



Essential Readings in Environmental Law
IUCN Academy of Environmental Law (www.iucnael.org)

CLIMATE CHANGE TREATIES

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OVERVIEW OF KEY SCHOLARSHIPS

General Introduction to Climate Change Science and the Effects of Climate Change on the Environment and Human Health

1. Pachauri, R. K. and A. Reisinger (eds.), *IPCC, Climate Change 2007: Synthesis Report. Contribution of Working Groups I, II and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, (Geneva: IPCC, 2007).
2. Meehl, G. A. *et al.*, *Intergovernmental Panel on Climate Change, Working Group I, The Physical Science Basis: Summary for Policymakers, Fifth Assessment Report*, (Geneva: IPCC, 2013).

Negotiation and Implementation of the United Nations Framework Convention on Climate Change (UNFCCC)

3. Goldberg, D., “As the World Burns: Negotiating the Framework Convention on Climate Change” (1993) 5 *Geo. Int’l Env’tl. L. Rev.*, 239-275.
4. Bodansky, D., “The United Nations Convention on Climate Change: A Commentary” (1993) 8 *Yale J. Int’l L.*, 451-558.

Negotiation and Implementation of the Kyoto Protocol and its Flexibility Mechanisms

5. Grubb, M., C. Vrolik and D. Brack, *The Kyoto Protocol: A Guide and Assessment* (London: Royal Institute of International Affairs, 1999).
6. Grubb, M., *et al.*, “Global Carbon Mechanisms: Lessons and Implications”, (2011) 104 *Climatic Change*, 539-573.
7. Ellerman, A., F. Convery and C. De Perthuis, *Pricing Carbon: The European Union Emissions Trading Scheme* (Cambridge: Cambridge University Press, 2010).
8. Eni-Ibukun, T. A., *International Environmental Law and Distributive Justice: The Equitable Distribution of CDM Projects under the Kyoto Protocol*, (London and New York: Routledge, 2013).

The Post-2020 Climate Regime

9. Wold, C., D. Hunter and M. Powers, *Climate Change and the Law* (2ed.) (LexisNexis, 2013).
10. Aldy, J., and R. Stavins (eds.), *Post-Kyoto International Climate Policy, Implementing Architectures for Agreement*, (Cambridge: Cambridge University Press, 2010).
11. Boyd, W., “Climate Change, Fragmentation, and the Challenges of Global Environmental Law: Elements of a Post-Copenhagen Assemblage” (2010) 31 *University of Pennsylvania Journal of International Law*, 457-550.

General Introduction to Climate Change Science and the Effects of Climate Change on the Environment and Human Health

For anyone who wishes to engage in climate policy development, an understanding of climate change science is critical. Through regular and comprehensive reports, the Intergovernmental Panel on Climate Change (IPCC) has contributed to a broader understanding of the causes and effects of climate change.

1. The *IPCC, Climate Change 2007: Synthesis Report. Contribution of Working Groups I, II and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* by **R. Pachauri** and **A. Reisinger** summarizes the consensus view of thousands of scientists regarding the then-current state of climate science. At the time of its publication, the 2007 Synthesis Report provided the strongest indication yet that climate change was occurring and that human activities were contributing to this change. It also identified the anticipated consequences of climate change, including melting sea ice and glaciers, altered weather patterns, increased droughts, and diminished food supply. Finally, the report identified a host of mitigation and adaptation strategies—as well as cost estimates for action and inaction—that made it clear that failure to address climate change would be the costlier choice. While the 2007 Synthesis Report also prompted a backlash from “climate skeptics”, the information contained in the 2007 Synthesis Report likely contributed to a reinvigoration of the international negotiations and a commitment by global leaders to negotiate an agreement to succeed the Kyoto Protocol.
2. The report by **G. Meehl et al.**, titled, *Intergovernmental Panel on Climate Change, Working Group I, The Physical Science Basis: Summary for Policymakers, Fifth Assessment Report*, paints an even clearer, and bleaker, picture of the science and consequences of climate change. The report confirms that climate change is “unequivocal” and that humans are the “dominant cause” of climate change. Observers expect that this report may prompt the international community to negotiate an ambitious post-2020 climate change regime.

Negotiation and Implementation of the United Nations Framework Convention on Climate Change (UNFCCC)

The UNFCCC was the first international treaty to address climate change. Although the treaty negotiations may have produced a weaker treaty than many observers may have hoped, both the negotiations and the resulting framework have had a profound influence on the international climate regime.

3. **D. Goldberg's** *As the World Burns: Negotiating the Framework Convention on Climate Change* provides a concise summary of the negotiations, the divisions between the United States and other countries, and the resulting treaty. For someone interested in developing a decent understanding of how the UNFCCC came to be, **D. Goldberg's** description is indispensable.
4. **D. Bodansky's** *The United Nations Convention on Climate Change: A Commentary* provides an even deeper look into the negotiations, the divisions between countries, and the resulting text. Importantly, **D. Bodansky** describes the divisions not only between developed and developing countries, but also amongst developed and developing countries. In so doing, he forecasts the fissures that would eventually form between more industrialized developing countries, forested countries, and low-lying and island nations. **D. Bodansky** also provides a detailed overview and analysis of each negotiating session leading to the final formation of the UNFCCC. Similarly, his commentary describes each article of the UNFCCC and explains the significance of the language used throughout the treaty.

To a certain extent, **D. Goldberg** and **D. Bodansky** cover the same ground in their articles. However, they serve different purposes for those wishing to understand the development of the climate change regime. The **D. Goldberg** piece provides readers with a solid understanding of the negotiations and resulting treaty, but it does not linger on any issue for too long. As such, it would serve as good introductory background reading. **D. Bodansky's** piece provides much more context and explanation. For those who have never participated in international treaty negotiations, **D. Bodansky's** article paints a detailed picture of how negotiations proceed. Similarly, for those who wish to have a deeper understanding of how the early climate change negotiations continue to affect today's deliberations, **D. Bodansky's** article is essential reading.

Negotiation and Implementation of the Kyoto Protocol and its Flexibility Mechanisms

While the *Kyoto Protocol's* first commitment period ended in 2012, and only a few developed countries have signed up for a second commitment period, the Kyoto Protocol will continue to influence climate change negotiations for years to come. The Kyoto Protocol established an international market-based emissions trading system to lower greenhouse gas emissions. It also created project-based emissions trading programs between developed and developing countries. While these programs have faced many implementation problems, many observers expect them to continue into the future. Thus, while the *Kyoto Protocol* itself may not go beyond a second

commitment period, the institutions and trading programs it created seem likely to persist. With that in mind, the following books and articles serve as useful reading.

5. **M. Grubb, C. Vrolik and D. Brack's** *The Kyoto Protocol: A Guide and Assessment* offers a detailed overview and analysis of the *Kyoto Protocol* and its flexibility mechanisms. Their book begins with a discussion of the events that took the international community from the UNFCCC to the *Kyoto Protocol* in five short years. They then describe the negotiation process in some detail, providing essential background information for those who wish to understand the global politics of climate change. Next, they describe the key aspects of the *Kyoto Protocol* and its flexibility mechanisms. Most importantly, the book then offers an extensive evaluation of the treaty's likely economic and environmental consequences, as well as the likely hurdles the Parties will encounter as they work to implement the flexibility mechanisms. In devoting a full chapter to the Clean Development Mechanism (CDM), the authors presciently recognize both the opportunities and complications this innovative program will create. This book is certainly a "must read" for those interested in understanding the *Kyoto Protocol*.

The other books included in this section help us gain a better understanding of how the *Kyoto Protocol* has performed in practice.

6. In *Global Carbon Mechanisms: Lessons and Implications* **M. Grubb et al.** offer us an empirical analysis of how the flexibility mechanisms have worked through approximately the first half of the *Kyoto Protocol*.
7. **A. Ellerman, F. Convery, and C. de Perthuis** in their publication titled, *Pricing Carbon: The European Union Emissions Trading Scheme*, explore the initial years of the European Union's Emissions Trading System (EU ETS), which the EU established to implement the Kyoto Protocol's targets and timetables. Although their analysis only examines how the EU ETS performed from 2005 through 2007, it nonetheless helps provides an insightful examination and critique of the design of the system.
8. In *International Environmental Law and Distributive Justice: The Equitable Distribution of CDM Projects under the Kyoto Protocol* **T. Eni-Ibukun** examines how the CDM has performed in practice after nearly a decade of implementation and why the program has resulted in an imbalanced distribution of projects and funds to developing countries. **T. Eni-Ibukun** then argues that equity should guide implementation of the CDM in the future and proposes various mechanisms to ensure more equitable distribution of projects.

Collectively, these books help readers understand the successes and challenges involved in implementing the *Kyoto Protocol*. They also offer suggestions for improving the international climate regime moving forward.

The Post-2020 Climate Regime: International Negotiations and Proposals for the Future

Since at least 2007, when Bali hosted the climate change negotiations, Parties to the UNFCCC have been working to develop a treaty to follow the *Kyoto Protocol*'s first commitment period, which ran from 2008 to 2012. The Parties have met annually to negotiate a successor treaty, with the initial goal of securing a post-Kyoto agreement by 2009 in Copenhagen. Although the Copenhagen negotiations yielded an "Accord," most Parties considered their work incomplete. Parties now hope to complete negotiations for a post-2020 treaty at the 2015 Paris Conference of the Parties. The readings identified below provide an overview of the different rounds of negotiations, explore the major issues at play in the negotiations, and offer proposals for securing an effective treaty by 2015.

9. **C. Wold, D. Hunter and M. Powers'** *Climate Change and the Law* provide a detailed summary of the negotiations from Bali in 2007 to Doha in 2012. Their casebook explains how the negotiations proceeded, excerpts key text from the different negotiations, and explains the evolving frameworks the Parties have employed during the negotiation process. It also explains the *Copenhagen Accord*, how it developed, and its legal status. It therefore should serve as useful overview of the post-Kyoto and post-2020 negotiating process.
10. **J. Alby and R. Stavins'** book, *Post-Kyoto International Climate Policy, Implementing Architectures for Agreement*, explores a range of options for restructuring and reinvigorating the post-2020 negotiations. Part I of their book focuses on alternative institutional architectures the Parties could explore, from sectoral approaches to carbon pricing to the creation of a portfolio of climate treaties designed to accommodate different countries' unique requirements. Other parts of the book include chapters on technology transfer, international trade, economic development, and reallocating responsibility for emissions reductions. The diverse array of proposals provides much food for thought as the international community seems stuck in the Kyoto framework.
11. In *Climate Change, Fragmentation, and the Challenges of Global Environmental Law: Elements of a Post-Copenhagen Assemblage* **W. Boyd** offers a different perspective, questioning whether international law will effectively address climate change. His article explores the implications of the failure of the Parties to negotiate a binding treaty in Copenhagen, and argues that these failures may result from the efforts to address climate change as an international concern requiring an international response. He therefore suggests that climate governance should transform to integrate global, regional, national, and even local governance approaches to addressing climate change on a more holistic and diverse level. He then applies this theory to the efforts to develop a mechanism

supporting reduced emissions from deforestation and forest degradation (“REDD”) in the climate framework. Both his overarching hypothesis and his application of his proposed governance system are thought-provoking and illuminating.