

INVITED ARTICLE

Innovativeness and Paralysis in International Climate Policy

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Abstract

This article describes the challenges of using the constrained tools of international law to negotiate a sustainable framework to address climate change. It sets out to show how the particularities of the problem have led to creative and innovative solutions expanding the borders of international law. To this end, the article discusses carbon market mechanisms, the compliance regime of the Kyoto Protocol, and the emerging framework to create incentives to reduce land-based emissions in developing countries. These examples illustrate that the recognition of the role of sub-national and private entities in mitigating climate change has had significant impact on the rules of the climate regime. But the article also asserts that the UN process, while recognizing the role of private actors, is still inadequately equipped to involve non-state actors in a meaningful way. The climate regime therefore challenges the traditional thinking about interstate relationships. No longer solely a matter for international environmental law, contemporary environmental governance has become a global affair, which makes the lens of transnational law a useful tool to think about these issues in practice in a more intellectually fruitful and relevant way. This article thereby provides a snapshot of the type of issues and discussion that readers of this journal can look forward to in the years to come.

Keywords: Climate Change Negotiations, Transnational Governance, REDD, Emissions Trading, Compliance Regime, UNFCCC, Kyoto Protocol

1. INTRODUCTION

Recent years have seen a proliferation of actors, activities, and ideas put forward to address global climate change. The flurry of publications, meetings and concepts stands in sharp contrast to the slow progress in negotiating a global agreement to facilitate adequate action on climate change in the context of the United Nations (UN) Framework Convention on Climate Change (UNFCCC or the Convention).¹ Looking

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¹ New York, NY (US), 9 May 1992, in force 21 Mar. 1994, available at: <http://unfccc.int>.

back, the 1997 negotiation of the Kyoto Protocol² appears to have been a simple undertaking – resulting in, from today’s perspective, a rather simplistic treaty. With increased recognition of the complexity of the climate problem and its human, ecological, economic and political implications, the simple dichotomy between developed and developing countries needs to be reconsidered, as well as the state-centric, top-down approach of the UNFCCC and its Kyoto Protocol.

The objectives of this article are twofold. It seeks to describe the challenges of using the rather constrained tools of international law to negotiate a sustainable framework for addressing climate change, but it also sets out to show how the particularities of the problem have led to creative and innovative solutions which have expanded the borders of international law. Informed by my personal knowledge and experience, I have chosen (i) the carbon market mechanisms; (ii) the compliance regime of the Kyoto Protocol; and (iii) the emerging framework to reduce land-based emissions in developing countries to describe how international law creates incentives to reduce greenhouse gas (GHG) emissions. These examples will illustrate that the recognition of the role of sub-national and private entities in mitigating climate change has had significant impact on the rules of the climate regime.

But I will also argue that the UN process, while recognizing the role of private actors, is still inadequately equipped to involve non-state actors in a meaningful way. The climate regime therefore challenges the traditional thinking about inter-state relationships by pointing to the forms of interaction between state and non-state actors. Alongside the maturation of international environmental law, contemporary environmental governance has become a global affair which makes the lens of ‘transnational law’³ a useful tool to think about these issues in practice in a more intellectually fruitful and relevant way. In this regard, this article provides a snapshot of the type of issues and discussion that readers of this journal can look forward to in the years to come.

2. AT A SNAIL’S PACE: PROGRESS IN INTERNATIONAL CLIMATE NEGOTIATIONS

An international agreement on climate change has to take into account an extraordinary variety of economic and social concerns, and their complexity. Forging consensus around climate change requires outstanding sectoral knowledge and diplomatic skill – capacities that are not systematically developed within environmental administrations around the globe.⁴ It also requires the integration of competing concerns, as there is

² Kyoto (Japan), 10 Dec. 1997, in force 16 Feb. 2005, available at: http://unfccc.int/kyoto_protocol/items/2830.php.

³ Transnational law here refers to all law which regulates actions or events that transcend national frontiers.

⁴ Despite the increasing recognition that, while global warming may still be categorized as an environmental problem, addressing climate mitigation and adaptation requires economically and socially sustainable solutions; state delegations to the UNFCCC often continue to be led by officials from environmental ministries.

no country and no economic sector that would not be affected by climate change, either by the need to adapt to its adverse effects or by the emissions caused by economic activity.

The UN tradition of global participation is an essential pillar of the legitimacy of the UNFCCC that establishes the basis and platform for international climate negotiations.⁵ The global membership of the Convention reflects the global nature of the problem that the treaty sets out to tackle. It has also led to an emphasis on procedures that are guiding a transparent and interactive negotiation process around which a strong community of practice has developed.⁶ However, the inclusiveness and consensus-based nature of the UNFCCC decision-making processes also contribute to an incredibly slow pace of substantive progress in tackling climate change.⁷ Today, it may take days to agree to nothing more than the agenda for a negotiation session, whereby agenda discussions both serve to reopen agreed items and to introduce new topics.⁸ Agreement on substantive issues, most importantly a timetable to reduce emissions, has become almost impossible. While insiders still perceive incremental progress from the outside, the pace of the progress can easily be mistaken for complete stalemate.⁹

Looking back, the negotiations of the Convention in 1992 and the Kyoto Protocol in 1997 seemed like a walk in the park compared with today's navigating through territory full of cliffs and abysses. While climate negotiations in the 1990s were not without challenges, the problem was still at a considerable distance from mainstream politics. The discussions leading to the adoption of the UNFCCC were mostly of a scientific nature, aiming to establish a common understanding of climate science.¹⁰ The agenda was also driven mainly by the North, and seemed less relevant for developing countries. Consensus on the UNFCCC could be reached in little more than three years.¹¹ The Convention entered into force in 1994 and almost immediately led to the discussion of an instrument that would formulate GHG phase-out schedules. In 1997, when climate negotiators met in Kyoto, Japan, they adopted targets and the flexibility mechanisms that allowed collaborative efforts to meet emissions targets, the offsetting of emissions and the trading of assigned allowances.

⁵ J. Brunnée, S.J. Toope, *Legitimacy and Legality in International Law: An Interactional Account* (Cambridge University Press, 2010), at p. 178.

⁶ *Ibid.*, at pp. 145, 184.

⁷ The rules of procedures of the UNFCCC, adopted at the first conference of the parties, exclude a decision on voting (Art. 42): see FCCC/CP/1995/7, available at: <http://unfccc.int/resource/docs/cop1/07a01.pdf>.

⁸ See 'Summary of the Bonn Climate Change Conference', *Earth Negotiations Bulletin*, 12(513)SB34, 20 June 2011, available at: <http://www.iisd.ca/download/pdf/enb12513e.pdf>.

⁹ A Google search for 'stalemate in climate negotiations' results in 1,290,000 hits from around the world.

¹⁰ The establishment of the Intergovernmental Panel on Climate Change (IPCC) in 1988 was an important step towards creating a scientific basis for political action.

¹¹ See D. Bodansky, 'The History of the Global Climate Change Regime', in U. Luterbacher & D.F. Spriz (eds.), *International Relations and Global Climate Change* (MIT Press, 2001), pp. 23–40.

Since the Kyoto Protocol defined significant obligations for only a few countries, it has been widely ratified without establishing a widely accepted, common ground.¹² Today, the common ground seems less visible, but it is more solid. Countries have made significant progress towards establishing a common understanding on climate change in the last 15 years. The Bali Action Plan, adopted at the 13th session of the Conference of the Parties (COP-13) to the UNFCCC¹³ launched a process to establish a shared vision for long-term cooperative action. Yet, COP-15 held in 2009 in Copenhagen, Denmark – which was meant to result in agreement on a longer-term climate agreement – ended with lukewarm support for an informal accord that became the official result of a chaotic summit. The expectations had been very high: in meetings leading up to Copenhagen, there seemed to be broad support for a package of decisions as a basis for a new legal instrument under the Convention. In addition, there was hope for an agreement on a second commitment period under the Kyoto Protocol. However, a combination of clumsy moves by the Danish presidency,¹⁴ diplomatic misjudgment, failed and uncoordinated attempts to broker bilateral, trilateral and other deals, and also the eventual lack of political will, led to the Copenhagen Accord that was supported by the major emitters but not by the plenary of the Conference.¹⁵

After Copenhagen, many commentators wrote off the UNFCCC as the platform for forging agreement on international cooperation on climate change. The climate negotiations seemed to prove that the consensus-based system of the UN was outdated and no longer able to lead to an agreement on complex international issues. Expectations for COP-16 (held in December 2010 in Cancun, Mexico) were low and there was hardly any press coverage of the conference. Ironically, this only increased pressure on negotiators, the conference's presidency and the UNFCCC Secretariat. Many saw Cancun as a last chance to save the UNFCCC as the forum of international climate negotiations. The Mexican presidency invested a lot in rebuilding the trust that was shattered after Copenhagen. At the end, COP-16 adopted a comprehensive set of decisions, although with persistent objections from the Bolivian delegation. While the Cancun agreements partly mitigated the Copenhagen failures, they hardly mark a breakthrough. They have brought the parties back to the negotiating table; they also defined elements and steps towards a broader climate agreement, but the fundamental challenges of coming to an agreement on a cooperative, international climate framework remain (see the text box for a summary of those challenges).

¹² N. 5 above, p. 167.

¹³ Decision 10/CP.12, UN Doc. FCCC/CP/2007/6/Add.1, 14 Mar. 2008, available at: <http://unfccc.int/resource/docs/2007/cop13/eng/06a01.pdf>.

¹⁴ J. Vidal, 'Copenhagen Climate Failure Blamed on "Danish Text"' *The Guardian (Online Edition)*, 31 May 2010, available at: <http://www.guardian.co.uk/environment/2010/may/31/climate-change-copenhagen-danish-text>.

¹⁵ Decision 2/CP.15, UN Doc. FCCC/CP/2009/11/Add.1, 30 Mar. 2010.

The Challenges of Negotiating an International Climate Treaty

1. Some problems relate to the motivation of taking action:

- *Distance of cause and effect.* There is a significant intra- and intergenerational disparity between those who benefit from GHG emissions and those who suffer from the impact. Carbon emitting activities still result in quick gains and easy profits. Policy-makers would have to correct these externalities, but as long as emitting is understood to create jobs politicians will have a hard time to convince their constituencies that climate policy would benefit them.

2. Other problems relate to the social and economic implications of addressing climate change:

- *Dealing with equity.* The system of the UNFCCC is based on the differentiation of developing and developed countries. This divide should reflect the ability to pay and support action ('common but differentiated responsibilities').¹⁶ As global geopolitics and emissions profiles have changed, this simplified divide has become a barrier for an effective climate policy.¹⁷
- *The finance question.* There is also no consensus about sharing the costs of climate change mitigation and adaptation. The question is relevant in the discussions between developed and developing countries, but also among developed or developing countries. The loss of competitiveness is a great concern and the trade implications of climate change mitigation are increasingly sensitive.

3. Yet other problems relate to the way in which a treaty can create incentives for action:

- *Targets and timetables.* The logic of climate change for the last 15 years has been the logic of the Kyoto Protocol – namely, building the international climate regime around mandatory emissions reduction targets. While in the first commitment period of the Protocol only developed countries accepted emissions targets, the underlying notion was that over time more and more countries would accept such targets. However, history has proved otherwise. Instead of more, there are fewer countries today that are ready to accept legally binding targets than there were in 1997.

¹⁶ Art. 3.1, UNFCCC.

¹⁷ It has been argued that the South–North divide is not the main problem of climate negotiations, though; in the negotiation history North–North disagreements were at least as relevant as South–North confrontations: see D.A. Mejía, 'The Evolution of the Climate Change Regime: Beyond a North–South Divide?', ICIP Working Paper, Institut Catala International, Per La Pau, Barcelona, Spain, June 2010, available at: http://www20.gencat.cat/docs/icip/Continguts/Publicacions/WorkingPapers/Arxius/WP10_6_ANG.pdf.

4. Finally, some problems relate to the evolving nature of climate negotiations:

- *Increased complexity.* This promotion of climate change to a priority for national and international policy makers went along with a proliferation of issues that moved on the climate change agenda. Today there is no single individual who can follow, or even fully grasp, all the agenda items negotiated under the UNFCCC. This includes a full generation of negotiators who have spent most of their professional life negotiating climate change, often being confined for weeks in hotels surviving on bad food and with little sleep.

So far, the climate regime has proved to be resilient in the face of attacks and failures. It has survived the brash rejection of the United States (US) to ratify the Kyoto Protocol and, while it is still struggling to cope with the failure of the Copenhagen COP, it is likely to recover from that hit as well. Held together by the procedural, ‘interactional’¹⁸ law of the climate regime and by the shared understanding that climate change is a common problem of humankind, there is an emerging consensus that every state and every sector has to contribute to climate change mitigation and all countries have to take measures to adapt. The question is just how, and by how much?

3. CATALYZING INNOVATION: TRADE, COMPLIANCE, AND SECTORAL INCENTIVES

Despite the fundamental challenges that climate negotiators confront, the climate regime has given rise to some of the most innovative solutions in international environmental law. Perhaps because it is the only way to achieve any progress, the climate regime has proved to be innovative at its fringes, while being comparatively static on the inside. In the following section, I will provide three examples of climate change negotiations leading to innovative mechanisms and solutions that challenge the traditional limitations of international law. I will review the emergence and functioning (and flaws) of carbon markets, the Kyoto Protocol compliance mechanism, and the emerging incentive framework to address emissions from deforestation in developing countries.

3.1. *Trading Emissions Rights*

The Kyoto Protocol did not invent emissions trading. However, it has created an international carbon market whose common currency is measured in tons of GHG emissions. It has elaborated and refined trading rules and created an international convention on how to measure, account for, and transfer emissions reduction credits and international allowances. These conventions have found their way into both

¹⁸ N. 5 above, p. 131.

mandatory emissions trading schemes, such as the European Union (EU) Emissions Allowance Trading System (EU ETS),¹⁹ and voluntary carbon market standards, such as the Verified Carbon Standard (VCS).²⁰ The UNFCCC/Kyoto Protocol rules, in turn, have been influenced both by guidance and standards formulated by the Intergovernmental Panel on Climate Change (IPCC) as well as early domestic emissions trading systems (such as the US SO_x/NO_x Trading System).²¹

Climate change mitigation is well suited for market-based solutions. The fact that GHGs do not have local pollution effects offers the opportunity to put in place schemes where emissions are reduced where it is easiest and most cost effective to do so. Therefore, the integration of emissions trading into the Kyoto Protocol reduces the costs of compliance. It also facilitated bringing the US on board to initially support and sign the treaty, even though it was, in 1997, already very uncertain whether the US Congress would ever accept (imposed) emissions targets and limitations. From a historical perspective, 'climate change was a problem in need of a solution, and . . . emissions trading was a solution in search of bigger and bigger problems to solve'.²² It was therefore tempting to include the concept of emissions trading into the Kyoto Protocol, even when studies on real costs (including transaction costs), and adequate institutions were still missing. Instead, the further elaboration of the mechanisms was deferred to the COP, which complied with this mandate by adopting the Marrakesh Accords in 2001.²³

The concept of emissions trading implicitly includes the private sector in the Kyoto Protocol compliance framework. It reflects the fact that the reduction of GHG emissions will require investment that goes beyond the public sector's ability to finance. The definition of market mechanisms directly under an international agreement remains a particular feature of the Kyoto Protocol. There are three market mechanisms defined under the Protocol, which differ in the way in which the emissions allowances or credits are generated, at which level the incentives are expected to work, and where. Developed country parties that have GHG emissions limitation and reduction commitments under the Kyoto Protocol (Annex B Parties) can meet their commitments not only by taking domestic measures, but also by making use of International Emissions Trading (IET), Joint Implementation (JI), and the Clean Development Mechanism (CDM):

¹⁹ Directive 2003/87/EC of 13 Oct. 2003 establishing a Scheme for Greenhouse Gas Emission Allowance Trading within the Community and Amending Directive 96/61/EC [2003] OJ L275/32, amended through Directive 2008/101/EC [2009] OJ L8/3; and Directive 2009/29/EC [2009] OJ L140/63.

²⁰ See Verified Carbon Standards, available at: <http://www.v-c-s.org>.

²¹ D. Burtraw & S.J. Szambelan, 'U.S. Emissions Trading Markets for SO₂ and NO_x, Resources for the Future', Discussion Paper RFF DP 09-40, Washington DC, 2009; M.W. Gehring & C. Streck, 'Emissions Trading: Lessons from SO_x and NO_x Emissions Allowance and Credit Systems, Legal Nature, Title, Transfer, and Taxation of Emission Allowances and Credits' (2005) 35 *Environmental Law Reporter*, pp. 10219–35.

²² R. Calel, 'Climate Change and Carbon Markets: A Panoramic History', Centre for Climate Change Economics and Policy Working Paper No. 62, Grantham Research Institute on Climate Change and the Environment Working Paper No. 52, July 2011, available at: http://www.cceep.ac.uk/Publications/Working-papers/Papers/60-69/WP62_Climate-change-carbon-markets-panoramic-history.pdf, at p. 1.

²³ UNFCCC, Marrakesh Accords, from Decision 2/CP.7 through to Decision 24/CP.7, adopted and confirmed in 2005 as Decisions of the COP serving as a Meeting of the Parties to the Kyoto Protocol (CMP), available at: <http://unfccc.int/documentation/decisions/items/3597.php>.

- Article 17 of the Kyoto Protocol establishes the basis for international emissions trading. The Article does not refer to ‘emissions’ or ‘trading’ but merely allows the transfer and acquisition of emissions rights defined and created under the Protocol. To allow such transfers it assumes the existence of registries and an infrastructure that allows the accounting for and tracking of emissions units.
- Article 6 of the Kyoto Protocol defines JI – a project-based mechanism that allows the transfer of emissions reduction units (ERUs) between developed country parties that have been generated by JI projects developed by parties to the Protocol or authorized legal entities. Other than assigned amounts of units that are allocated to state parties, the ERUs of JI are generated at the project level. Emissions reductions are measured against a business-as-usual emissions baseline. They are generated and transferred primarily by private entities.
- Article 12 of the Kyoto Protocol defines the CDM under which developed countries may implement projects in developing countries that will reduce GHG emissions. Through the CDM, parties aim to break new ground in promoting international investment in climate-friendly technologies for the benefit of developing countries.²⁴

While the flexible mechanisms (the CDM especially) have been exposed to criticism and much bad press²⁵ – particularly to claims that many non-additional projects have been registered and that these projects create fake or fraudulent emissions reductions²⁶ – its success in mobilizing private sector support and finance for mitigation projects in developing countries is beyond doubt. The prospect of selling and acquiring carbon credits has unleashed private activity in clean energy and technology sectors.²⁷ The Kyoto Protocol rules and procedures have also been essential in shaping voluntary and national emissions trading schemes. Examples of how the Protocol has led to a standardization of emissions trading rules and procedures include:

²⁴ M. Netto & K.-U. Barani Schmidt, ‘The CDM Project Cycle and the Role of the UNFCCC Secretariat’, in D. Freestone & C. Streck (eds.), *Legal Aspects of Carbon Trading* (Oxford University Press, 2009), pp. 213–30.

²⁵ B. Pearson & Y.S. Loong, ‘The CDM: Reducing Greenhouse Gas Emissions or Relabeling Business as Usual?’, *CDM Watch, Third World Network*, Mar. 2003, available at: <http://www.twinside.org.sg/title/cdm.doc>; A. Michaelowa & P. Purohit, ‘Additionality Determination of Indian CDM Projects: Can Indian CDM Project Developers Outwit the CDM Executive Board?’, *Climate Strategies, Discussion Paper CDM-1*, Feb. 2007, available at: <http://www.internationalrivers.org/files/additionality-cdm-india-cs-version9-07.pdf>, or <http://www.noe21.org/docs/Michaelowa-teripress-2007>. In 2007, there was an intense media debate on additionality and sustainability benefits of the CDM. The Stockholm Environment Institute has compiled a list of publications that criticize the CDM for its lack of additionality: see B. Haya, ‘Compilation of Evidence that the Majority of Projects in the CDM are Non-additional’, 11 Sept. 2008, available at: <http://www.co2offsetresearch.org/PDF/AdditionalityLackCDM.pdf>.

²⁶ Michaelowa & Purohit, *ibid.*; L. Schneider, ‘Is the CDM Fulfilling its Environmental and Sustainable Development Objectives? An Evaluation of the CDM and Options for Improvement’, *Oeko Institut, Berlin*, 2007, available at: <http://www.oeko.de/oekodoc/622/2007-162-en.pdf>; M.W. Wara & D.G. Victor, ‘A Realistic Policy on International Carbon Offsets’, *Stanford University, Energy and Sustainable Development Working Paper No. 74*, Apr. 2008, available at: http://pesd.stanford.edu/publications/a_realistic_policy_on_international_carbon_offsets.

²⁷ There are 3,500 registered CDM projects for which 740m tCO₂e (740 million tons of CO₂ equivalent) emissions reductions had been issued by Oct. 2011. See UNFCCC website: <http://cdm.unfccc.int>.

- accounting in tons of CO₂ equivalent;²⁸
- the establishment of business-as-usual baselines to measure project emissions reductions;
- testing of additionality as eligibility criteria of emissions reductions from projects;
- *ex post* issuance of GHG credits based on independent verification; and
- the establishment of tracking and trading registries;²⁹
- stakeholder consultations as a requirement for GHG-reducing projects at the local and international levels.

The success of the Kyoto Protocol and its standard-setting function for global GHG markets is all the more surprising as the implementation of the flexible mechanisms was anything but easy. Previous experiences with emissions trading systems had been limited to small systems controlled by homogenous institutions equipped with full enforcement powers.³⁰ The reliance on existing standards and institutions has helped to control transaction costs. In contrast, international carbon markets have started out by referring to a small, evolving set of rules to be implemented by a hugely varying and inexperienced set of entities and institutions. Few of the rules had been tested. Departing from the concepts framed in short articles in the actual Protocol, over the implementation arrangements of the Marrakesh Accords, to a very detailed set of decisions by the subsidiary bodies set up to administer the mechanism (the CDM Executive Board and the JI Supervisory Committee), the rules governing international carbon market transactions have been developed in a pragmatic rather than strategic manner. While this approach facilitates learning, implementation could have been accelerated if regulation had been supported by proper analysis in the first place. It also has become obvious that, despite all the innovation, traditional instruments and institutions of international law were often unable to make rulings without bias and with satisfactory predictability. The bodies set up to administer carbon market mechanisms have turned out to be poorly equipped to deal with private sector concerns; private project participants lack basic access to due process and are often exposed to retroactive and poorly justified decisions.³¹

3.2. *Complying with the Kyoto Protocol*

Monitoring and enforcing compliance is one the fundamental challenges of international law. In the absence of a higher authority than the party state, it is often not clear why governments abide by international agreements, in particular where circumstances change and treaty provisions conflict with the short-term priorities of governments in charge. If at all, the ‘puzzle of compliance is why governments,

²⁸ An exception is the Regional GHG Initiative in the Northeast of the US: Regional Greenhouse Gas Initiative, available at: <http://www.rggi.org>.

²⁹ The EU has integrated the (more complex) EU trading registries with the Protocol’s registries and by choosing to shadow the Protocol’s assigned amount units (AAUs) with EU emission allowances.

³⁰ N. 22 above.

³¹ C. Streck & J. Lin, ‘Making Markets Work: A Review of CDM Performance and Need for Reform’ (2008) 19(2) *European Journal of International Law*, pp. 409–42.

seeking to promote their own interests, ever comply with rules³² that are not in their immediate self-interest. While ratified treaties are generally recognized as being legally binding, this effect has been challenged when local decision-makers felt that treaty compliance was no longer in a country's interest. In the case of the Kyoto Protocol, Canada – claiming that it could not comply with its emissions reduction obligations – has offered some particularly interesting interpretations of the nature of the Protocol. Justice LeBel of the Canadian Supreme Court has argued that the lack of enforceability of the Protocol's provisions would mean that they had no legally binding effect.³³ Politicians, in the absence of support for the treaty content, have also argued that compliance with international law was a choice rather than an obligation.³⁴

Taking into account the apparent liberty that lawyers and non-lawyers take in interpreting the effect of international law, it is striking how strong is the call for a renewed legally binding instrument governing international climate change post-2012. The strongest proponent for a binding treaty may be the EU, which, for internal political reasons, prefers a formal legal instrument to facilitate implementation across all 27 Member States of the EU.³⁵ The EU is supported by developing countries that have an interest in extending the Kyoto Protocol without major revisions.³⁶ In this context it is interesting to review the compliance regime of the Protocol which, still within the limitations of international law, is unusually coercive.

The compliance mechanism of the Kyoto Protocol has been developed on the basis of its Article 18 that mandated the Conference of the Parties (COP) serving as a Meeting of the Parties to the Kyoto Protocol (CMP) to approve 'appropriate and effective procedures and mechanisms to determine and to address cases of non-compliance with the provisions of [the] Protocol'. Consequences of non-compliance should take into account 'the cause, type, degree and frequency of non-compliance'. Article 18 also clarified that any procedures and mechanisms 'entailing binding consequences' should be adopted by means of an amendment of the Protocol. It is therefore not surprising that, at the time the Kyoto Protocol compliance mechanism was negotiated, the question of whether non-compliance procedures could be agreed through a simple COP decision, or whether

³² R.O. Keohane, *After Hegemony: Cooperation and Discord in the World Political Economy* (Princeton University Press, 1984).

³³ Justice Louis LeBel observed that '[a]s international law is generally non-binding or without effective control mechanisms, it does not suffice to simply state that international law requires a certain outcome': see (Justice) L. LeBel & G. Chao, 'The Rise of International Law in Canadian Constitutional Litigation: Fugue or Fusion? Recent Developments and Challenges in Internalizing International Law' (2002) 16 *Supreme Court Law Review* (2d), pp. 23–63, at 62.

³⁴ 'Harper's Letter Dismisses Kyoto as "Socialist Scheme"', *CBC News*, Canada, 30 Jan. 2007, available at: <http://www.cbc.ca/news/canada/story/2007/01/30/harper-kyoto.html>; and 'Harper Letter Called Kyoto a "Socialist Scheme"', *Canadian Press*, Canada, 30 Jan. 2007, available at: <http://www.lilithgallery.com/articles/environmental/Harper-Vs-Kyoto.html#Letter>.

³⁵ These general procedures consist of the control exerted by the European Commission acting as the 'keeper of the treaties', control which can lead to an action before the European Court of Justice (ECJ): Art. 258 Treaty on the Functioning of the European Union (TFEU). A-S. Tabau & S. Maljean-Dubois, 'Non-compliance Mechanisms: Interaction between the Kyoto Protocol System and the European Union' (2010) 21(3) *European Journal of International Law*, pp. 749–63.

³⁶ Joint Statement issued at the Conclusion of the Eighth BASIC Ministerial Meeting on Climate Change, 28 Aug. 2011, available at: <http://www.info.gov.za/speech/DynamicAction?pageid=461&sid=21113&tid=41020>. The BASIC group of countries includes Brazil, South Africa, India, and China.

it would need an amendment of the Protocol, created significant controversies.³⁷ In the spirit of Article 18, a COP decision was probably insufficient; however, an amendment was impractical because of the need for ratification, and the fact that binding consequences arise only for those parties that have ratified the amendment. Pragmatism prevailed and the Kyoto Protocol non-compliance procedure was agreed by a COP decision in 2001.³⁸ This decision was confirmed in 2005 by a CMP decision after the Protocol had entered into force.³⁹ The fact that it is not clear to what extent the procedure displays a binding effect has not reduced the ambition of the compliance mechanism.

The Compliance Committee of the Kyoto Protocol is arguably the most far-reaching institution developed so far in the context of non-compliance rules in any multilateral environmental agreement (MEA).⁴⁰ It combines elements of managerial and sanction-oriented compliance mechanisms.⁴¹ The managerial element helps to address the causes for non-compliance through a 'cooperative, problem-solving approach'⁴² and the coercive element allows the imposition of sanctions.⁴³ The Compliance Committee is composed of two branches: the facilitative branch that is responsible for 'providing advice and facilitation to Parties in implementing the Protocol',⁴⁴ and the enforcement branch that is responsible for 'determining whether a party included in Annex I is not in compliance'⁴⁵ with its quantified emissions limitation or reduction commitment, the methodological and reporting requirements under Articles 5(1)–(2) and 7(1) and (4) of the Protocol, and the eligibility requirements under Articles 6, 12 and 17 of the Protocol.⁴⁶

³⁷ J. Depledge, 'Tracing the Origins of the Kyoto Protocol: An Article-by-Article Textual History', UNFCCC Technical Paper, FCCC/TP/2000/2, 25 Nov. 2000, available at: <http://unfccc.int/resource/docs/tp0200.pdf>; L. MacFaul, 'Developing the Climate Regime: the Role of Verification', in R. Avenhaus, N. Kyriakopoulos, M. Richard & G. Stein (eds.), *Verifying Treaty Compliance: Limiting Weapons of Mass Destruction and Monitoring Kyoto Protocol Provisions* (Springer, 1996) p. 171–212, at 185.

³⁸ UNFCCC, Decision 24/CP.7, 21 Jan. 2002, available at: <http://unfccc.int/resource/docs/cop7/13a03.pdf>.

³⁹ UNFCCC, Decision 27/CMP.1, 30 Mar. 2006, available at: <http://unfccc.int/resource/docs/2005/cmp1/eng/08.pdf>.

⁴⁰ The compliance system of the Kyoto Protocol builds on the non-compliance procedure adopted under the Montreal Protocol (Montreal Protocol on Substances that Deplete the Ozone Layer, Montreal (Canada), 16 Sept. 1987, in force 1 Jan. 1989, available at: http://ozone.unep.org/new_site/en/montreal_protocol.php), that made one of the tasks of the Compliance Committee to 'identify the facts and possible causes relating to individual cases of non-compliance': see UNEP, 'Report of the Tenth Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer, Annex II: Non-Compliance Procedure', UNEP Doc. OzL.Pro.10/9, 3 Dec. 1998, available at: http://ozone.unep.org/Meeting_Documents/mop/10mop/10mop-9.e.pdf.

⁴¹ J. Brunnée, 'Enforcement Mechanisms in International Law and International Environmental Law', in U. Beyerlin *et al.* (eds.), *Ensuring Compliance with Multilateral Environmental Agreements: A Dialogue between Practitioners and Academia* (Brill, 2005), pp. 1–23.

⁴² A. Chayes & A. Handler Chayes, *The New Sovereignty: Compliance with International Regulatory Agreements* (Harvard University Press, 1995), at p. 3.

⁴³ In favour of sanctions as part of the international compliance mechanisms, see G.W. Downs, D.M. Roche & P.N. Barsoom, 'Is the Good News about Compliance Good News about Cooperation?' (1996) 50 *International Organization*, pp. 379–406, at 382–7.

⁴⁴ UNFCCC, Decision 27/CMP.1, n. 39 above, Annex V, para. 4.

⁴⁵ *Ibid.*

⁴⁶ *Ibid.*, Annex, para. 2.

The consequences applied by the two branches differ considerably. As in the case of other MEAs, the Kyoto Protocol places heavy emphasis on ‘justificatory discourse’⁴⁷ and involves ‘states in a variety of increasingly dense collective processes of deliberation, justification and judgment’.⁴⁸ However, the Kyoto Protocol also has a more explicit sanction-oriented component than other multilateral environmental treaties. While the facilitative branch may provide further advice, assist, and formulate recommendations for the party concerned, the enforcement branch may directly apply sanctions. The consequences at the disposal of the enforcement branch that should take ‘into account the cause, type, degree and frequency of the non-compliance’⁴⁹ include:

- a declaration of non-compliance;
- the development of an implementation plan to remedy the non-compliance; and
- suspension of eligibility, where the non-compliance relates to one or more of the eligibility criteria under Articles 6, 12 or 17 of the Protocol.

In addition to suspending a party’s eligibility for participation in the Protocol’s trading mechanisms, the compliance body is charged with applying a specific consequence to a party’s non-compliance with its emissions reduction commitment. If a party fails to meet its emissions target, its excess emissions will be deducted (at a penalty rate of 1.3) from future emissions allowances.

While the Compliance Committee lacks powers to enforce its decisions, some of the sanctions that it applies can be directly executed by UNFCCC bodies. In particular, the decision to ban parties from participation in trading mechanisms is under the direct control of the UNFCCC bodies. The Kyoto Protocol has thus established institutions that not only have nominal authority but also de facto enforcement powers. These powers are closely related to the regulation of carbon markets by the UNFCCC institutions. To ensure the integrity and thus the effective operation of the emissions trading

⁴⁷ N. 42 above. Non-compliance procedures (NCPs) have been negotiated under the following: the Montreal Protocol (n. 40 above); the UNECE Convention on Long-Range Transboundary Air Pollution (LRTAP), Geneva (Switzerland), 13 Nov. 1979, in force 16 Mar. 1983, available at: <http://www.unece.org/env/lrtap>; the UNECE Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention), Espoo (Finland), 25 Feb. 1991, in force 10 Sept. 1997, available at: <http://www.unece.org/env/eia>; the Kyoto Protocol, n. 2 above; the Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (Basel Convention), Basel (Switzerland), 22 Mar. 1989, in force 5 May 1992, available at: <http://www.basel.int>; the UNECE Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention), Aarhus (Denmark), 25 June 1998, in force 30 Oct. 2001, available at: <http://www.unece.org/env/pp/welcome.html>; the Cartagena Protocol on Biosafety to the Convention on Biological Diversity (Cartagena Biosafety Protocol), Montreal (Canada), 29 Jan. 2000, in force 11 Sept. 2003, available at: <http://bch.cbd.int/protocol>; the Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (Rotterdam PIC Convention), Rotterdam (The Netherlands), 11 Sept. 1998, in force 24 Feb. 2004, available at: <http://www.pic.int>; the Stockholm Convention on Persistent Organic Pollutants (Stockholm POPs Convention), Stockholm (Sweden), 22 May 2001, in force 17 May 2004, available at: <http://www.pops.int>; and the Food and Agriculture Organization (FAO) International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA), Rome (Italy), 3 Nov. 2001, in force 29 June 2004, available at: <http://www.planttreaty.org>.

⁴⁸ *Ibid.*

⁴⁹ UNFCCC, Decision 27/CMP.1, n. 39 above.

mechanisms, the Kyoto Protocol needed a compliance regime that could prevent their abuse.⁵⁰

3.3. *Reducing Emissions from Deforestation*

Along with reform of the existing market mechanisms, parties to the UNFCCC discuss new and more ambitious mechanisms that would cover policies or sectors in developing countries to create incentives for more robust, long-term emissions reductions. One of the most developed emerging element of a post-2012 mechanism is a framework to incentivize emissions reductions from deforestation and forest degradation (REDD+).⁵¹ Despite the sizeable climate change mitigation potential of the land-use sector, the international climate regime so far has not created many incentives to tap into this opportunity. The CDM under the Kyoto Protocol offers incentives for mitigation of land use related emissions in developing countries through manure and waste water management, as well as afforestation and reforestation. However, neither the UNFCCC nor the Kyoto Protocol rewards for reduced emissions from deforestation or the enhancement of carbon stocks through soil carbon sequestration in developing countries.

But things are changing. Over the last few years, the contribution of land-use practices to global climate change has received increasing attention in international climate negotiations. The primary focus rests on the design of strategies and incentive mechanisms that reduce emissions from deforestation and forest degradation, with a mitigation potential of about 4.3 GtCO₂e (gigatons of CO₂ equivalent) by 2020.⁵² At COP-11 in Montreal in 2005, developing countries tabled a motion that indicated that they were prepared to reduce emissions from deforestation provided that appropriate incentives were put in place.⁵³ That motion triggered intense negotiations under the UNFCCC and the establishment of various initiatives to build capacity and develop REDD+ demonstration projects.

In Cancun, the parties established an incentive mechanism that encourages developing countries to contribute to mitigation actions in the forest sector through the full scope of REDD+ activities.⁵⁴ These reductions are contingent upon developed countries providing adequate and predictable financial, technical and technological support.⁵⁵ With appropriate support, developing countries are also encouraged to

⁵⁰ Ibid.

⁵¹ The full reference to REDD+ includes sustainable forest management, the role of conservation, and enhancement of forest carbon stocks.

⁵² Project Catalyst, 'Towards a Global Climate Agreement', Synthesis Briefing Paper, June 2009, available at: http://www.project-catalyst.info/images/publications/synthesis_paper1.pdf.

⁵³ 'Reducing Emissions from Deforestation: Approaches to Stimulate Action', submission by the Governments of Papua New Guinea & Costa Rica, to Item 6 of the provisional agenda of CP-11, 11 Nov. 2005, available at: <http://www.rainforestcoalition.org/documents/COP-11AgendaItem6-Misc.Doc.FINAL.pdf>.

⁵⁴ UNFCCC, Decision 1/CP.16 (Outcome of the work of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention) ('AWG-LCA Outcome'), Section III (C) & Annex I, available at: <http://unfccc.int/resource/docs/2010/cop16/eng/07a01.pdf>.

⁵⁵ Ibid., paras. 71 and 74.

develop a national REDD+ strategy, reference levels and measurement systems, and an information system on how social, legal, and environmental safeguards are being addressed throughout the implementation of REDD+ activities.⁵⁶ The REDD+ decision recognizes implementation through a phased approach beginning with: (i) the development of national strategies, policies and measures, and capacity building; followed by (ii) the implementation of national policies that could involve demonstration activities; and evolving into (iii) results-based actions that should be fully measured, reported and verified.⁵⁷

REDD+ requires developing countries to take responsibility and contribute to climate change mitigation. They need to develop policies and institutions that support a paradigm shift in land use. This goes far beyond the project approval requirement of the CDM. The formulation of incentives to reward emissions reductions at the national or policy level is designed to catalyze policy changes without dictating particular policies or measures. Taking into account the sensitivities surrounding land use and the relevance of the agricultural sector to the economies of developing countries, it is remarkable how much support there is for REDD+. In fact, since the start of the REDD+ negotiations, developing countries have exercised leadership in moving the agenda item forward. In this and other aspects, the emerging mechanisms hold lessons that go beyond the land use sector and indicate the following broader policy changes under the UNFCCC:

- *National ownership and policy integration*: Rather than formulating top-down targets, the process supporting emissions reductions in developing countries seeks to integrate sustainability in longer-term policies.
- *Partnership*: There are few precedents for implementing development goals in combination with forest protection and sustainable resource management. Developed countries have largely only learned to manage their resources after exploiting and contaminating them first. Developing countries are now asked to reduce poverty and increase wealth and opportunities while managing their resources sustainably. It is essential that these efforts are supported by the combined knowledge and resources from developed and developing countries in an equal partnership.
- *Accounting and measurement*: The policy solutions will differ among countries. The UNFCCC can, however, facilitate the comparability of efforts and success through harmonized measurement, reporting, and verification systems (MRV) that take into account the data constraints many developing countries are facing.
- *Financial support*: International incentive mechanisms for mitigation and for adaptation are most likely to consist of a mix of market and non-market support mechanisms that complement domestic finance. Given the limitations of public (international and domestic) finance leveraging, private investment will be essential.

⁵⁶ Ibid., para. 71.

⁵⁷ Ibid., para. 73.

- *Sub-national and non-state participation*: The success of REDD+ will depend on the engagement of all relevant actors, including local authorities, communities and the private sector. Building on a decade of decentralization efforts, it is essential that mitigation and adaptation policies are supported by all levels of governance and all sectors of society – in particular, the potential stewards of forests, but also by those that control the drivers of deforestation.
- *Information and learning*: The performance-based nature of funding for climate change mitigation facilitates the establishment of national (and/or international) performance checks and MRV. The resulting information ensures transparency of the policies and measures towards stakeholders and allows countries to adapt the programmes based on results and lessons learned.

The emerging REDD+ framework holds many lessons for the further development of international climate policies. Its performance-based nature, the spirit of partnership, the integration of sub-national and national efforts, and the leadership of developing countries is indicative of a change in engaging in collaborative mitigation strategies. While it remains to be seen how successful REDD+ will be, it bodes well that the negotiation process is accompanied by analysis and readiness activities.⁵⁸ Marking a difference in the adoption of the Kyoto Protocol mechanisms, fast-start finance and demonstration activities allow the building of support and capacities in national governments that are reflected in increasingly informed negotiations supported by a strong community of non-governmental stakeholders. Readiness processes integrated in the development of low carbon development strategies are likely to continue and receive support through bilateral or multilateral cooperation. As long as such processes are coordinated and informed by consultations and stakeholder involvement, they have the potential to facilitate long-term change in the formulation of national strategies. The land-use sector is one of the most prominent examples, where integration of all levels of governance, as well as consideration of incentives for relevant private and community stakeholders, is essential for further success.

4. CONCLUSIONS

The implementation of the Kyoto Protocol has taken the international community on a journey to test the feasibility of emissions trading, carbon markets and the inclusion of non-state stakeholders directly into the treaty's incentive system. Back in 1997, experience in international GHG emissions trading was missing. More than a decade of such experience now allows for the analysis of transaction and implementation costs, targeted sectors, and the appropriate governance structures that was not available when the Protocol was negotiated. Such analysis can help to inform policy makers of the appropriate role of international carbon markets within a broader portfolio of policies. It can help to ensure that international carbon policies are complementary,

⁵⁸ See, e.g., the activities undertaken in the context of the Forest Carbon Partnership Facility by the World Bank, available at: <http://www.forestcarbonpartnership.org/fcp>.

and that markets are used to address that part of the problem for which they are most effective.⁵⁹

The Kyoto Protocol system of tables and targets became acceptable through the allowing of flexibility in meeting emissions targets. The trading regime led to a compliance mechanism with greater powers and authorities than comparable mechanisms. Current negotiations struggle with the question of how to achieve the overall emissions stabilization goal (Article 2 of UNFCCC) in the context of bottom-up mitigation proposals. Confronted with the lack of government action, the regime becomes more inclusive, embracing private sector finance and sub-national activities. In order to involve the private sector that has to provide the required source of innovation, technologies and finance, a set of practical policies and incentives is urgently required to help to remove the obstacles to finance low carbon and adaptation strategies. The emerging REDD+ framework is an interesting case study in whether private sector participation can be mobilized through an international mechanism and whether national governments will put in place the appropriate incentive systems.

⁵⁹ N. 20 above.