CDM Executive Board plays an important role in regulating the CDM. It creates detailed rules through its decisions, addressed mainly at the thousands of private and public actors implementing CDM projects on the ground. This institutional structure has resulted in the evolution of a complex web of rules and requirements applicable to the CDM. It has also been argued that "the Board's decision-making practice is often not predictable, and many of its decisions have come as a surprise to project participants and technical experts."[29] After complaints from a number of stakeholders that the regulation of the CDM was quickly becoming too difficult to grasp, the COP/MOP requested the CDM Executive Board to develop a catalogue of its decisions.[30] As of 2012, this online tool remains under development by the UN Climate Change Secretariat. Thus far, a more influential initiative to categorize CDM rules has been the *CDM Rulebook*, known as the "definitive online database on CDM rules" developed and maintained by law firm Baker & McKenzie with initial funding from eight donor countries and organizations.[31] The database is updated after each meeting of the CDM Executive Board and the COP/MOP.

The CDM is also a prime example of a public-private partnership that seeks to promote climate change mitigation and sustainable development. Private entities are

[24] Kyoto Protocol, supra, note 2, Art. 12.7.

[25] Decision 3/CMP.1, Modalities and procedures for a clean development mechanisms defined in Article 12 of the Kyoto Protocol, UN Doc. FCCC/KP/CMP/2005/8/Add.1, 30 March 2006. The Marrakesh Accords were originally adopted by COP 7 in 2001, but their formal adoption under the Kyoto Protocol took place at COP/MOP 1 in 2005.

[26] Decision 5/CMP.1, Modalities and procedures for afforestation and reforestation project activities under the clean development mechanism in the first commitment period of the Kyoto Protocol, UN Doc. FCCC/KP/CMP/2005/8/Add.1, 30 March 2006.

[27] Decision 4/CMP.1, Guidance relating to the clean development mechanism, Annex II, Simplified modalities and procedures for small-scale CDM project activities and Decision 6/CMP.1, Simplified modalities and procedures for afforestation and reforestation project activities under the clean development mechanism in the first commitment period of the Kyoto Protocol and measures to facilitate their implementation, UN Doc. FCCC/KP/CMP/2005/8/Add.1, 30 March 2006.

[28] Kyoto Protocol, supra, note 2, Art. 12.4.

[29] Charlotte Streck and Jolene Lin, "Making Markets Work: A Review of the CDM Performance and the Need for Reform", 19 *European Journal of International Law* (2008), 409, at 410.

[30] Overall, several reform proposals for the CDM have been put forward by both states and private actors, many of which are currently being explored through the CDM Policy Dialogue, launched in 2011. More information is available at: http://cdmpolicydialogue.org/ (last accessed on 30 April 2012).

[31] The CDM Rulebook, available at: http://www.cdmrulebook.org/ (last accessed on 26 March 2012).

largely responsible for financing and implementing CDM projects on the ground. They also perform key functions in terms of ensuring compliance with the international CDM rules by validating the projects and verifying the ensuing emission reductions.[32] All this goes to show that what was originally a provision in an international treaty has become a dynamic regulatory process that involves not only sovereign states that are Parties to the Kyoto Protocol, but also the CDM Executive Board, the UNFCCC Secretariat, national CDM authorities, private sector and civil society actors, local stakeholders as well as donor countries and organizations.

The close engagement of the private sector in the governance and implementation of the CDM has posed some interesting challenges to the traditional, state-centred focus of public international law. The CDM Executive Board is an institution established under an international treaty. However, it has come to exercise authority over private actors that very much resembles administrative powers typically used by public authorities in national jurisdictions. For example, when approving and rejecting project proposals, the CDM Executive Board makes decisions with significant legal and economic implications for private actors participating in the CDM.[33] Given that it is not possible to appeal the CDM Executive Board's decisions, this aspect of the CDM is at odds with some of the key rights that are traditionally protected by domestic constitutions, including the right to a fair hearing and to effective judicial review.[34] COP/MOP 5 has consequently requested that the CDM Executive Board create an appeals procedure under the CDM and negotiations on the new appeals body are currently ongoing.[35] Given the functions that the CDM Executive Board exercises, it can be argued that "[t]he type of governance undertaken by the EB can be understood and analysed as administrative action: rule-making, administrative adjudication between competing interests, and other forms of regulatory decision-making and management."[36] This differs from the traditional, state-centred focus of international law. Likening governance of the CDM to administrative action brings to the fore links to the global administrative law project, which proceeds from the argument that:

> …we are witnessing the emergence of a 'global administrative space'; a space in which the strict dichotomy between domestic and international has largely broken down, in which administrative functions are preformed in often complex interplays between officials and institutions on different levels, and in which regulation may be highly effective despite its

[32] See Sect. 3.4. below, and also: Kati Kulovesi, "The Private Sector and the Implementation of the Kyoto Protocol: Experiences, Challenges and Prospects", 16 *Review of the European Community and International Environmental Law* (2007), 146.

[33] Streck and Lin, "Making Markets Work", supra, note 29, at 410–411; see also Ludger Gieberts and Alexander Sarac, "An Appeals Process for the Kyoto Protocol's Clean Development Mechanism", 4 *Carbon and Climate Law Review* (2010), 260, at 261.

[34] Jeffrey L. Dunoff and Joel P. Trachtman, "A Functional Approach to International Constitutionalization", in Jeffrey L. Dunoff and Joel P. Trachtman (eds), *Ruling the World? Constitutionalism, International Law, and Global Governance* (Cambridge et al.: Cambridge University Press, 2009), 3, at 17. Dunoff and Trachtman discuss this in the context of the UN Security Council actions imposing sanctions and firms suspected of involvement in terrorist activities.

[35] Decision 2/CMP.5, Further guidance related to the clean development mechanism, UN Doc. FCCC/KP/CMP/2009/21/Add.1, 30 March 2010, para. 42.

[36] Streck and Lin, "Making Markets Work", supra, note 29, at 411.

> predominantly non-binding forms… Global administrative law proposes drawing together these dispersed practices and understand them as part of a common, growing trend towards administrative-law type mechanisms for holding global regulatory governance accountable and to inquire into the challenges this set of issues poses to both domestic administrative law and international law.[37]

However, even if the implementation of the CDM involves the exercise of public authority over private actors, governance of the CDM lacks many of the checks and balances that typically play a key role in domestic administrative processes. For climate law scholarship, then, this calls for engaging in inquiries that expand the scope of legal analysis beyond the traditional doctrines of public international law to assess the legitimacy of the CDM and other novel forms of climate governance.

In addition to such doctrinal perspectives, the plural mix of legal sources applicable to the CDM may pose challenges to those implementing CDM projects on the ground. What I mean by this is that when designing and implementing a CDM project, it is necessary to take into consideration the combined and simultaneous effect of parallel legal norms originating from different sources of legal authority. The starting point is the international level, which forms the foundation for the CDM and, as we saw above, in itself includes several layers emanating from the Kyoto Protocol, COP/MOP decisions and norm-creation by the CDM Executive Board. From the practical perspective, national CDM regulations by the project host country are equally important. The international CDM rules require each non-Annex I Party to confirm both that its participation in a CDM project is voluntary and that the project contributes to its sustainable development.[38] Environmental impact assessments of CDM projects also take place in accordance with the host countries' national requirements.[39] In practice, a number of CDM host countries have developed national criteria and procedures for approving CDM projects. Complying with the host country's national CDM laws and regulations is crucial for project participants to obtain the host country's Letter of Approval, a prerequisite for registering the CDM project under the Kyoto Protocol.

In practice, most buyers of CDM credits come from the EU where the Emissions Trading Scheme (ETS) has introduced a price for greenhouse gas emissions of more than 10,000 installations.[40] Through the Linking Directive, they can use CERs

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[37] Krisch and Kingsbury, "Introduction: Global Governance and Global Administrative Law in the International Legal Order", supra, note 11, at 1.

[38] Decision 3/CMP.1, supra, note 25, para. 40(a). The general requirement that a CDM project contributes to the host country's sustainable development is stipulated in Kyoto Protocol, supra, note 2, Art. 12.

[39] Ibid., para. 37(c).

[40] Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community, OJ 2003 L 275/32; Directive 2008/101/EC of the European Parliament and of the Council of 19 November 2008 amending Directive 2003/87/EC so as to include aviation activities in the scheme of greenhouse gas emissions allowance trading within the Community, OJ 2009 L 8/3; and Directive 2009/29/EC of the European Parliament and of the Council of 23 April 2009 amending Directive 2003/87/EC so as to improve and extend the greenhouse gas emission allowance trading system of the Community, OJ 2009 L 140/63.

to comply with their emissions quota.[41] The EU has, however, introduced some stricter sustainability criteria for CDM credits under the ETS than those applicable under the Kyoto Protocol. It has, for instance, banned credits from afforestation and reforestation CDM projects and it will also prohibit CDM credits from certain industrial gas projects from May 2013 onwards.[42] Familiarity with EU climate change law is therefore highly relevant for the participants of such CDM projects that seek to generate CERs for installations included in the ETS. Furthermore, some Annex I countries within and outside the EU have enacted special national legislation laying down criteria for the approval of CDM projects.

In addition to the multiple layers of specialized CDM rules that have their origin in international, EU and national legal systems, a CDM transaction normally also raises legal questions concerning, taxes, accounting and contract law. The ERPA in particular plays a key role, especially as the vast majority of CDM projects are implemented by private actors, with limited or no involvement by an Annex I party to the Kyoto Protocol.[43] In practice, the ERPA process takes place in parallel with the official CDM project cycle and the regulation of ERPAs tends to falls under private international law rather than public international law.[44] It has been argued that the negotiation of carbon contracts and the structuring and financing of carbon transactions:

> …requires the ability to overcome the 'disconnect' that often exists between international and national law and between private and public legal regimes, and to incorporate principles and structures, provided for in the Kyoto Protocol… into effective contracts which will bind the parties, comply with domestic law requirements, and also allow for enough flexibility to manage the constantly developing international legal framework.[45]

Some of the key elements in an ERPA include defining, *inter alia,* how various risks will be shared, the price of carbon credits, timetables for delivery and payments, as well as questions concerning liability, sanctions, applicable law and dispute resolution. An ERPA may also contain obligations related to environmental and social issues that more specific than those included in the international CDM rules and the host country's national CDM criteria. Some scholars have raised concerns over this 'dual legal nature' of the CDM cycle. Most notably, they have lamented that the private CDM contracting cycle "does not directly involve governments and is non-transparent."[46]

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[41] Directive 2004/101/EC amending Directive 2003/87/EC establishing a scheme for greenhouse gas emission allowance trading within the Community, in respect of the Kyoto Protocol's project mechanisms, OJ 2004 L 338/18

[42] Press Release: Commission welcomes vote to ban certain industrial gas credits, IP/11/56, 21 January 2011.

[43] For interesting discussion see Soren E. Lütken and Axel Michaelowa, *Corporate Strategies and the Clean Development Mechanism: Developing Country Financing for Developed Country Commitments* (Cheltenham, UK and Northampto, MA, USA: Edward Elgar, 2008), at 110–146.

[44] Klijn, Gupta and Nijboer, "Privatizing Environmental Resources", supra, note 23, at 176.

[45] Martin Wilder, Monique Willis and Mina Guli, "Carbon Contracts, Structuring Transactions: Practical Experiences", in David Freestone and Charlotte Streck (eds), *Legal Aspects of Implementing the Kyoto Protocol Mechanisms: Making Kyoto Work* (Oxford et al.: Oxford University Press, 2005*),* 295, at 295–296.

[46] Klijn, Gupta and Nijboer, "Privatizing Environmental Resources", supra, note 23, at 177.

They have also highlighted "that most project developers in the developing world are inexperienced in international contracts" which "taxes their ability to participate effectively in contract negotiations and in understanding the broader ramifications of such contracts."[47] Hence, according to Klijn, Gupta and Nijboer, the "split personality of the CDM is due to it being both a public international law instrument, as well as a commercial law instrument, and is a critical legal challenge calling for solutions that reconcile these different personalities."[48]

Finally, some CDM project participants also seek to comply with voluntary regulatory initiatives designed to strengthen CDM projects' contribution to sustainable development. The best-known example is the CDM Gold Standard, established by the WWF in 2003 and currently endorsed by more than 80 non-governmental organizations worldwide.[49] The Gold Standard has been designed to "certify renewable energy and energy efficiency carbon offset projects to ensure that they all demonstrate real and permanent greenhouse gas (GHG) reductions and sustainable development benefits in local communities that are measured, reported and verified."[50] To do so, the Gold Standard project cycle involves steps that are additional to the official CDM project cycle.[51] These are sometimes turned into legally-binding obligations through the ERPA.

As this overview shows, the CDM is regulated through complex and innovative arrangements and its implementation involves a diverse mix of actors. As such, it poses challenges to both scholars researching climate change law as well as to lawyers and others implementing CDM projects on the ground. It also illustrates the multi-layered and colorful landscape of climate change law, and points towards the need to use innovative doctrinal tools and approaches in researching climate change law.

3.3 Climate Law: Interactions Between Sources of Legal Authority

3.3.1 Background: Globalization and Law

Over the past several decades, globalization has affected most areas of law.[52] For one, national legal fields have become more 'internationalized' as domestic legal

[47] Ibid.

[48] Ibid., at 181. Their suggested remedy is a supervisory body for climate change contract making.

[49] The Gold Standard website, available at: http://www.cdmgoldstandard.org/about-us/who-we-are (last accessed on 26 March 2012).

[50] Ibid.

[51] Ibid.

[52] Francis Snyder, "Economic Globalisation and the Law in the 21st Century", in Austin Sarat (ed.), *The Blackwell Companion to Law and Society* (Malden MA et al.: Blackwell Publishing, 2004), 3. Similarly, David Kennedy, "The Mystery of Global Governance", in Jeffrey L. Dunoff and Joel P. Trachtman (eds), *Ruling the World? Constitutionalism, International Law, and Global Governance* (Cambridge et al.: Cambridge University Press, 2009), 37, at 39; and Krisch and Kinsgsbury, "Introduction: Global Governance and Global Administrative Law in the International Legal Order", supra note 11, at 1.

and political developments are increasingly influenced by external factors.[53] As Snyder describes:

> Formally speaking, the sources of 'international' and 'national' norms are different, and this difference has its legal doctrinal importance in each of the two institutional and normative settings. However, the traditional distinction between 'domestic' and 'foreign,' or between 'national' and 'international,' does not often adequately capture the political origins, legal content, cultural understandings, economic assumptions, and social practices, for example the need for certain types of specialized legal professionals, of contemporary law.[54]

David Kennedy notes that most in the legal profession "thought they knew how it all worked" and legal thinking tended to be organized in relatively unproblematic categories, such as private law and public law, national law and international law.[55] Recently, however, boundaries of such categories are increasingly challenged. There are conflicting and multiplying jurisdictions, asserting the validity or persuasiveness of their rules, with no decider of last resort.[56] Kennedy also argues that specialists in every field of law "have all come to see their subject in international or comparative terms" and it is "hard to think of a legal problem that does not cross disciplinary and national boundaries."[57] Koskenniemi, in turn, draws attention to fragmentation and deformalization of international law, indicating that "traditional international law is pushed aside by a mosaic of particular laws and institutions, regimes and types of more or less formal regulation, each following its own preferences."[58]

Such developments are leaving their mark on legal scholarship and several new approaches have evolved in response to the globalization of the legal landscape.[59] They focus on themes such as constitutionalization and fragmentation of international law, the global administrative law project, and global legal pluralism.[60] According to Kennedy, public international law is in fact currently going through "a period of heightened doctrinal and methodological ferment" characterized by "disciplinary critique, confusion and rethinking".[61] Snyder, in turn, notes that many scholars are focusing on questions concerning hierarchy, coordination and multi-level governance, proceeding from the insight that different levels of governance interact, sometimes with regard to the same subject matter, sometimes with

[53] Snyder, "Economic Globalisation and the Law in the 21st Century", supra, note 52, at 3.

[54] Ibid.

[55] Kennedy, "The Mystery of Global Governance", supra, note 52, at 39.

[56] Ibid., at 55.

[57] Ibid., at 39.

[58] Martti Koskenniemi, "The Fate of Public International Law: Constitutional Utopia or Fragmentation", Chorely Lecture, 7 June 2006, London School of Economics and Political Science, at 13.

[59] For an overview, see Kennedy, "The Mystery of Global Governance", supra, note 52, at 43–53.

[60] See references, supra, notes 10–13.

[61] Kennedy, "The Mystery of Global Governance" supra, note 52, at 38.

regard to social life.[62] In the environmental field, scholars are increasingly interested in transnational environmental law, described by Shaffer and Bodansky in the following terms:

> The concept of transnational environmental law… is much broader than that of international environmental law. Transnational environmental law encompasses all environmental law norms that apply to transboundary activities or that have effects in more than one jurisdiction… The concept of transnational environmental law thus includes national environmental regulation that has horizontal effects across jurisdictions – for example, by providing regulatory models to other countries or by applying to or affecting the behavior of producers and consumers within them. It also includes the development of standards by private actors that have effects across borders, such as through product certification and labeling regimes. In practice, the transnational environmental law process sometimes includes international law as part of a single diachronic law-making process, but oftentimes does not.[63]

With climate law being multi-layered and characterized, *inter alia*, by overlapping sources of legal authority, deformalization, involvement of non-state actors and a high degree of specialization within the UNFCCC regime, it seems to have several links with these broader theoretical discussions and presents ample opportunities to further explore and engage with the themes reflected in these approaches.

3.3.2 Climate Law and Interaction Between Different Sources of Legal Authority

Given the global nature of the climate change problem, climate law has the tendency to cross legal and geographical boundaries. One of the arguments here is that studying interactions between various sources of legal authority in regulating climate change, including their hierarchies, synergies and tensions. including their hierarchies, synergies and tensions is necessary for analysing and understanding the combined effect of the multiple layers of climate change regulation. The relevant interactions commonly place vertically between international law and national legal systems. In many jurisdictions vertical interaction also occurs between the national and

[62] Snyder, "Economic Globalisation and the Law in the 21st Century", supra, note 52, at 5. As Betsill and Bulkely, "Cities and the Multi-level Governance of Global Climate Change", supra, note 7, at 149, explain: "The focus on multi-level governance emerged originally from studies of European integration, where the argument was made that the role of national governments within the EU was diminishing and that a new, multilevel system of governance was taking shape." The basic idea is that "decision-making competencies are increasingly shared between actors operating at different levels of governance" and the aim is to draw "attention to the importance of considering how political authority and processes of policymaking cross traditional divides between state and non-state actors, domestic and international spheres." Ibid.

[63] Gregory Shaffer and Daniel Bodansky, "Transnational Unilateralism and International Law", 1 *Transnational Environmental Law* (2012), 1 *Transnational Environmental Law* (2012), 31 at 32. For discussion on the concept of transnational environmental law, see also Fisher, "The Rise of Transnational Environmental Law", supra, note 9

sub-national levels. National climate regulation is also having horizontal effects across jurisdictions, for example, through unilateral climate action as well as through the diffusion of regulatory innovations.[64] Horizontal interaction also frequently takes place between specialised areas of international law. In this respect, several scholars have studied climate law against the backdrop of fragmentation of international law, raising questions concerning the mutual supportiveness of different international legal regimes from the climate change perspective, including the UNFCCC and World Trade Organization, and the UNFCCC and the Convention of Biological Diversity.[65]

The relevance of the vertical relationship has been reflected in the debate concerning the post-2012 legal architecture under the UNFCCC where one of the key questions is whether countries' mitigation commitments should be defined 'top down' through an international treaty or 'bottom up' through national legislation.[66] At the European level, questions have emerged concerning the relationship between EU climate law and its Member States' national legal systems, and also concerning the relationship between EU climate law and local regulatory initiatives.[67] Could, for example, some EU Member States implement stricter climate protection measures than those required by EU law and introduce carbon dioxide performance standards to companies included in the EU ETS?[68] Could the Mayor of London prohibit the use in London of passenger cars, which exceed the average EU emissions benchmark of 130 g of carbon dioxide per kilometre?[69]

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[64] Shaffer and Bodansky, "Transnational Unilateralism and International Law", supra, note 63. I am also grateful for Harro van Asselt for inspiring my thinking in this regard.

[65] Harro van Asselt, Francesco Sindico and Michael Mehling, "Global Climate Change and Fragmentation of International Law", 30 *Law and Policy* (2008), 423; Margaret A. Young, "Climate Change Law and Regime Interaction", 5 *Carbon and Climate Law Review* (2011), 147; Kati Kulovesi, *The WTO Dispute Settlement System: Challenges of the Environment, Legitimacy and Fragmentation* (The Netherlands: Kluwer Law International, 2011), at 217–257; Annalisa Saravesi, "Reducing Emissions from Deforestation in Developing Countries under the UNFCCC: Caveats and Opportunities for Biodiversity", *Yearbook of International Environmental Law* (2011, forthcoming); Elisa Morgera, "Far Away, So Close: A Legal Analysis of the Increasing Interactions between the Convention on Biological Diversity and Climate Change Law", 2 *Climate Law* (2011), 85. See also the respective contributions by Harro van Asselt, Annalisa Saravesi and Elisa Morgera and myself in Part IV of the present volume.

[66] For discussion on top down and bottom up approaches, see Daniel Bodansky, "A Tale of Two Architectures: The Once and Future U.N. Climate Change Regime", March 2001, available at: http://ssrn.com/abstract=1773865 (last accessed on 26 March 2012); and Jacob Werksman and Kirk Henderson, "The Aftermath of Copenhagen: Does International Law Have a Role to Play in a Global Response to Climate Change", 25 *Maryland Journal of International Law* (2010), 142.

[67] Joanne Scott, "The Multi-Level Governance of Climate Change", in Paul Craig and Grainne de Bruca (eds), *The Evolution of EU Law,* 2nd ed. (Oxford et al.: Oxford University Press, 2011), 805, also available at: http://www.ucl.ac.uk/laws/environment/docs/hong-kong/The%20Multi-Level%20Governance%20of%20Climate%20Change%20(Joanne%20Scott).pdf (last accessed on 26 March 2012).

[68] Joanne Scott, "The Multi-Level Governance of Climate Change", 5 *Carbon and Climate Law Review* (2011), 25, at 26–27.

[69] Scott, "The Multi-Level Governance of Climate Change", supra, note 67, at 43.

In federal states, like the US, questions have surfaced concerning the compatibility of regional climate change agreements with US federalism, and also concerning the relationship between federalism and state-based climate change policies.[70] While the US federal government has lagged behind in the development of climate change law, individual states like California have taken progressive legislative steps to regulate greenhouse gas emissions. Carlarne describes how such initiatives have led to interplay between various levels of government, for instance, concerning the regulation of greenhouse gas emissions from automobile tailpipes.[71]

Horizontal effects across national jurisdictions change occur through transnational cooperation between experts and policymakers, and the diffusion of regulatory models and innovations. Dissemination of examples, concepts and models can also transpire through bilateral cooperation, including development assistance and technical cooperation.[72] There has also been discussion about linking national emissions trading schemes, and concrete plans are underway to fully link the EU ETS and the Australian emissions trading scheme by 2018. Furthermore, migration of climate law across national boundaries caused by the desire of some actors, most notably the EU, to promote climate change mitigation through regulatory schemes that seek to influence actors located outside their territory. There is in fact a rapidly growing body of research on the external dimensions of EU climate law.[73] For one, legislation included in the EU's 2009 Climate and Energy Package contains provisions that are linked to the development of international law through the UN climate negotiations.[74] Most notably, however, EU climate law includes several elements

[70] Cinnamon Piñon Carlarne, *Climate Change Law and Policy: EU and US Approaches* (Oxford et. al.: Oxford University Press, 2010), at 67 et seq.

[71] Ibid., at 77–85.

[72] I am grateful for Elisa Morgera for drawing my attention to this point. For detailed discussion see, Gracia Marin-Duran and Elisa Morgera, *Environmental Integration in the EU's External Relations: Beyond Multilateral Dimensions* (Oxford and Portland, Oregon: Hart Publishing, 2012).

[73] Scott, "The Multi-Level Governance of Climate Change", supra, notes 67 and 68; Kati Kulovesi, Elisa Morgera and Miquel Muñoz, "Environmental Integration and Multi-faceted International Dimensions of EU Law: Unpacking the EU's 2009 Climate and Energy Package", 48 *Common Market Law Review* (2011), 829; Sebastian Oberthür and Claire Roche Kelly, "EU Leadership in International Climate Policy: Achievements and Challenges", 43 *The International Spectator* (2008), 35; Kati Kulovesi, "Climate Change in the EU External Relations: Please Follow My Example (or I Might Force You to)", in Elisa Morgera (ed), *The External Environmental Policy of the European Union: EU and International Law Dimensions* (Cambridge University Press, forthcoming, October 2012); Kati Kulovesi, "Make Your Own Special Song even if Nobody Else Sings Along: International Aviation Emissions and the EU Emissions Trading Scheme", 2 *Climate Law* (2011), 535; Joanne Scott and Lavanya Rajamani, "EU Climate Change Unilateralism: International Aviation in the European Emissions Trading Scheme", 23 *European Journal of International Law* (2012), 469 and Biswajit Dhar and Kasturi Das, "The European Union's Proposed Carbon Equalization System: Can it be WTO Compatible?", 25 November 2009, available at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1513231 (last accessed on 26 March 2012).

[74] For detailed analysis, see Kulovesi, Morgera and Muñoz, "Environmental Integration and Multi-faceted International Dimension of EU Law", supra, note 73.

that seek to both inspire and influence behaviour in national jurisdictions outside the EU.[75] This aspect of the EU climate law has surfaced questions concerning, for example, jurisdictional limits and the definition and permissibility of extraterritorial regulation and unilateral trade measures.[76] Concrete experiences from its implementation have also shown that such regulatory approaches, reflected most notably in the inclusion into the EU ETS of emissions from foreign airlines taking off from and landing at the EU airports, could well lead to competition between legal systems for power and influence.[77] Horizontal interaction between the UNFCCC and other specialised international legal regimes is discussed in chapters included in Part IV of this book.

3.3.2.1 Vertical Interaction: International and National Law

The vertical relationship between international and national law has played an important role throughout the history of the UNFCCC regime. Notably, the question concerning 'top-down' and 'bottom-up' approaches to climate change mitigation remains central in this regard. Different views on these two approaches originally emerged already during negotiations for the UNFCCC in the early 1990s, most prominently between the EU and US, and both approaches are reflected in the UNFCCC itself and subsequent evolution of the UN climate regime.[78] Notably, the Kyoto Protocol is based on a 'top down' legal architecture, traditionally favoured by the EU and developing countries. Accordingly, countries' emission reduction commitments are defined on the basis of an international treaty, implemented through domestic policies and measures.[79] Increasingly powerful is, however, an alternative 'bottom up' vision, advocated most notably by the US. The 'bottom up' approach relies on voluntary international mitigation pledges, made binding through national legislation and reported internationally (hence, it is also known as the pledge-and-review – approach). The rationale of this approach is that "[w]hat really matters is that the pledges reflect measurable, reportable and verifiable actions and that they are embedded in domestic law. From this perspective, the international legal character of a future climate agreement seems less important."[80] Nevertheless, the main motivation behind the bottom up approach is arguably political. It has been indicated that a bottom up approach takes into consideration national political sensitivities and complexities around climate change: "International pledges grow out of,

[75] Ibid.

[76] Kulovesi, "Make Your Own Special Song", supra, note 73, at 547–550.

[77] Ibid., 558. See also Scott and Rajamani, "EU Climate Change Unilateralism", supra, note 73, at 481 et seq.

[78] Daniel Bodansky, "A Tale of Two Architectures: The Once and Future U.N. Climate Change Regime", Arizona State University, March 2001, available at: http://ssrn.com/abstract=1773865 (last accessed on 14 March 2012), at 6.

[79] The numbers in Annex B of the Kyoto Protocol were, however, negotiated "bottom up" based on political bargaining rather than "top down" based on climate science.

[80] Werksman and Henderson, "The Aftermath of Copenhagen", supra, note 66, at 3.

and reflect, domestic policies rather than being superimposed on them. The role of the international regime is not to define what each state must do, but rather to help generate political will by raising the profile of the climate change issue and providing greater transparency."[81] The argument in favour of a 'bottom up' approach are, however, not universally accepted. Instead, in the ongoing long-term negotiations under the UNFCCC, the question concerning 'top down' and 'bottom up' approaches has therefore been politically highly sensitive. Proponents of a 'top down' approach include most developing countries and the EU, while US and some other members of the Umbrella Group have advocated a 'bottom up' approach.

In practice, the UNFCCC regime has recently taken steps from a Kyoto-type 'top up' legal structure towards a 'bottom up' legal architecture. The first step came as the (unadopted) 2009 Copenhagen Accord called on developed countries to commit to implementing quantified, economy-wide targets for 2020 and submit them for inclusion in Appendix I.[82] It also called on developing countries to implement mitigation actions and submit these for inclusion in Appendix II.[83] The 2010 Cancun Agreements subsequently followed the same approach, 'anchoring' developed and developing countries' mitigation pledges into two information documents compiled by the UNFCCC Secretariat.[84] In other words, the Cancun Agreements brought the bottom up approach into the official UNFCCC process.[85] In light of these recent developments it has been predicted that the future international climate regime "is likely to be a non-prescriptive regime based on self-selected nationally determined targets and actions, applicable in a broadly symmetrical fashion across countries, and backed not by a treaty-based compliance system, but by a robust reporting and (possibly) a review system."[86]

In context of the current configuration of a 'bottom up' approach under the UNFCCC it is important to note, however, that countries do not necessarily have in place national legislation to implement the mitigation pledges that they have communicated to the UNFCCC Secretariat. In this sense, the practical application of the pledge-and-review approach is lacking the crucial component of binding national legislation. The focus therefore shifts towards soft law.[87] Werksman and Herbertson

[81] Bodansy, "A Tale of Twor Architectures," supra, note 78.

[82] Decision 2/CP.15, The Copenhagen Accord, FCCC/CP/2009/7/Add.1, 30 March 2010, para. 4.

[83] Ibid., para. 5

[84] Compilation of economy-wide emission reduction targets to be implemented by Parties included in Annex I to the Convention, Revised Note by the Secretariat, UN Doc. FCCC/SB/2011/INF, 7 June 2011; Compilation of information on nationally appropriate mitigation actions to be implemented by Parties not included in Annex I to the Convention, Note by the Secretariat, UN Doc. FCCC/AWGLCA/2011/INF.1, 18 March 2010;

[85] Bodansky, "A Tale of Two Architectures", supra, note 78, at 3.

[86] Lavanya Rajamani, Jutta Brunnée and Meinhard Doelle, "Introduction: The Role of Compliance in an Evolving Climate Regime", in Jutta Brunnée, Meinhard Doelle and Lavanya Rajamani (eds), *Promoting Compliance in an Evolving Climate Regime* (Cambridge et al.: Cambridge University Press, 2012), 1, at 9.

[87] See Antto Vihma, "Analyzing Soft Law and Hard Law in Climate Change" in Chapter 7 of the present volume.

have suggested that, countries could use COP decisions and "reinvest in strengthening those aspects of the legal character of the climate change regime that are already within the UNFCCC's mandate as a legally binding treaty."[88] Reliance on soft law in climate change mitigation surfaces questions concerning, *inter alia,* effectiveness and compliance assessment. From the national law perspective, legitimacy also becomes a key consideration. For example, how much substance can be included in a COP decision before it either triggers national implementation procedures or risks violating the spirit of domestic constitutional guarantees related to democratic oversight and approval of international undertakings?

In addition to the long-standing debate on 'top down' and 'bottom up' approaches, there are interesting examples of how international and national law can interact and complement each other in the regulation of climate change law. Green Investment Schemes, for instance, illustrate how some governments may be willing to undertake stricter commitments through national legislation than under international climate treaties, and national legislation can therefore be used to enhance the environmental integrity of international climate change law.

Under Article 17 of the Kyoto Protocol, Annex I countries with legally-binding emission reduction commitments may participate in international emissions trading, provided that they comply with the eligibility criteria defined in the Marrakesh Accords.[89] One of the challenges of the Kyoto Protocol emissions trading scheme relates 'hot air,' in other words, the large amount of credits available due to the fact that emissions in several Eastern and Central European countries declined significantly from their 1990 levels as a result of economic restructuring. While the 'excess allocation' to the former communist countries was a conscious decision taken by COP 3 in 1997, it has been feared that the sale of hot air credits under Article 17 will jeopardize the environmental integrity of the Kyoto Protocol.

A legal response to the problem of 'hot air' has subsequently evolved through national legislation and other measures taken by countries concerned. Several Central and Eastern European countries, including the Czech Republic, Latvia, Hungary, Poland and Estonia, have created Green Investment Schemes.[90] The Estonian scheme, for example, is described as "a financing mechanism where finances that come from the trading of the country's CO2 quotas under the Kyoto Protocol are channelled to environmental projects and programmes that help to lower the CO2 emission."[91] In other words, countries with a Green Investment Scheme have used national legislation to ensure that international emissions trading under the Kyoto Protocol

[88] Werksman and Henderson, "The Aftermath of Copenhagen", supra, note 66, at 39.

[89] Decision 11/CMP. 1, Modalities, rules and guidelines for emissions trading, UN Doc. FCCC/KP/CMP/2005/8/Add.2, 30 March 2006.

[90] For overview, see Andreas Tuerk et al., "Working Paper: Green Investment Schemes: First Experiences and Lessons Learned", April 2010, available at: http://www.joanneum.at/climate/Publications/Solutions/JoanneumResearch_GISWorkingPaper_April2010.pdf (last accessed on 20 March 2012).

[91] Environmental Investment Center, "Green Investment Scheme", available at: http://www.kik.ee/en/kik-eng/sources-of-financing/green-investment-scheme.html (last accessed 14 February 2012).

reduces greenhouse gas emissions even if their targets in Annex B of the Kyoto Protocol would allow them to sell carbon credits without any further action to mitigate climate change. The detailed conditions for spending revenue from international emission trading are typically set forth in an Assigned Amount Unit (AAU) Purchase Agreement. Buyers can be governments or private actors authorised by their governments to participate in emissions trading in accordance with Article 17 of the Kyoto Protocol. Estonia, for example, has sold ten million AAUs to Mitsubishi Corporation.[92] According to the terms of the transaction, the proceeds will be invested to create a country-wide charging infrastructure for electric vehicles.[93] In addition, approximately 500 electric cars will be provided for the use of social workers and a grant scheme will be launched to support the purchase of electric cars by private individuals.[94] Furthermore, all owners of these electric vehicles will have to start consuming only electricity generated from renewable energy sources through a Guarantees of Origin scheme.[95] While Green Investment Schemes have developed outside the UNFCCC legal regime, their potential contribution to the problem of hot air was recognized in the decision by COP/MOP 2 to include Belarus with an emission reduction target in Annex B of the Kyoto Protocol. Accordingly, the COP/MOP welcomed that Belarus "will use any revenues generated from transfers under Article 17 of the Kyoto Protocol for further greenhouse gas emission abatement measures."[96]

There are obviously many other ways in which international and national climate change law could complement each other to increase the effectiveness and mutual supportiveness of the overall body of climate change law. One relevant area is climate finance, a key issue in the ongoing negotiations under the UNFCCC.[97] Here, developed countries' general obligation to provide climate finance under the UNFCCC could be complemented through specific legal mechanisms developed at the national level to generate climate finance. An existing example is the EU ETS and its non-binding provisions on allocating revenue from the auctioning of emission allowances.[98] Through reforms included in the EU's 2009 Climate and

[92] Estonian Government Communication Unit Press Release, "Estonia Will Promote the Use of Electric Cars under a Green Investment Scheme", 3 March 2011, available at: http://www.kik.ee/en/kik-eng/sources-of-financing/green-investment-scheme.html (last accessed 14 February 2012).

[93] Ibid.

[94] Ibid.

[95] Ibid.

[96] Decision 10/CMP.2, Proposal from Belarus to amend Annex B to the Kyoto Protocol, UN Doc. FCCC/KP/CMP/2006/10/Add.1, 2 March 2007, para. 3. According to the decision, this was still "subject to approval by the relevant authorities of the Republic of Belarus."

[97] For comprehensive overview, see Yulia Yamineva and Kati Kulovesi, "The New Legal and Institutional Framework for Climate Finance under the United Nations Framework Convention on Climate Change: A Breakthrough or an Empty Promise?" in Chapter 9 of this volume.

[98] Directive 2009/29/EC supra, note 40, Arts. 10, 10a and 10c. For discussion, see Kulovesi, Morgera and Muñoz, "Environmental Integration and the Multifaceted International Dimensions of EU Law", supra, note 73, at 855–858.

Energy Package, auctioning will gradually become the sole method of distributing allowances under the ETS.[99] The revised ETS Directive includes voluntary provisions to earmark at least 50% of the auctioning revenue for climate change mitigation and adaptation, including in developing countries.[100] In this respect, EU climate law has links to the international level, *inter alia*, through references to the Kyoto Protocol's Adaptation Fund and addressing deforestation in developing countries. While non-binding, the provisions on auctioning revenue in the context of the ETS serve to illustrate how international law and national legislation could interact vertically and complement each other in key areas, such as climate finance.

3.3.2.2 Vertical Interaction: Sub-national Initiatives

With globalization, attention is shifting towards forms of governance that take place beyond the state. Climate change cooperation is no exception. One aspect of this trend is a focus on sub-national initiatives. It has been argued that countries will be unable to meet their international climate change commitments without more explicit engagement with sub-national action.[101] Furthermore, in some countries sub-national initiatives have been key drivers for the development of climate change law. The US is the most important example in this regard.

State-led initiatives and regional cooperation have played a far more important role in the US in regulating climate change than the federal government. In her study, Carlarne describes how states, including California and New York, are "choosing to follow the footsteps of the EU to try to create robust climate change laws and policies" even if the federal government is lagging behind.[102] While noting that "states have frequently led the way for the federal government in experimenting with and promoting new environmental laws and regulations," she indicates that it is rare for them to embark on "such a widespread and coordinated campaign to develop effective environmental laws in the absence of federal leadership as in the current case of climate change governance."[103] Almost two dozen US states have some type of renewable energy obligations and over a dozen states have enacted or are in the process of enacting legislation to control greenhouse gas emissions.[104] In addition, US states are creating regional climate change partnerships,[105] also in cooperation with Canadian counterparts. These include the Western Climate

[99] Ibid.

[100] Ibid.

[101] Betsill and Bulkeley, "Cities and the Multi-level Governance of Global Climate Change", supra, note 8, at 141–142.

[102] Carlarne, *Climate Change Law and Policy,* supra, note 70, at 63.

[103] Ibid., at 61.

[104] Ibid., at 88.

[105] Ibid., at 64.

Initiative and the Regional Greenhouse Gas Initiative.[106] Carlarne concludes that state and regional programs are "now reaching a critical mass," increasing political pressure "at the national level for comparable, if not superior action."[107]

Also local governments are increasingly involved in efforts to address climate change. A prominent example is the International Council for Local Environmental Initiatives (ICLEI), a transnational network of more than 1,220 local governments from 70 different countries, representing nearly than 570 million people.[108] In 1993, ICLEI created the Cities for Climate Protection programme with five milestones to reduce greenhouse gas emissions. Many CCP member governments are taking action to mitigate climate change independently of their national governments.[109] They also interact directly across national boundaries and speak at the UN climate negotiations through the ICLEI, which has an observer status in the process.[110]

From the legal perspective, sub-national initiatives bring to the fore questions concerning competence, hierarchy and multi-level governance. As mentioned above, questions have already been raised concerning the relationship between the various state-led and regional initiatives in the US with the federal government, and concerning the relationship between EU law and local climate change initiatives.

3.3.2.3 Interaction Between National Jurisdictions

As explained above, diffusion of regulatory models and innovation across national jurisdictions is influenced by various forms of transnational cooperation between policymakers and experts. Also development cooperation and technical assistance contribute to their dissemination. However, as Shaffer and Bodansky, have recently argued, migration of legal norms also happens when "powerful states apply their national environmental standards extraterritorially, effectively imposing their standards on others."[111] Given the failure of the UNFCCC regime to steer the world on a course that avoids dangerous anthropogenic climate change, it is increasingly tempting for countries to attempt to regulate the behaviour of foreign entities and influence developments beyond their territory. This constitutes another reason for the tendency of climate law to migrate over national and legal borders.

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[106] Ibid., at 64–65.

[107] Ibid., at 89.

[108] For more information see the ICLEI website, available at: http://www.iclei.org/index.php?id=about (last accessed on 21 March 2012).

[109] Betsill and Bulkeley, "Cities and the Multi-level Governance of Global Climate Change", supra, note 7, at 145.

[110] Ibid., at 146–147.

[111] Shaffer and Bodansky, "Transnational Unilaterlaism and International Law", supra, note 63, at 4. They highlight in particular the role of the EU and the US in creating transnational environmental law, mentioning, in particular, the EU's REACH regulation for chemicals and its scheme for genetically modified organisms and the US-prescribed methods for catching tuna and shrimp.

As also noted above, EU climate law is a prime example in this regard; it includes several elements designed not only to reduce greenhouse gas emissions in Europe but also to influence developments outside the EU. This applies equally to issues regulated under the UNFCCC regime, such as the CDM, and issues on which the international community has been unable to reach meaningful agreement, such as emissions from international aviation.[112] The external dimensions of EU climate law are linked to the EU's goal of playing a leadership role in the battle against climate change. This has been the EU's political objective since the early 1990s and it has recently been given a legal formulation in the Treaty on the Functioning of the European Union.[113] Given the size of its markets, the EU is, in theory, well-placed to use its climate law to influence developments beyond its territory:

> The EU's vast internal market… provides it with a powerful bargaining chip and gives it an excellent potential to create and alter incentives. The ability to act as a gatekeeper for those who want access to the EU market and the ability to enforce EU standards on trading partners is an extremely valuable powerful resource. The sheer scale of the internal market also means that the EU can offer and take actions that will have a dramatic environmental impact.[114]

Existing examples of external reach of EU climate change law include sustainability criteria for biofuels. To implement its 10% target for renewable energy in the transport sector by 2020, the EU adopted sustainability criteria for imported and domestically produced biofuels to ensure, *inter alia*, minimum greenhouse gas emission reductions and prevent loss of biodiversity.[115] From the conventional perspective of international law, the biofuels sustainability criteria are interesting in that they seek to influence land-use in the territory of third countries.[116] On the other hand, the implementation of the scheme relies largely on economic operators, and voluntary schemes and standards can be used and 'benchmarked' against the EU's sustainability criteria.[117]

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[112] For comprehensive discussion, see Kulovesi, Morgera and Muñoz, "Environmental Integration and Multi-faceted International Dimension of EU Law", supra, note 73; and Kulovesi, "Climate Change in the EU External Relations", supra, note 73.

[113] According to Article 191(1) of the Treaty on the Functioning of the European Union, one of the objectives of the EU's environmental policy is to contribute to: preserving, protecting and improving the quality of the environment; protecting human health, prudent and rational utilization of natural resources; and promoting measures at international level to deal with regional or worldwide environmental problems, *and in particular combating climate change*. Emphasis added.

[114] Charles F. Parker and Christer Karlsson, "Climate Change and the European Union's Leadership Moment: An Inconvenient Truth?", 48 *Journal of Common Market Studies* (2010), 923, at 928.

[115] Directive 2009/28/EC of the European Parliament and the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and subsequently repealing Directives 2001/77/EC and 2003/30/EC, OJ 2009 L 140/16, Art. 17.

[116] For discussion, see Kulovesi, Morgera and Muñoz, "Environmental Integration and Multi-faceted International Dimensions of EU Law", supra, note 73, at 877–887; Jolene Lin, "The Environmental Regulation of Biofuels: Limits of the Meta-Standard Approach", *Carbon and Climate Law Review* (2011), 34; Scott, "The Multi-Level Governance of Climate Change", supra, note 68, at 29–30.

[117] Lin, "The Environmental Regulation of Biofuels", supra, note 116, at 38–40.

Another – highly controversial – example of the transboundary influence of EU climate law is the inclusion of emissions from all flights taking off and landing in EU airports in the ETS from 2012 onwards. Emissions from international aviation are growing rapidly, threatening to cancel out the impact of climate change mitigation in other sectors. Frustrated by the lack of global progress through the International Civil Aviation Organization, the EU decided to address aviation emissions unilaterally in an attempt to inspire and influence international developments.[118] The inclusion of emissions by foreign airlines has, however, generated some strong opposition. It provoked the US to consider the "European Union Emissions Trading Prohibition Act of 2011," which passed the House of Representatives in October 2011 and would have prohibited US-based airlines from participating in the ETS if a counterpart bill passed the Senate.[119] A bill with somewhat less stringent language is expected to be adopted by the full Congress in the spring of 2012.[120] Also China has prohibited its airlines from participating in the ETS and increasing fares or imposing other charges related to the scheme, and India has instructed its airlines not to participate in the scheme.[121] The EU change law, in turn, includes some built-in legal mechanisms to consider impacts of measures taken by other jurisdictions. If, for instance, a third country adopts measures to mitigate emissions from international aviation, EU bodies will decide whether aircraft operators from the country in question should be exempt from the obligation to participate in the ETS.[122]

The external ambitions of EU climate law are increasingly attracting scholarly attention, including criticism. Alluding to "the increasing propensity of the EU to engage in climate change unilateralism," Scott and Rajamani, for example, have argued that international law and the principle of common but differentiated responsibilities in particular should constrain the global dimensions of EU climate law.[123] Despite criticism and political controversies surrounding its initiatives, it is conceivable that the EU expands the external reach of its climate law in the future – and that other countries will implement similar measures. Ideas already discussed include the inclusion of imports of energy intensive products under the ETS to avoid carbon leakage.[124] While the Commission has traditionally taken a cautious approach to the idea, the concept continues to float around, supported by France in particular. The idea of imposing measures on imports played a crucial role also in the US in

[118] For comprehensive discussion, see Kulovesi, "Make Your Own Special Song", supra, note 73.

[119] H.R. 2594 European Union Emissions Trading Prohibition Act of 2011.

[120] "US Congress to Oppose EU Law on Aircraft Emissions", *Carbon Market Europe*, 3 February 2012.

[121] BBC News, "China 'bans' airlines from joining EU carbon scheme", 6 February 2012, available at: http://www.bbc.co.uk/news/business-16901106 (last accessed on 2 March 2012); "India Confirms Boycott of EU Aviation Emissions Rule," *Bridges Weekly,* 29 March 2012, available at: http://ictsd.org/i/trade-and-sustainable-development-agenda/129985/ (last accessed on 30 April 2012).

[122] Directive 2009/29/EC, supra, note 40.

[123] Scott and Rajamani, "EU Climate Change Unilateralism", supra, note 73, at 481 et seq.

[124] For discussion, see Kulovesi, Morgera and Muñoz, "Environmental Integration and Multi-faceted International Dimensions of EU Law", supra, note 73, at 858–862.

the currently frozen plans for a federal cap-and-trade scheme for greenhouse gas emissions. Furthermore, there has already been some analysis concerning China's growing influence in Africa and how this might affect climate law and policy. Accordingly, "China's potential to influence and assist African countries in the development of successful climate change policy and law is only just beginning" and "it would be fair to assume that China's efforts to help African countries with climate change action will substantially follow its own climate change policy and regulatory experience, and the model it has used for investment aid in Africa."[125]

For the present focus, these examples are interesting as they illustrate the growing number of linkages between different legal regimes and jurisdictions in regulating climate change, and they also show that the relationship between different legal authorities can be a dynamic one where one legal system reacts to developments in other jurisdictions. An issue of concern in this respect is, for instance, that unilateral measures implemented in one jurisdiction could lead to retaliation by other jurisdictions. This could potentially lead to competition between legal regimes for power and influence, or to 'forum shopping' and regulatory arbitrage, making the position of the private actors operating in several jurisdictions and getting caught in the legal battle uncomfortable and confusing. While there is no legal mechanism to ensure coordination and coherence between various national legal systems in regulating climate change, it is hoped that international law will play a role in taming climate change unilateralism. As Shaffer and Bodansky indicate:

> Unilateral action is not a one-step dance. It is better viewed as part of a dynamic process of action and reaction, reassessment and response, in which international law plays an uneasy role as both a check and a potential consolidator. International law needs to discipline (or, better stated, provide guidelines for) unilateral action, as part of this dynamic process. But, as with all matters, the trick is to get the balance right: there should be neither too little constraint, which would permit discriminatory and opportunistic policies, nor too much constraint, which would impede needed action.[126]

Overall, the landscape of climate law looks particularly dynamic from the perspective of interaction between legal systems and regimes. The relevance of this dimension of climate law can also be expected to increase as climate law continues to expand. Arguably, this poses challenges to both climate law scholars and practitioners who are required to take into consideration a plural mix of legal sources and understand their linkages and relationships.

3.4 Climate Law: Non-state Actors and Deformalization

The second trend in climate change law relates to the involvement of non-state actors and growing role of soft law in international climate governance. While conventional international actors, international organizations and sovereign states,

[125] Christopher Tung, "The Influence of Chinese Climate Law & Policy on Africa", 5 *Climate and Carbon Law Review* (2011), 334, at 344.

[126] Shaffer and Bodansky, "Transnational Unilateralism and International Law", supra, note 63, at 11.

continue to hold a prominent role, climate change initiatives are increasingly taking place beyond the UN climate regime and the nation state.[127] What is their relevance for climate law research and scholarship? This section first discusses public-private partnerships and self-regulation with respect to climate change. It then identifies some of the key issues for climate law research.

3.4.1 Public-Private Partnerships and Other Hybrid Initiatives

Over the years, various public-private partnerships and other hybrid forms of cooperation have emerged around climate change: "Along with inter-governmental treaty-making, the climate policy arena is characterized by civil-society led standard setting, self-regulation by transnational corporations and hybrid governance arrangements, such as multi-stakeholder partnerships".[128]

For climate change law, key public-private partnerships have been created under the UNFCCC and the Kyoto Protocol. Most notably, governance of the Kyoto Protocol's flexibility mechanisms is based on close cooperation between the public and private sectors.[129] The CDM, for example, can be characterised as a public-private partnership in which private actors participate both by implementing climate-friendly projects on the ground and ensuring the projects' compliance with the international rules adopted under the Kyoto Protocol.[130] In accordance with Article 12.5 of the Kyoto Protocol and international CDM rules, validation of CDM projects and certification of emission reductions is primarily done by Designated Operational Entities (DOEs). The current list of approximately 50 DOEs includes mostly commercial certification companies accredited by the CDM Executive Board.[131] In practice, DOEs play a critical role in ensuring the environmental integrity of the CDM and the Kyoto Protocol. As the CDM Validation and Verification Manual indicates: "The CDM is a rules-based mechanism. Therefore, it shall be the DOE's responsibility to ensure that… these rules are complied with for any project activities requesting registration as a proposed CDM project activity".[132] During the

[127] Okereke, Bulkeley and Schröder, "Conceptualizing Climate Governance Beyond the International Regime", supra, note 7, at 58.

[128] Bäckstrand, "Accountability of Networked Climate Governance", supra, note 8, at 76.

[129] For an overview, see Kulovesi, "The Private Sector and the Implementation of the Kyoto Protocol", supra, note 32, 146 et seq.

[130] Morgera and Kulovesi, "Public-Private Partnerships for Wider and Equitable Access to Climate Technologies", supra, note 8.

[131] UNFCCC, "List of DOEs", 2012, available at: http://cdm.unfccc.int/DOE/list/index.html (last accessed 1 March 2012).

[132] CDM Executive Board, *Clean Development Mechanism Validation and Verification Manual*, available at: http://cdm.unfccc.int/Reference/Manuals/accr_man01.pdf (last accessed 1 March 2012), para. 29.

validation process, DOEs are responsible for checking, *inter alia,* the critical requirement that the CDM project results in emission reductions that are "additional" to what would have been achieved in absence of the project. In verifying emission reductions, the essential task of DOEs is to ensure that the CDM project has achieved the planned emission reductions. This includes a visit to the project site to "assess that all physical features of the… CDM project activity proposed in the registered PDD [Project Design Document] are in place and that the project participants has operated the proposed CDM project activity as per the registered PDD".[133] Bearing in mind the basic idea that Annex I countries can meet a part of their emission reduction commitments under the Kyoto Protocol through offsets created under the CDM, it is clear that DOEs, in other words: private actors, are critical for the implementation of the Kyoto Protocol and ensuring its environmental integrity. One of the challenges, then, is that "[w]hile auditors in general rely on their reputation for independence and integrity to stay in business, there is less incentive to guard against reputational risks in the quasi-monopolistic environment that DOEs currently operate in."[134] In a similar vein, private actors will play an important role in verifying compliance with the EU's sustainability criteria for biofuels.[135]

While engagement of the private sector is widely seen as the CDM's greatest achievement, it is useful to bear in mind that the private sector's involvement in the CDM was neither clear nor uncontroversial from the outset. In fact, the market-based nature of the CDM continues to generate important challenges, especially for the mechanism's objective of contributing to the sustainable development of developing countries hosting the projects. During the evolution of the CDM, a market-based approach relying on private actors was initially pitted against an "interventionist" approach that would have relied on traditional development assistance from the public sector to implement CDM projects.[136] Those supporting the market-based approach argued, however, that governments should set the rules for the CDM while the private sector "which holds the capital and technology necessary to the CDM's success" should be entrusted to design the CDM projects.[137] Interventionists, in turn, were skeptical of the private sector's ability to assist non-Annex I countries to achieve sustainable development.[138] Indeed, as explained in Eni-ibukun's chapter on climate justice and the CDM in the present volume, the market-driven nature of the CDM has lead to the somewhat ironic situation "where those that are most in need

[133] Ibid., para. 196.

[134] Lin, "The Environmental Regulation of Biofuels", supra, note 116, at 42.

[135] See ibid. for critical assessment.

[136] Jacob Werksman, "The Clean Development Mechanism: Unwrapping the Kyoto Surprise", 7 *Review of European Community and International Environmental Law* (1998), 147, at 153.

[137] Ibid.

[138] Ibid.

of CDM projects, because of their low development levels, are actually the ones benefitting the least from the CDM."[139] All this goes to show that while private sector engagement is crucial for climate change mitigation, novel regulatory approaches, such as public-private partnerships and market-based mechanisms, also entail considerable challenges.

Under the UN climate regime, the private sector also participates in the Nairobi Work Programme on Impacts, Vulnerability and Adaptation to Climate Change along with international organizations and other public entities. To boost private sector engagement in climate change adaptation, the UNFCCC Secretariat launched in 2012 a database called Adaptation Private Sector Initiative to showcase successful strategies that businesses and communities are using to adapt to climate change, while simultaneously creating profit or avoiding losses.[140] The approximately 100 initial examples include actions by well-known global companies, such as Coca Cola, Nestlé, Levi's, Microsoft and Starbucks.[141] In launching the initiative, UNFCCC Executive Secretary Christiana Figueres underscored that "[c]limate risks which affect communities around the world are always also business risks".[142]

Outside the UNFCCC regime, one example of a public-private initiative is the Chicago Climate Exchange (CCX).[143] The CCX was initially a voluntary greenhouse gas reductions programme, which traded allowances between 2003 and 2010 and involved major corporations, utilities and financial institutions with activities in all 50 United States, 8 Canadian provinces and 16 countries.[144] Its size was estimated at around one third of the EU ETS.[145] In 2011, a new CCX Offsets Registry Programme was launched to register verified emission reductions based on a comprehensive set of established protocols.[146] The success of the CCX remains questionable, however, serving to highlight some of the challenges related to the efficacy of non-state initiatives discussed below in sect. 3.4.3.

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[139] Tomilola Eni-ibukun, "Climate Justice: The Clean Development Mechanism as a Case Study" in Chapter 10 of the present volume.

[140] UNFCCC Press Release, "UNFCCC secretariat aims to help communities and businesses become climate-resilient with help of new online tool", 26 January 2012, available at: https://unfccc.int/files/press/press_releases_advisories/application/pdf/pr20122601_apsidbase.pdf (last accessed on 1 March 2012).

[141] Ibid.

[142] Ibid.

[143] See, for example, Andonova et al., "Transnational Climate Governance", supra, note 6, at 62; Bulkeley and Newell, *Governing Climate Change,* supra, note 5, at 95.

[144] CCX Fact Sheet, December 2011, available at: https://www.theice.com/publicdocs/ccx/CCX_Fact_Sheet.pdf (last accessed on1 March 2012).

[145] Ibid.

[146] Ibid.

3.4.2 Private Sector Engagement and Voluntary Regulatory Initiatives

The landscape of climate change law becomes even more colourful when taking into consideration regulatory initiatives around climate change launched by civic players exclusively. As such, private sector activities are crucial for climate change mitigation and one of the key objectives of climate change law is to regulate them, driving investment towards climate-friendly technologies and activities.

The private sector has been closely following climate change policy since the beginning, attempting to influence developments both internationally and within national boundaries. Initially, most private actors mobilized to stall action against climate change.[147] Subsequently, however, most have taken a more responsible stance. One of the watersheds came in December 2007 as more than 150 well-known global companies published the Bali Communiqué on Climate Change in the Financial Times, calling for a comprehensive and legally binding climate change agreement under the United Nations.[148] Networks like the World Business Council for Sustainable Development, an initiative bringing together more than 190 chief executive officers of international companies, have also been active in promoting climate change policies.

Many businesses have also begun to see climate change action as an opportunity rather than a threat.[149] A number of companies are undertaking self-regulation activities and participating in voluntary schemes and agreements to reduce greenhouse gas emissions and improve their energy efficiency. One such initiative is the Carbon Disclosure Project, which requests information annually from thousands of companies concerning their greenhouse gas emissions, energy use and other relevant issues.[150] Companies like Shell and BP have also experimented with internal emissions trading schemes. There are also various other voluntary regulatory initiatives related to carbon trading, such as the Gold Standard for the CDM, the Voluntary Carbon Standard (VCS) and the Climate, Community and Biodiversity Standard. Overall, there is a large number of partnerships and soft law initiatives seeking to address climate change.

3.4.3 Non-state Actors and Climate Law Research

Scholars of both international relations and law are increasingly interested in non-state actors, soft law and 'governance' – a notion that (in contrast to 'government')

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[147] Bulkeley and Newell, *Governing Climate Change,* supra, note 5, at 88.

[148] An advert published in the global edition of *The Financial Times*, 30 November 2007.

[149] Bulkeley and Newell, *Governing Climate Change*, supra, note 5, at 87.

[150] For more information, see the Carbon Disclosure Project website, available at: https://www.cdproject.net/en-US/Programmes/Pages/climate-change-programs.aspx (last accessed on 21 March 2012).

includes the idea that it can take place without the state.[151] There has already been research on what is described as transnational climate governance, "a distinct form of global governance operating in a political sphere where public and private actors interact across national borders and political jurisdictions."[152] Some legal scholars have drawn attention to 'global law,' characterized as "a new body of law that emerges from various globalization processes in multiple sectors of civil society independently of laws of the nation states."[153] According to Teubner, this "fully fledged law" is distinguished from the traditional law of nation states by its peculiar characteristics: while lacking in institutional and political support, global law is "closely coupled with globalized socio-economic processes."[154]

In legal theory, accounting for the role of non-state actors points towards legal pluralism[155] and approaches challenging the traditional role of sovereign states as exclusive norm-setting institutions and emphasizing private norm-production by trade associations, professional/technical organizations, commercial arbitrators, multinational companies and other civic players.[156] Proponents of these approaches have made the argument that traditional legal theories are inadequate to grasp the increasingly multifaceted normative reality. According to Rosen-Zvi, "the world is increasingly governed by an intricate web of norm-producers, which includes international organizations, transnational bodies, states in federative systems, regions, countries, cities, national and transnational associations of subnational entities, as well as a host of private and quasi-private entities that are emerging as new types of actors on the global regulatory stage."[157] Also Perez highlights that the global economic system "is governed by multiple systems of law" and it "is not based on a coherent set of normative or institutional hierarchies. It represents, rather, a highly pluralistic mixture of legal regimes, with variable organisational and thematic structures."[158] Perez thus emphasizes the role of private legal systems, arguing that such systems are not made of the familiar sources of public international law, "but rather, are the result of (private) norm-production by trade associations, professional/technical organizations, commercial arbitrators,

[151] Andonova et al., "Transnational Climate Governance", supra, note 6, at 55.

[152] Ibid., at 68–69.

[153] Teubner, "Global Bukowina", supra, note 10, at 2.

[154] Ibid.

[155] As Koskenniemi has explained, vocabulary on legal pluralism has emerged from three different sources: the study of local laws and de facto practices in modern society; native law's coexistence with imported metropolitan laws in the context of colonialism; and globalisation. Here, the focus is on legal pluralism associated with globalisation. See Martti Koskenniemi, "Global Legal Pluralism: Multiple Regimes and Multiple Modes of Thought", Harvard, 5 March 2005, at 14.

[156] See Teubner, "Global Bukowina", supra, note 10, for comprehensive discussion.

[157] Issachar Rosen-Zvi, "Climate Change Governance: Mapping the Terrain", 5 *Carbon and Climate Law Review* (2011), 234, at 236.

[158] Perez, *Ecological Sensitivity and Global Legal Pluralism*, supra, note 11, at 7.

Multinational Enterprises and other civic players."[159] In response to such developments, it has been suggested that the scope of legal analysis should be expanded. Berman, for example, has argued that applying a pluralist framework to the global arena, "is essential if we are to more comprehensively conceptualize a world of hybrid legal spaces."[160] In the context of climate change law, Rosen-Zvi indicates that the study of climate change regulation "should go beyond traditional or even transnational regulation to encompass hybrid regulatory forms which blur the distinction between the public and the private and destabilize boundaries between the global, the national and the sub-national."[161]

Accounting for the role of non-state actors in the legal sphere comes, however, with its own challenges. For one, a project aiming to paint a comprehensive image of the complex and colourful climate governance structures involving non-state actors entails the risk that descriptiveness becomes the main objective. According to Koskenniemi:

> The problem with legal pluralism is the way it ceases to pose demands on the world. Theorists of globalisation are so enchanted by the complex interplay of the technical regimes and a positivist search for a vocabulary that would encompass all of them that they lose thus the critical point of their exercise. This is visible, for instance, in the habit of collapsing the distinction between law and regulation, a favourite technique of international relations study, and to describe law as another regime in thoroughly instrumental terms: 'legalization' as a policy-choice sometimes dictated by strategic interests.[162]

Differences between the notions of 'government' and 'governance' and 'legislation' and 'regulation' surface important questions concerning legitimacy and effectiveness; also pointing towards ideological debates surrounding neoliberalism.[163] Indeed, it was during the dawn of neoliberalism that "public regulation became anathema to powerful social forces" and the push began "for private, voluntary systems of environmental governance, as well as for public-private partnerships that might accomplish the kind of things that advocates of legal regulation had once demanded."[164] In this respect, questions can be raised concerning the effectiveness of the various climate change partnerships and their implications for legitimacy and

[159] Ibid., at 8.

[160] Berman, "Global Legal Pluralism", supra, note 10, at 1159.

[161] Rosen-Zvi, "Climate Change Governance: Mapping the Terrain", supra, note 157, at 234.

[162] Koskenniemi, "Global Legal Pluralism", supra, note 155, at 16.

[163] For a critical overview of neoliberalism, see David Harvey, *A Brief History of Neoliberalism* (Oxford et al.: Oxford University Press, 2005).

[164] Craig N. Murphy, "Privatizing Environmental Governance", 9 *Global Environmental Politics* (2009), 134, at 134, drawing the link to the age of Thatcher, Reagan and global neoliberalism. See also Simon Roberts, "After Government? On Representing Law without a State", 68 *Modern Law Review* (2005), 1, at 24, arguing that "it is very difficult to specify in a convincing way a secure grounding for 'law' if we try to shake it free from particular forms historically associated with the state."

democracy. Arguments supporting such informal initiatives include their flexibility, collaborative nature, speed and diverse expertise.[165] Some of the key concerns, then, include that such partnerships 'hollow out' the state, reinforce neoliberalism and accelerate privatization of environmental governance.[166] Furthermore, it is feared that they increase business influence, reinforce elite multilateralism and lead to fragmentation of global governance as well as to the retreat of state responsibility in the production of public goods.[167]

Koskenniemi has also questioned whether "informal networking by private industries, non-governmental stakeholder groups and national administrators have produced a stable basis for a formal pluralist statement."[168] Fisher, in turn, has called for "head-on engagement with extended legal pluralism," explaining that:

> By extended legal pluralism I mean the range of different legal and quasi-legal norms that can operate in transnational environmental law, whether international agreements, dispute settlement, policy-making, or negotiation. Legal pluralism is not just another word for the political science term 'governance', or for 'soft law'. Rather, it is a term that signifies that there is much that is legal in transnational environmental law but that its legal nature requires careful and nuanced analysis. To put it another way, transnational environmental law is not just politics and it does have legal content.[169]

Against this background, climate law scholarship faces the challenge of accounting for the various private sector initiatives and public-private partnerships, while retaining a normative focus.

3.5 Conclusions

Acknowledging that climate law is already a highly specialised field of legal practice, this chapter has explored the landscape of climate law and scholarship, and identified two broad trends. The first relates to the realisation that climate change is increasingly regulated at multiple levels and the various levels tend to interact and influence each other. Their hierarchies, synergies and tensions are therefore relevant for understanding the overall impact of legal norms related to climate change, including their tensions and synergies. Second, climate law is also characterized by deformalization; looking broadly, it encompasses various soft law sources and non-state actors. Accounting for the various private sector and soft law initiatives, and discerning their legal relevance while avoiding becoming overtly descriptive and losing the normative focus appear as further challenges for climate law research.

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[165] Bäckstrand, "Accountability of Networked Climate Governance", supra, note 8, at 77.

[166] Ibid.

[167] Ibid.

[168] Koskenniemi, "Global Legal Pluralism", supra, note 155, at 14–15.

[169] Fisher, "The Rise of Transnational Environmental Law", supra, note 9, at 49.

Given the rapid evolution of the field in recent years, climate law research has tended to focus on substantive issues. This chapter has shown, however, that there are ample opportunities for climate law research to engage more closely with central themes in ongoing theoretical discussions on, inter alia, globalisation, legal pluralism, fragmentation, global administrative law, multi-level governance and transnational environmental law.