Book Reviews

Atmospheric Justice: A Political Theory of Climate Change, by Steve Vanderheiden.

New York, N.Y.: Oxford University Press, 2008, 282 pp., \$49.95, hardcover.

The most recent scientific evidence makes it clear that human activity has noticeably contributed to the increased concentration of carbon dioxide and other greenhouse gases in the atmosphere, thickening the greenhouse gas layer around the globe, altering the carbon cycle and, ultimately, changing climatic patterns. These dynamics are expected to generate an array of impacts on our planet, especially on poorer countries. However, this evidence has not yet prompted adequate responses from the international community. According to Steve Vanderheiden, the inability to build a successful global architecture to tackle climate change mostly derives from the non-inclusion of ethical considerations on responsibility for, and vulnerability to, climate impacts. On the basis of this assumption, Atmospheric Justice systematically addresses the concepts of justice and responsibility in the context of climate change.

The aim of the book is twofold: on the one hand it seeks to explore, from the perspective of applied ethics and political theory, justice and responsibility in climate change; on the other, it seeks to draw attention to some theoretical problems that characterize existing theories of justice and responsibility in this context. Consequently, the argument develops on two levels: that of theory (ethical and political), and that of its application. After an introduction on climate science and policy which highlights the main challenges that an effective global climate regime should address and provides the necessary background for the ensuing theoretical analysis, Chapters 2, 3, and 4 define the philosophical foundation of Vanderheiden's contribution. Chapter 2 scrutinizes, within a liberal egalitarian account, the notion of justice as a possible normative reference for tackling climate impacts. In particular, Vanderheiden applies the analytical perspective of John Rawls's theory of justice as fairness to scrutinize ethical issues within the United Nations Framework Convention on Climate Change (UNFCCC) and its Kyoto Protocol. Chapter 3 extends the scope

of justice to the international level. The author makes clear that, according to the cosmopolitan perspective, justice – which traditionally focuses on allocations within one country – can span national boundaries in the context of climate change, in order to accommodate its supranational causes and effects. Chapter 4 justifies another extension of liberal theories of justice, namely to future generations, which are also highly likely to be hit by the climate impacts caused by their ancestors. In his reasoning, Vanderheiden convincingly demonstrates that liberal accounts of justice resist these extensions and are valuable referents for the ethical investigation of climate change.

The remaining chapters pertain to the realm of applied theory, in so far as they examine the various facets of the notion of responsibility (Chapter 5), and some conditions for its proper attribution (Chapter 6) in the context of climate change. Vanderheiden argues that a global climate regime should consider both collective and individual responsibility, and he concludes that states should be held responsible for their contributions to the generation of climate impacts that cause undeserved harm because of their capacity for both moral deliberation and moral action. Finally, Chapter 7, in light of the book's arguments, examines alternative schemes for allocating climate burdens. First, Vanderheiden proposes a modified account of the "equal shares" approach, in which the allocation of emission rights takes account of both historical ignorance and a distinction between survival and luxury emissions. Then he explores different versions of the "equal burdens" approach, and concludes that they are unfair because they violate equity and responsibility.

Atmospheric justice is a valuable and authoritative addition to the growing literature on the ethics and politics of climate change. Its major strength is its thorough analysis of responsibility in both theoretical and empirical terms. It is, however, a rather demanding and dense read, because Vanderheiden's arguments are sometimes grounded in necessarily abstract, yet sound, philosophical foundations. Nonetheless, they maintain policy-relevance thanks to the author's ability to contextualize them in the domain of climate change. One drawback to the book is that it is mostly concentrated on distributive justice, despite its recurrent assertions concerning the importance of procedural justice, which is addressed rather cursorily in the last few pages, without genuine theoretical treatment.

The book could be mainly of use to academics working in the fields of political theory, applied ethics and climate policy, who may find resources in it to organize and systemize their understanding of the challenges raised by justice and responsibility in international climate change.

Marco Grasso Dipartimento di Sociologia e Ricerca Sociale, Università degli Studi di Milano Bicocca/ Department of Geography, King's College London

Climate Change and Forests: Emerging Policy and Market Opportunities, edited by Charlotte Streck, Robert O'Sullivan, Toby Janson-Smith and Richard Tarasofsky.

London and Washington D.C.: Chatham House & Brookings Institution, 2008. 346 pp., £39.99, hardback.

Tropical deforestation is responsible for between 15 and 20 percent of global greenhouse gas emissions. Reducing it presents a potentially very cost-effective mitigation option, which in addition may provide significant co-benefits in terms of biodiversity conservation and poverty alleviation. Not surprisingly, therefore, Reduced Emissions from Deforestation and Degradation (REDD), a mechanism that would compensate developing countries for reducing these emissions under the global climate regime, is one of the themes at the centre of the discussions on a climate regime post-2012. However, there is still considerable uncertainty as to how such a mechanism could eventually look like and how it can best build on the experience with forestry projects under the Clean Development Mechanism (CDM).

In this context, Climate Change and Forests – edited by Charlotte Streck Robert O'Sullivan, Toby Janson-Smith, and Richard Tarasofsky – provides a timely and highly valuable stock-taking exercise of this complex issue, bringing together a range of contributions by recognized experts from both science and practice. Framed as a "practical reference manual for anyone concerned about climate policy", the book aims to provide "a realistic view of the role that the forest and land-use sector can play in a post-Kyoto regime". The volume comprises five parts. After introductory chapters on climate change and forestry by the editors, and on the concept of market-based mechanisms for forest conservation and climate change by Rosimeiry Portela and colleagues, the second part focuses on the "international arena". Eveline Trines traces the history of land-use, land-use change and forestry (LULUCF) in the global climate regime, complemented by a well-informed review of the rules governing forestry projects under the Kyoto Protocol's flexible mechanisms by Sebastian M. Scholz and Martina Jung. Johannes Ebeling discusses the main risks and criticisms voiced on the issue of forestry-based mitigation and carbon trading, keeping a distinctly pro-market perspective. Further chapters in this section explore the opportunities for broadening the scope of forestry projects to account for wider co-benefits (Jan Fehse) and the complex links between bioenergy projects and climate change (Bernhard Schlamadinger et al.).

Part three, entitled "practical experiences", moves from the policy to the implementation side. This section, more disparate in character than the previous, addresses the various challenges in the design and implementation of carbon forestry projects under the CDM. The contribution by Bruno Locatelli and colleagues makes for a particularly interesting read. Summarizing experiences of developers of CDM forestry projects in Latin America, they conclude that the real difficulties in the development of such projects do not primarily lie in the technical domain, but relate to legal and market issues, especially the structure and content of the contract negotiations. These are questions that Monique Miller and her co-authors tackle in their sophisticated treatment of the legal and contractual side of forest carbon transactions under the CDM. Dominique Hervé and Edmundo Claro add the national perspective, discussing the legal status and progress of CDM forestry projects in Chile. Franck Lecocq and Stéphane Couture approach the issue from a different angle, presenting an economic analysis of the types of investors likely to buy temporary credits from forestry projects. An accessible overview of key methodological questions in measuring and monitoring carbon emissions from forestry projects by Timothy Pearson and colleagues rounds off this part of the book.

Part four, "outlook: avoided deforestation and the post-Kyoto agenda", represents the core of the book, delving into design options for a REDD mechanism under a post-2012 climate regime. The introduction by Robert O'Sullivan limits itself to the main technical and policy questions in the design of REDD, bypassing, however, controversial subjects such as the rights of indigenous peoples and local communities and the national implementation of REDD. Three of the following chapters ("an accounting mechanism for REDD in developing countries" by Danilo Mollicone et al., "compensated reductions" by Stephan Schwartzman and Paulo Moutinho, and the "nested approach" by Charlotte Streck et al.) outline prominent proposals for REDD design that continue to be influential in the scientific and policy debates. The chapter by Manuel Estrada Porrua and Andrea García-Guerrero stands somewhat apart, describing the evolution of Latin-American views on carbon sinks in the global climate regime. The more political treatment of the issues at stake and of negotiating positions and rationales of countries in this chapter would have been desirable also in other chapters and outside the scope of Latin-America.

Part five, "national systems and voluntary carbon offsets", provides a welcome addition to the volume, presenting experiences and recent developments from the voluntary sector and from domestic legislations. The first chapter by Karen Gould et al. reviews policy-making on forest sinks in Australia and New Zealand, where market-based strategies in this sector are relatively advanced. Subsequently, Cathleen Kelly and colleagues discuss subnational developments and the federal debate in the United States. The latter, however, has since been largely overtaken by the rapid legislative developments and bills proposed since the Obama administration entered into office. Particularly interesting are the last two chapters on the role of forestry offsets in the voluntary market. Katherine Hamilton et al. coin the term "charismatic carbon", denoting the marketing potential of the various co-benefits of forestry projects that constitute a key competitive advantage in the voluntary sector. Marisa Meizlish and David Brand in turn look at the practical side of project development for the voluntary market.

Overall, Climate Change and Forests makes for an impressive tour d'horizon of the role of carbon markets for forest conservation and climate change mitigation. Without exception, all contributions to the volume are of high quality and contain pertinent, relevant information for academics, policymakers and practitioners alike. The short case studies of existing or emerging carbon forestry projects interspersed throughout the volume present a considerable value added for the reader, illustrating the challenges, but also the success stories of on-theground implementation of this project type. It is regrettable, however, that the focus of this comprehensive book is so narrowly on the link between forests and carbon markets. A market-based approach to REDD is by no means the "only game in town", and it would have made the ambition of the volume only more credible if it had also included some of the more critical voices in the debate. Instead, for instance, many of the chapters counter the perceived risks of "flooding" the carbon market by REDD credits with the almost automatic argument that this can be prevented by the adoption of more stringent emission reduction targets by industrialized countries. A look at the ongoing negotiations, however, reveals that prospects for this are far from assured. Just as relevant would have been a more critical investigation into the challenges of implementing REDD in countries with weak governance, rampant corruption, and ineffective public institutions. After all, if even a very advanced legislature like the European Union encounters significant difficulties in implementing an emissions trading scheme, one can only wonder how a country like Indonesia or the Democratic Republic of Congo is to establish a REDD scheme that succeeds in effectively devolving incentives and REDD payments down to the community level. What is needed is an honest debate about the advantages and

drawbacks of alternatives or interim solutions to a market-based REDD mechanism – and one would hope that the editors will follow up with a companion volume that tackles some of these questions as well. Be that as it may, on the whole, Climate Change and Forests certainly represents the most complete and sophisticated volume on marketbased approaches to forests and climate change to date, and is a must-read for anyone looking for a state of the art overview on this subject matter.

Constanze Haug

Researcher, Institute for Environmental Studies, Vrije Universiteit Amsterdam

New Publications

This section provides an overview of recent literature on legal aspects of carbon trading and other dimensions of climate change regulation. Please send any suggestions for inclusion in this list to the Book Review Editor at van.asselt@lexxion.de.

Books

Boykoff, Max (ed.) The Politics of Climate Change: A Survey. Published by Routledge, 2009.

320 pp., £130.00 (hardcover), ISBN: 978-1-85743-496-5

Burns, William C.G., and Hari M. Osofsky (eds.) Adjudicating Climate Change: State, National and International Approaches. Published by Cambridge University Press, 2009.

412 pp., £50.00 (hardcover), ISBN: 978-0-521-87970-5

Cottier, Thomas, Olga Nartova, and Sadeq Z. Bigdeli (eds.) International Trade Regulation and the Mitigation of Climate Change. World Trade Forum. Published by Cambridge University Press, 2009.

456 pp., £70.00 (hardcover), ISBN: 978-0-521-76619-7

Freestone, David, and Charlotte Streck (eds.) Legal Aspects of Carbon Trading: Kyoto, Copenhagen, and Beyond. Published by Oxford University Press, 2009.

720 pp., £95.00 (hardcover), ISBN: 978-0-19-956593-1

Helm, Dieter, and Cameron Hepurn (eds.) The Economics and Politics of Climate Change. Published by Oxford University Press, 2009.

576 pp., £30.00 (hardcover), ISBN: 978-0-19-957328-8

Honkonen, Tuula. The Common but Differentiated Responsibility Principle in Multilateral Environmental Agreements: Regulatory and Policy Aspects. Published by Kluwer Law International, 2009.

432 pp., \$158.00 (hardcover), ISBN: 978-90-411-3153-9 Salih, M.A. Mohamed (ed.) Climate Change and Sustainable Development: New Challenges for Poverty Reduction. Published by Edward Elgar, 2009.

336 pp., £75.00 (hardcover), ISBN: 978-1-84844-409-6

Selin, Henrik, and Stacy D. VanDeveer (eds.) Changing Climates in North American Politics: Institutions, Policymaking, and Multilevel Governance. Published by MIT Press, 2009.

352 pp., \$26.00 (paperback), ISBN: 978-0-262-51286-2

Weishaar, Stefan. Towards Auctioning: The Transformation of European Green House Gas Emissions Trading System - Present and Future Challenges to Competition Law. Published by Kluwer Law International, 2009.

272 pp., \$145.00 (hardcover), ISBN: 978-9-04113-198-0

Articles

1. General Climate Regulation – International

Aguirre, Geoffrey J. "Why Cutting Down Trees is Part of the Problem, but Planting Trees Isn't Always Part of the Solution: How Conceptualizing Forests as Sinks Can Work Against Kyoto," 11 Oregon Review of International Law (2009), pp. 205-224.

Biermann, Frank, Philipp Pattberg, Harro van Asselt, and Fariborz Zelli. "The Fragmentation of Global Governance Architectures: A Framework for Analysis," 9 Global Environmental Politics (4/2009), pp. 14-40.

Boute, Anatole. "The Potential Contribution of International Investment Protection Law to Combat Climate Change," 27 Journal of Energy and Natural Resources Law (3/2009), pp. 333-376. Davis, William Daniel. "What Does "Green" Mean? Anthropogenic Climate Change, Geoengineering, and International Environmental Law," 43 Georgia Law Review (3/2009), pp. 901-951.

Freeman, Jody, and Andrew Guzman. "Climate Change and U.S. Interests," 109 Columbia Law Review (2009), pp. 1531-1601.

Greene, Herman F. "Hot, Crowded, and Not-So-Flat: The Changing Climate for Corporations," 44 Wake Forest Law Review (2009), pp. 799-832.

Kulaço€lu, Vesile, and Ludivine Tamiotti. "National Climate Change Mitigation Measures and Their Implications for the Multilateral Trading System: Key Findings of the WTO/UNEP Report on Trade and Climate Change," 43 Journal of World Trade (5/2009), pp. 1115-1144.

Lester, Sarah, and Karsten Neuhoff. "Policy Targets: Lessons for Effective Implementation of Climate Actions," 9 Climate Policy (5/2009), pp. 464-480.

Meckling, Jonas O., and Gu Yoon Chung. "Sectoral Approaches for a Post-2012 Climate Regime: A Taxonomy," 9 Climate Policy (6/2009), pp. 652-668.

Müller, Benito, Niklas Höhne, and Christian Ellermann. "Differentiating (Historic) Responsibilities for Climate Change," 9 Climate Policy (6/2009), pp. 593-611.

Neuhoff, Karsten. "Understanding the Roles and Interactions of International Cooperation on Domestic Climate Policies," 9 Climate Policy (5/2009), pp. 435-449.

O'Brien, Julia. "The Equity of Levelling the Playing Field in the Climate Change Context," 43 Journal of World Trade (5/2009), pp. 1093-1114.

Quinn, Elias Leake. "The Solitary Attempt: International Trade Law and the Insulation of Domestic Greenhouse Gas Trading Schemes from Foreign Emissions Credit Markets," 80 University of Colorado Law Review (2009), pp. 201-254.

Rajamani, Lavanya. "Addressing the 'Post-Kyoto' Stress Disorder: Reflections on the Emerging Legal Architecture of the Climate Regime," 58 International and Comparative Law Quarterly (4/2009), pp. 803-834.

Richardson, Benjamin J. "Climate Finance and Its Governance: Moving to a Low Carbon Economy Through Socially Responsible Financing?," 58 International and Comparative Law Quarterly (3/2009), pp. 597-626.

Veel, Paul-Erik. "Carbon Tariffs and the WTO: An Evaluation of Feasible Policies," 12 Journal of International Economic Law (3/2009), pp. 749-800.

Vezirgiannidou, Sevasti-Eleni. "The Climate Change Regime Post-Kyoto: Why Compliance is Important and How to Achieve," 9 Global Environmental Politics (4/2009), pp. 41-63.

Winkler, Harald, Shaun Vorster, and Andrew Marquard. "Who Picks up the Remainder? Mitigation in Developed and Developing Countries," 9 Climate Policy (6/2009), pp. 634-651.

Zhang, ZhongXiang. "Multilateral Trade Measures in a Post-2012 Climate Change Regime? What Can be Taken from the Montreal Protocol and the WTO?," 37 Energy Policy (12/2009), pp. 5105-5112.

2. General Climate Regulation – Domestic and Regional

Aung, Christopher. "The Regulation of Greenhouse Gas Emissions by New York State from a Legal Perspective: Is a Tax of Market-Based System Optimal?," 29 Pace Law Review (2009), pp. 739-764.

Carlson, Ann E. "Iterative Federalism and Climate Change," 103 Northwestern University Law Review (2009), pp. 1097-1161.

Ferrey, Cameron, and Steve Ferrey. "Past is Prologue: Recent Carbon Regulation Disputes in Europe Shape the U.S. Carbon Future," 16 Missouri Environmental Law and Policy Review (2009), pp. 650-689.

Purvis, Nigel. "The Case for Climate Protection Authority," 49 Virginia Journal of International Law (2009), pp. 1007-1062. Schatz, Andrew. "A Tale of Three Signatories: Learning from the European Union, Japanese, and Canadian Kyoto Experiences in Crafting a Superior United States Climate Change Regime," 70 University of Pittsburgh Law Review (2009), pp. 593-644.

Stallworthy, Mark. "Legislating Against Climate Change: A UK Perspective on a Sisyphean Challenge," 72 Modern Law Review (3/2009), pp. 412-435.

3. Emissions Trading

Asselt, Harro van, and Thomas Brewer. "Addressing Competitiveness and Leakage Concerns in Climate Policy: An Analysis of Border Adjustment Measures in the US and the EU," 38 Energy Policy (1/2010), pp. 42-51.

Golub, Alexander, Jos Cozijnsen, and Annie Petsonk. "Linking Russia with the European and Global Greenhouse Gas Emissions Trading Markets: Three Paths for Greening the Russian Assigned Amount under the Kyoto Protocol," 14 Mitigation and Adaptation Strategies for Global Change (5/2009), pp. 433-453.

Haites, E., and X. Wang. "Ensuring the Environmental Effectiveness of Linked Emissions Trading Schemes over Time," 14 Mitigation and Adaptation Strategies for Global Change (5/2009), pp. 465-476.

Hepburn, Samantha. "Carbon Rights as New Property: The Benefits of Statutory Verification," 31 Sydney Law Review (2009), pp. 239-271.

Howland, Juliet. "Not All Carbon Credits are Created Equal: The Constitutional and the Cost of Regional Cap-and-Trade Market Linkage," 27 UCLA Journal of Environmental Law and Policy (2009), pp. 413-455.

Sterk, Wolfgang, and Ralf Schüle. "Advancing the Climate Regime through Linking Domestic Emission Trading Systems?," 14 Mitigation and Adaptation Strategies for Global Change (5/2009), pp. 409-431.

Vranes, Erich. "Climate Change and the WTO: EU Emission Trading and the WTO Disciplines on Trade in Goods, Services and Investment Protection," 43 Journal of World Trade (4/2009), pp. 707-735.

Wettestad, Jørgen. "EU Energy-Intensive Industries and Emission Trading: Losers Becoming Winners?," 19 Environmental Policy and Governance (5/2009), pp. 309-320.

Wettestad, Jørgen. "Interaction between EU Carbon Trading and the International Climate Regime: Synergies and Learning," 9 International Environmental Agreements: Politics, Law and Economics (4/2009), pp. 393-408.

Zeben, Josephine A.W. van. "The European Emissions Trading Scheme Case Law," 18 Review of European Community and International Environmental Law (2/2009), pp. 119-128.

Zeller, Bruno. "Systems of Carbon Trading," 25 Touro Law Review (2009), pp. 909-942.

4. Project Mechanisms and Offsets

Boyd, Emily, Nate Hultman, J. Timmons Roberts, Esteve Corbera, John Cole, Alex Bozmoski, Johannes Ebeling, Robert Tippman, Philip Mann, Katrina Brown, and Diana M. Liverman. "Reforming the CDM for Sustainable Development: Lessons Learned and Policy Futures," 12 Environmental Science and Policy (7/2009), pp. 820-831.

Headon, Sam. "Whose Sustainable Development?: Sustainable Development under the Kyoto Protocol, the 'Coldplay Effect', and the CDM Gold Standard," 20 Colorado Journal of International Environmental Law and Policy (2/2009), pp. 127-156.

Klijn, Anne-Marie, 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 (2/2009), pp. 172-184.

Levin, Kelly, Benjamin Cashore, and Jonathan Koppell. "Can Non-State Certification Systems Bolster State-Centered Efforts to Promote Sustainable Development through the Clean Development Mechanism?," 44 Wake Forest Law Review (2009), pp. 777-798.

Lin, Jolene, and Charlotte Streck. "Mobilising Finance for Climate Change Mitigation: Private Sector Involvement in International Carbon Finance Mechanisms," 10 Melbourne Journal of International Law (2009), pp. 70-101.

Prouty, Ann E. "The Clean Development Mechanism and Its Implications for Climate Justice," 34 Columbia Journal of Environmental Law (2/2009), pp. 513-540.

Sautter, John A. "The Clean Development Mechanism in China: Assessing the Tension between Development and Curbing Anthropogenic Climate Change," 27 Virginia Environmental Law Journal (2009), pp. 91-118.

Streck, Charlotte, Andreas Tuerk, and Bernhard Schlamadinger. "Foresty Offsets in Emissions Trading Systems: A Link between Systems?," 14 Mitigation and Adaptation Strategies for Global Change (5/2009), pp. 455-463.

5. Impacts and Adaptation

Baldwin, Katherine M. "NEPA and CEQA: Effective Legal Frameworks for Compelling Consideration of Adaptation to Climate Change," 82 Southern California Law Review (2009), pp. 769-808.

Dellink, Rob, Michel den Elzen, Harry Aiking, Emmy Bergsma, Frans Berkhout, Thijs Dekker, and Joyeeta Gupta. "Sharing the Burden of Financing Adaptation to Climate Change," 19 Global Environmental Change (4/2009), pp. 411-421.

Peart, Nicola, "Dispute in Climate Change Adaptation Finance – Towards a Convergent Outcome for the COP-15," 18 European Energy and Environmental Law Review (6/2009), pp. 307-333.

6. Liability and Litigation

Averill, Marilyn. "Linking Climate Litigation and Human Rights," 18 Review of European Community and International Environmental Law (2/2009), pp. 139-147.

Burns, William C.G. "Belt and Suspenders? The World Heritage Convention's Role in Confronting Climate Change," 18 Review of European Community and International Environmental Law (2/2009), pp. 148-163.

Erion, Graham. "The Stock Market to the Rescue? Carbon Disclosure and the Future of Securities-Related Climate Change Litigation," 18 Review of European Community and International Environmental Law (2/2009), pp. 164-171.

Latham, Mark. "Environmental Liabilities and the Federal Securities Laws: A Proposal for Improved Disclosure of Climate Change-Related Risks," 39 Environmental Law (2009), pp. 647-728.

Schatz, Julia. "Climate Change Litigation in Canada and the USA," 18 Review of European Community and International Environmental Law (2/2009), pp. 129-138.