

SEEKING A UNIFIED FIELD OF CLIMATE FINANCE

*David P. Cluchey**

CLIMATE FINANCE: REGULATORY AND FUNDING STRATEGIES FOR CLIMATE CHANGE AND GLOBAL DEVELOPMENT. EDITED BY RICHARD B. STEWART, BENEDICT KINGSBURY, & BRYCE RUDYK. NEW YORK UNIVERSITY PRESS. 2009.

The collection of essays on climate change, edited by Richard Stewart, Benedict Kingsbury, and Bryce Rudyk, takes on the ambitious goal of constructing “a unified field of climate finance from a very diverse body of practice and ideas.”¹ While it does not entirely achieve this goal, this volume, with its thirty-five essays and a comprehensive introductory chapter by the three editors, makes a useful contribution to the literature in the field. Given the brevity of the essays (other than the introduction, none exceeds ten pages and most are significantly shorter) the book is particularly helpful for the reader looking for a broad but sophisticated overview of a multi-faceted topic with a wide variety of complex sub-issues.

The process of creating programs to reduce the levels of greenhouse gases released into the atmosphere has evolved since the United Nations Framework Convention on Climate Change entered into force in 1994.² The steps taken in the Kyoto Protocol of 1998 reflected promise,³ but the results of last December’s conference in Copenhagen were disappointing.⁴ The preliminary versions of the essays in *Climate*

* Professor of Law, University of Maine School of Law.

1. CLIMATE FINANCE: REGULATORY AND FUNDING STRATEGIES FOR CLIMATE CHANGE AND GLOBAL DEVELOPMENT xii (Richard B. Stewart, Benedict Kingsbury, & Bryce Rudyk eds., 2009) [hereinafter CLIMATE FINANCE].

2. United Nations Framework Convention on Climate Change, March 21, 1994, 1771 U.N.T.S. 107.

3. Kyoto Protocol to the United Nations Framework Convention on Climate Change, December 11, 1997, 37 I.L.M. 22 (1998).

4. See, e.g., John M. Broder, *Many Goals Remain Unmet in 5 Nations’ Climate Deal*, N.Y. TIMES, Dec. 18, 2009, at A1, available at <http://www.nytimes.com/2009/12/19/science/earth/19climate.html>; John Vidal, Allegra Stratton and Suzanne

Finance were presented at a conference in Abu Dhabi in May of 2009 and the final versions of the essays were published promptly thereafter (September 2009). The timing of the conference and the publication appears to be directly related to influencing the planned climate summit in Copenhagen in December, 2009. *Climate Finance* is not a traditional academic treatment of the issues discussed in its essays, but rather a reflection of the origin of the essays in conference presentations with an apparent objective of short-term impact on climate policy discussions at the Copenhagen Summit.

Stewart, Kingsbury, and Ryduk have a general sense of what they believe would constitute an effective and politically-viable financial strategy for promoting climate mitigation. In their introduction they identify three factors which they describe as the “key determinants” of climate finance.⁵ The first, and most significant, of these factors is “climate science imperatives.”⁶ However, this is not a book about climate science and the editors dispense with this factor in a paragraph and devote only a single essay to it.⁷ Although there remains scattered controversy about the causes and the extent of climate change, Oppenheimer’s essay presents the consensus case for the very serious implications of failing to respond promptly and effectively to the problem of global warming and it does so concisely and compellingly.

The real concerns of the editors are the other two factors they identify as key to climate finance, financing needs and mitigation opportunities, and the political economy of climate policy.⁸ These two factors, broadly conceived, are the focus of most of the essays in this book.

Climate Finance is divided into six parts. The first part, “Climate Mitigation: Overview and Key Themes”, includes the introduction by the editors and essays on climate change,⁹ funds needed for mitigation of

Goldenberg, *Low targets, goals dropped: Copenhagen ends in failure*, THE GUARDIAN, Dec. 19, 2009, at 1, available at <http://www.guardian.co.uk/environment/2009/dec/18/copenhagen-deal>.

5. Richard B. Stewart, Benedict Kingsbury, & Bryce Rudyk, *Climate Finance for Limiting Emissions and Promoting Green Development*, in CLIMATE FINANCE 4.

6. *Id.*

7. Michael Oppenheimer, *Understanding the Causes and Implications of Climate Change*, in CLIMATE FINANCE 35-41.

8. Stewart, Kingsbury, & Ryduk, *supra* note 5, at 4-6.

9. See Oppenheimer, *supra* note 7.

climate change,¹⁰ and the need for a “more flexible architecture” for climate finance.¹¹ The authors of each of these essays are respected experts, two of them are academics and the third has served in both the government and non-government organization sectors. These essays lay the foundation for the approaches and mechanisms suggested in later essays.

Part II of the book is the longest section (at almost 100 pages) and is focused on recommendations for reform of financing mechanisms. In the first of these essays, the author, associated with the Environmental Defense Fund, makes the case for the use of cap and trade mechanisms over the alternative of a carbon tax.¹² This is the only essay directly dealing with this issue and the resolution of the debate in favor of cap and trade is consistent with the editors’ view of the issue.¹³ The only other discussion of the issue is found in a later essay in another section of the book, suggesting possible advantages of the carbon tax approach.¹⁴ It is clear that the editors have decided not to elaborate on the debate between cap and trade and carbon tax approaches and the remainder of the essays are largely focused on specific issues relating to the cap and trade mechanism. Nonetheless, a more extensive acknowledgement of the cap and trade/carbon tax controversy and a more balanced treatment of the debate would have been a useful addition to the book.

The other essays in Part II discuss a variety of important topics relating to the structure of mitigation programs. There is a single essay on the reform of the Kyoto Protocol Clean Development Mechanism (CDM).¹⁵ The CDM is an effort to encourage developed countries to meet their mitigation commitments, in part, by funding clean energy and mitigation schemes in developing countries. While it is acknowledged

10. Bert Metz, *The Climate Financing Problem: Funds Needed for Global Climate Change Mitigation Vastly Exceed Funds Currently Available*, in CLIMATE FINANCE 42-47.

11. Daniel Bodansky, *The Future of Climate Governance: Creating a More Flexible Architecture*, in CLIMATE FINANCE 48-52.

12. Nathaniel O. Keohane, *Cap-and-Trade is Preferable to a Carbon Tax*, in CLIMATE FINANCE 57-64.

13. Stewart, Kingsbury, & Ryduk, *supra* note 5, at 8.

14. Lily Batchelder, *Fiscal Considerations in Curbing Climate Change*, in CLIMATE FINANCE 291-99. Professor Batchelder suggests, among other issues, that given the regressive effect of climate change mitigation measures, the need for additional revenue to ameliorate the effect of these measures on the less well-off members of society might be more likely met by a carbon tax. *Id.* at 291.

15. Charlotte Streck, *Expectations and Reality of the Clean Development Mechanism: A Climate Finance Instrument between Accusation and Aspiration*, in CLIMATE FINANCE 67-75.

that the CDM has cut the costs of compliance for some developed countries, its contribution to sustainable and efficient development is debated.¹⁶ Several essays discuss the importance of sectoral focus in any financing mechanism, with particular emphasis on forest and land use programs in the developing world.¹⁷ Two essays discuss leveraging trading to generate additional funds for mitigation programs, reflecting the concern that trading alone will not provide sufficient funds to meet mitigation goals.¹⁸ There is an essay on the importance of linking trading systems¹⁹ and several on the role of private investment in cap and trade markets and the perspectives of private investors.²⁰

In contrast to Part II, which examines the details of structuring the market mechanisms for dealing with mitigation investments, Parts III and V of *Climate Finance* are concerned with two very broad issues essential to the success of any multilateral mitigation initiative. Part III focuses on the current disconnect between developed and developing countries and discusses approaches which might help allay the concerns of developing countries and ensure their active participation in the climate change mitigation process. Part V explores the relationship between climate mitigation and finance issues and trade regulation under the auspices of the WTO.

The essay by Ghosh and Woods in Part III²¹ starkly lays out the level of distrust between the developed and the developing countries in the negotiations on climate mitigation. This distrust is the culmination of many years of failure of communication and understanding on a wide

16. *Id.* at 69-71.

17. Murray Ward, *Why a Successful Climate Change Agreement Needs Sectoral Elements*, in CLIMATE FINANCE 79-84; Ruben Kraiem, *Sectoral Crediting: Getting the Incentives Right for Private Investors*, in CLIMATE FINANCE 85-89; Eric C. Bettelheim, *Forest and Land Use Programs Must Be Given Financial Credit in Any Climate Change Agreement*, in CLIMATE FINANCE 90-95; Israil Klabin, *Stock-and-Flow Mechanisms to Reduce Land Use, Land Use Change, and Forestry Emissions: A Proposal from Brazil*, in CLIMATE FINANCE 96-101.

18. Bert Metz, *Mitigating Climate Change at Manageable Cost: The Catalyst Proposal*, in CLIMATE FINANCE 105-10; Annie Petsonk et al., *Engaging Developing Countries by Incentivizing Early Action*, in CLIMATE FINANCE 111-21.

19. Henry Derwent, *Carbon Market Design: Beyond the EU Emissions Trading Scheme*, in CLIMATE FINANCE 125-31.

20. Marcel Brinkman, *Incentivizing Private Investment in Climate Change Mitigation*, in CLIMATE FINANCE 135-42; Nick Robins and Mark Fulton, *Investment Opportunities and Catalysts: Analysis and Proposals from the Climate Finance Industry on Funding Climate Mitigation*, in CLIMATE FINANCE 143-51.

21. Arunabha Ghosh & Ngaire Woods, *Developing Country Concerns about Climate Finance Proposals Priorities, Trust, and the Credible Donor Problem*, in CLIMATE FINANCE 157-164.

range of issues.²² There is skepticism among the developing nations toward the Bretton Woods institutions, i.e. the International Monetary Fund and the World Bank, based in part on the disproportionate voting power of the developed countries in these institutions.²³ This skepticism extends also to the World Trade Organization where the developing country members have been dissatisfied with the implementation of a variety of Uruguay Round Agreements, particularly those in agriculture and intellectual property.²⁴ The authors point out that this distrust makes reliance on the Bretton Woods institutions to manage climate finance programs or as conduits for financial support of mitigation efforts in developing countries problematic.²⁵

The essential disagreement between the developed and developing countries in the area of climate mitigation is the question of who will bear the costs (both out-of-pocket and in foregone development) incurred by the developing countries in mitigating emissions. Ghosh and Woods suggest three steps that could be taken to help build trust among the developing nations:

1. Ensure the Creation of a Secure Pool of Climate Finance.
2. Use (or Build) Trusted Institutions for Decision making and Disbursement of Finance.
3. Develop Effective Monitoring, Verification, and Compliance Mechanisms for Financing and Technology Transfer Commitments.²⁶

These suggestions have, thus far, not found resonance among developed nations who would prefer to limit their investment in developing country mitigation efforts and to manage the financial commitments they have made through multilateral institutions with which they have long experience, i.e. the Bretton Woods institutions. The main point of the Ghosh and Woods essay, that a multilateral commitment by the developing countries to climate mitigation will only follow from serious negotiations and commitments by the developed nations, is well taken. Ultimately, the developed nations will have to respond to this position if they wish to achieve significant multilateral climate mitigation cooperation.

22. *See generally*, JOSEPH E. STIGLITZ, *GLOBALIZATION AND ITS DISCONTENTS* (2002).

23. *Id.* at 12, 224-27. *See generally*, Stephen Zamora, *Voting in International Economic Organizations*, 74 AM. J. INT'L L. 566 (1980).

24. STIGLITZ, *supra* note 22, at 7-8, 245-46.

25. Ghosh & Woods, *supra* note 21, at 161-62.

26. *Id.* at 160-63.

The other essays in Part III discuss specific issues related to the ongoing disconnect between the developing and developed countries, including an interesting proposal by the Korean Ambassador for Climate Change to move to a so-called “bottom-up regime” that focuses on nationally appropriate mitigation actions (NAMAs) reflecting the voluntary choices of individual countries on appropriate approaches to mitigation.²⁷ Three of the essays deal with conditionality, reflecting the reality that the developed countries are unlikely to provide significant amounts of funding for climate mitigation to developing countries without attaching conditions to the use of money and requiring the achievement of mitigation objectives.²⁸ Overall, Part III is an excellent treatment of the obstacles to be overcome to ensure the future involvement of developing countries in the multilateral climate mitigation process.

The relationship between trade and climate finance, dealt with in Part V of *Climate Finance*, is a complicated one.²⁹ The concern that environmental regulations can be used to advance protectionist goals is serious and has been the subject of previous multilateral trade negotiations.³⁰ On the other hand, environmental regulation is an important task of government and the original General Agreement on Tariffs and Trade (GATT) recognized environmental and conservation exceptions to the strict application of trade rules.³¹

27. Rae Kwon Chung, *Operationalizing a Bottom-Up Regime: Registering and Crediting NAMAs*, in CLIMATE FINANCE 179-85.

28. Jacob Werksman, *From Coercive Conditionality to Agreed Conditions: The Only Future for Future Climate Finance*, in CLIMATE FINANCE 189-96; Kevin E. Davis & Sarah Dadush, *Getting Climate-Related Conditionality Right*, in CLIMATE FINANCE 197-205; Ngaire Woods, *Making Climate Finance Work: What Might Climate Change Experts Learn from the Experience of Development Assistance?*, in CLIMATE FINANCE 206-10.

29. For a more detailed treatment, see GARY CLYDE HUFBAUER, STEVE CHARNOVITZ & JISUN KIM, *GLOBAL WARMING AND THE WORLD TRADING SYSTEM* (Peterson Institute for International Economics 2009).

30. See RAJ BHALA & KEVIN KENNEDY, *WORLD TRADE LAW: THE GATT-WTO SYSTEM, REGIONAL ARRANGEMENTS, AND U.S. LAW* § 1-6(b) (LEXIS Law Publishing 1998). The Uruguay Round Agreements on Technical Barriers to Trade and on the Application of Sanitary and Phytosanitary Measures can be found at http://www.wto.org/english/docs_e/legal_e/legal_e.htm (last visited June 3, 2010).

31. See General Agreement on Tariffs and Trade (1947), Article XX (b) (excepting measures “necessary to protect human, animal or plant life or health”) and (g) (“relating to the conservation of exhaustible natural resources...”), 55 U.N.T.S. 194.

A number of important issues on the relationship of trade law to climate finance are explored in six essays in *Climate Finance*.³² Particularly interesting is *Border Climate Adjustment as Climate Policy* by Alexandra Khrebtukova, discussing the potential and the legality of the imposition of carbon tariffs reflecting the climate impact of imported goods.³³

Part IV of *Climate Finance* examines specific national experiences related to climate mitigation and the lessons to be taken from those experiences. Three of these essays focus on the climate policies of, respectively, the United States, the European Union, and China.³⁴ The essay on the U.S. situation, by Nathaniel O. Keohane (Director of Economic Policy and Analysis at the Environmental Defense Fund), outlines the provisions of the Waxman-Markey bill passed by the U.S. House of Representatives in June, 2009.³⁵ While the ambitious approach taken by this bill is laudable (e.g., 83% decrease in 2005 greenhouse gas emissions by 2050), Congressional action this year on a comprehensive approach to decreasing greenhouse gas emissions now seems unlikely.³⁶ When action is finally taken by the U.S. Congress, it is likely to be somewhat less ambitious than the Waxman-Markey bill. Although the

32. Gabrielle Marceau, *The WTO and Climate Finance: Overview of the Key Issues*, in CLIMATE FINANCE 247-53; Robert Howse & Antonia Eliason, *Carbon Trading and the CDM in WTO Law*, in CLIMATE FINANCE 254-58; Robert Howse and Antonia Eliason, *Countervailing Duties and subsidies for Climate Mitigation: What Is, and What Is Not, WTO-Compatible?*, in CLIMATE FINANCE 259-65; Alexandra Khrebtukova, *Border Climate Adjustment as Climate Policy*, in CLIMATE FINANCE 266-71; Arunabha Ghosh, *Enforcing Climate Rules with Trade Measures: Five Recommendations for Trade Policy Monitoring*, in CLIMATE FINANCE 272-80; Sandra G. Mayson, *Carbon Footprint Labeling in Climate Finance: Governance and Trade Challenges of Calculating Products' Carbon Content*, in CLIMATE FINANCE 281-87.

33. See Khrebtukova, *supra* note 32. Other commentators have endorsed the idea of a carbon tax imposed at the border as an equalizer in imposing climate mitigation costs on producers from nations that have not pursued equivalent mitigation efforts. See e.g., Paul Krugman, *Building a Green Economy*, N.Y. TIMES, April 11, 2010, at MM34, available at <http://www.nytimes.com/2010/04/11/magazine/11Economy-t.html>.

34. Nathaniel O. Keohane, *Climate Legislation in the United States: Potential Framework and Prospects for International Carbon Finance*, in CLIMATE FINANCE 213-20; James Chapman, *The EU ETS: Experience to Date and Lessons for the Future*, in CLIMATE FINANCE 221-27; Jie Yu, *Greenhouse Gas Emissions and Mitigation Measures in China*, in CLIMATE FINANCE 228-33.

35. Keohane, *supra* note 34.

36. See, e.g., Darren Samuelsohn, *Graham Says He Could Vote for Climate Bill, but Oil Spill Requires a 'Time-Out'*, N.Y. TIMES, May 7, 2010, <http://www.nytimes.com/cwire/2010/05/07/07climatewire-graham-says-he-could-vote-for-climate-bill-b-10855.html>.

review of the bill was helpful in the timeframe it was written, the run-up to the Copenhagen Summit, an essay providing a more general discussion of the various factors which will influence the ultimate version of U.S. legislation would have been more broadly useful.

The detailed review of the EU Emissions Trading System (ETS) in James Chapman's essay is particularly impressive.³⁷ It chronicles and reports on the results to date of a successful cap and trade approach to limiting greenhouse gas emissions. It also describes ways in which the EU approach could be linked to other similar systems and includes EU suggestions for dealing with the issue of including developing countries in multilateral climate mitigation efforts. Overall, it accomplishes its objective of setting out a concise and informative summary of EU progress in limiting greenhouse gas emissions.

The essay on China, *Greenhouse Gas Emissions and Mitigation Measures in China*, acknowledges China's unwillingness to commit to binding emissions caps, but defends China's investment in emission reduction programs and discusses China's growing focus on sustainable technology as part of its economic growth strategy.³⁸ The author argues that China's effort to reduce energy consumption per capita and in selected industrial and electric power sectors will result in China achieving reductions in greenhouse gas emissions that will, within five years, match the reductions agreed to by Annex I nations under the Kyoto Protocol. If this prediction is accurate, it is good news indeed.

The final part of the book, Part VI, entitled "Taxation of Carbon Markets," appears almost as an afterthought, though it raises very important concerns for climate finance. Decisions on taxation create incentives and disincentives that must be understood to avoid unintended consequences. Professor Lily Batchelder's essay, *Fiscal Considerations in Curbing Climate Change*, is an excellent review of key fiscal issues generated by both a cap-and-trade schemes and carbon taxes.³⁹ Professor Batchelder notes that climate mitigation programs tend to be regressive with a disproportionate financial burden placed on lower income citizens. She suggests approaches that will mitigate the regressive effect of costs imposed to curb emissions, noting the revenue raising advantages of carbon taxes and the risk of inequities and inefficiencies from the distribution of free emission permits. Her treatment of the issue, while concise, is sophisticated and useful.

37. See Chapman, *supra* note 34.

38. See Yu, *supra* note 34.

39. See Lily Bat Batchelder, *Fiscal Considerations in Curbing Climate Change*, in CLIMATE FINANCE 291-99.

Professor Yoram Margalioth discusses the tax treatment of cap-and-trade permits in *Tax Consequences of Carbon Cap-and-Trade Schemes*.⁴⁰ In a very clearly written and concise essay, he surveys a number of complex issues generated by different approaches to the taxation of emission permits. He identifies a series of potential distortions and disincentives as well as gaming risks and offers suggestions for avoiding them. As with Professor Batchelder's essay, his sophisticated treatment of the issues will be helpful to any policymaker contemplating the structure of a cap-and-trade scheme.

Overall, *Climate Finance* is well-conceived and well-executed. It appears to have had limited success in its implicit objective of influencing the Copenhagen Summit on climate change. It does, however, provide a useful catalogue of issues that must be resolved before a successful multilateral initiative can be fashioned to deal with emissions caps and a trading system for those caps. A number of the essays in the book also suggest sophisticated solutions to the resolution of some of those issues. This gives the book continuing importance in the debate about climate mitigation and the mechanisms necessary to finance it.

40. See Yoram Margalioth, *Tax Consequences of Carbon Cap-and-Trade Schemes*, in CLIMATE FINANCE 305-10.

