

International Cooperation: Agreements and Instruments

A Very Preliminary View
of Chapter 13
Working Group III
Fifth Assessment Report
Intergovernmental Panel on Climate Change.

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Abstract

This essay consists of a very preliminary interpretation of the outline of Chapter 13 of Working Group III of the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. It is based upon the author's impressions in early July, prior to the first Lead Authors meeting, which took place in Korea. The other Coordinating Lead Author of the chapter, as well as the twelve Lead Authors of the Chapter 13 team, will have their own ideas about the content and priorities of the chapter. The correspondence of the final product to this brief summary is therefore limited.

1. Introduction

This brief essay summarizes a presentation I made in Tokyo prior to the first Lead Authors Meeting (LAM1) of Working Group III of the Intergovernmental Panel on Climate Change (IPCC) in Changwon, Korea. Because the Tokyo presentation took place before the writing team had met for the first time, my presentation in Tokyo reflected only my own view at the time of what the contents of Chapter 13 might include. Since then, the structure and content of the chapter have evolved considerably.

It is important to recognize that my co-coordinating lead author is Zou Ji, Renmin University, Beijing, China; and that the Chapter 13 writing team includes the following Lead Authors: Thomas Brewer, Climate Strategies, USA; Michel den Elzen, Environmental Assessment Agency, Netherlands; Michael Finus, University of Exeter Business School, United Kingdom; Joyeeta Gupta, Vrije Universiteit, Netherlands; Niklas Höhne, Ecofys, Germany; Myung-Kyoon Lee, Keimyung University, Korea; Jorge Leiva, GreenLane Consultores Ltda., Chile; Matthew Paterson, University of Ottawa, Canada; Kilaparti Ramakrishna, United

Nations, USA; Gang Wen, Ministry of Finance, China; Jonathan Wiener, Duke University, USA; and Harald Winkler, University of Cape Town, South Africa. Also, it should be noted that the Review Editors for the chapter are: Ivanova Antonina, Autonomous University of Southern Baja California, Mexico; and Jennifer Morgan, World Resources Institute, USA.

The topical scope of chapter 13 is international climate, trade, and capital market agreements and arrangements. The disciplinary scope of the chapter is likely to include, first of all, the social sciences (economics, political science, international relations, and legal scholarship), and the relevant humanities (history, philosophy, and others). There are two crucial aspects to the nature of the text of chapter 13. First, the text is to be technically sound and policy relevant, based upon a comprehensive review of the relevant scientific literature. Second, although the text is to be policy relevant, no policy recommendations will be made. This is in keeping with the overall approach of the IPCC.

2. Framing Concepts: Potential Principles and Goals for International Cooperation

The key reality that drives the necessity for international cooperation in regard global climate change policy is the fact that climate change is a global commons problem (Stavins 2011). Therefore, the benefits that accrue to any individual country or region as a result of the actions it takes will inevitably be less than the costs that the country or region thereby incurs. This global Commons reality means that it is not in the interest of countries to take socially sufficient unilateral actions and that international, if not global, cooperation will be required.

Among the many potential criteria for assessing modes of international cooperation will be the following: environmental effectiveness; economic efficiency; cost-effectiveness; distributional equity, both cross-sectional and intertemporal; and implications for sustainable development.

3. International Agreements: Lessons for Climate Policy

Much can probably be learned from previous environmental and other international agreements. This may include drawing on appropriate literatures in political science, international relations, and game theory. Lessons can potentially be learned in regard to participation, compliance, information collection and dissemination, and other aspects of international cooperation on climate change policy. Included may be analysis of negotiation structures, both past and potential, using game-theoretic and other analytical approaches.

4. Multilateral and Bilateral Agreements and Institutions

A wide variety of existing international agreements and institutions will be reviewed and assessed. These may include the following: the United Nations Framework Convention on Climate Change

(UNFCCC); the Major Economies Forum on Energy and Climate (MEF); the G-20; the C-30; the World Bank; the International Monetary Fund; the International Energy Agency; and the Organization for Economic Cooperation and Development (OECD). In addition, consideration will be given to various regional agreements and institutions.

5. International Climate Policy Architectures

It is possible to specify a taxonomy of generic elements that are likely to appear in most climate policy architectures. Among these are: goals and targets; participation incentives; burden sharing methods; mechanisms for mitigation and adaptation; flexibility provisions; technology incentives; financing mechanisms; and compliance mechanisms. It is also possible to specify a taxonomy of generic assessment. Some of the basic categories include: impacts on climate change; aggregate cost; distribution of costs; and political and institutional feasibility.

Major alternative international climate policy architectures may be considered within three fundamental categories, although it is recognized that these categories are somewhat arbitrary in the sense that there is a continuous spectrum across all of these (Aldy and Stavins 2010). These categories are: centralized architectures; harmonized national policies; and decentralized architectures and coordinated national policies.

Examples of centralized architectures include: the Kyoto Protocol; formulas for assigning targets to countries; and a portfolio of international agreements. Examples of harmonized national policies include: harmonized national carbon taxes; harmonized carbon trading regimes; and harmonized standards. Examples of decentralized architectures and coordinated policies include: direct and indirect linkage of regional, national, and sub national cap-and-trade systems; direct and indirect linkage of heterogeneous national policies; and a portfolio of commitments, as in the Cancun Agreements.

6. Other Major Topics

There are a number of additional topics that will be covered in Chapter 13, but in my presentation in Tokyo, I did not describe these in detail. Rather, I provided no more than an outline. I do the same here. The topics are as follows: mechanisms for technology and knowledge development and transfer; capacity building for adaptation, monitoring, and information sharing; linkages between international and national policies; linkages between international and regional cooperation; interactions between climate and international trade policy; metrics and methods for assessing policy commitments and actions; investment, finance; and the role of public and private sectors, and public-private partnerships.

7. Caveats

This has been a very preliminary interpretation of the outline of Chapter 13 of Working Group III of the Fifth Assessment Report of the Intergovernmental Panel on Climate Change that had previously been agreed to by a plenary session of the IPCC. This interpretation is by one individual, one of the two coordinating lead authors of the chapter. The other coordinating lead author, as well as the twelve lead authors of the Chapter 13 team, will have their own ideas about the content and priorities of the chapter. We will all learn as the work progresses, so the correspondence of the final product to this brief summary is at present unknown.

References

Aldy, Joseph E. and Robert N. Stavins. *Post-Kyoto International Climate Policy: Implementing Architectures for Agreement*. New York: Cambridge University Press, 2010.

Stavins, Robert N. "The Problem of the Commons: Still Unsettled After 100 Years." *American Economic Review* 101(2011):81-108.