Chapter 14

A Commentary on the Kyoto Protocol

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14.1 Introduction

The Kyoto Protocol to the UN Framework Convention on Climate Change is the product of 30 months of complex negotiations and of a climactic last-minute adoption, so that a good number of its articles and paragraphs need interpretation and further elaboration. In many points agreements were reached on the basis of the "openness" of the drafting and postponement of definitions.

During the next two years a lot of work had to be done on those points through informal gatherings and workshops and intergovernment conferences. Such meetings have already been held by the Royal Institute of International Affairs at Chattam House in London, the Japanese Ministry of Trade and Investment (MITI) in Tokyo, and the OECD and IEA in Paris. This workshop at Columbia University can be considered the fourth in chronological order.

The protocol contains the following:

- 1. Menu of "mandatory" policies and measures for industrialized countries (Art. 2)
- 2. Quantified emission limitations and reductions commitments for the same group (Art. 3)
- 3. A "bubble" provision, especially convenient for the European Union (Art. 4)

[&]quot;From Kyoto to Buenos Aires: Technology Transfer and Emissions Trading" was chaired by G. Chichilnisky and R. Estrada-Oyuela and hosted by the Italian Academy of Columbia University, April 1998, with the support of the UNESCO chair at Columbia University, UNDP, UNEP, and UNIDO.

- 4. Requirement of a national system for estimation of emissions (Art. 5)
- 5. Joint implementation among developed countries with credits (Art. 6)
- 6. A request for inventories and information on compliance (Art. 7)
- 7. Mechanism to review information (Art. 8)
- 8. Provision for the periodical review of the protocol (Art. 9)
- 9. Indicative policies and measures for all parties (Art. 10)
- 10. Additional rules for the "financial mechanism" (Art. 11)
- 11. The "clean developed mechanism" (Art. 12)
- 12. Rules for the bodies of the protocol, such as the meeting of the parties (Art. 13), the secretariat (Art. 14), the Subsidiary Bodies for Scientific and Technological Advice and for Implementation (Art. 15) and the multilateral consultative process (Art. 16)
- 13. "Emission trading" (Art. 17; see also Arts. 3.10 and 3.11)
- 14. An enabling article to adopt noncompliance rules (Art. 18)
- 15. Rules for the settlement of disputes (Art. 19), amendments (Art. 20), and annexes (Art. 21)
- 16. Voting rights (Art. 22), designation of the depository (Art. 23), signature, and ratification
- 17. Accession, acceptance or approval (Art. 24), and entry into force (Art. 25)
- 18. Reservations (Art. 26), withdrawal (Art. 27), and languages (Art. 28)
- 19. Two annexes related to Article 3: Annex A, which lists the greenhouse gases controlled by that article and source categories by sectors, and Annex B, which lists the assigned amounts of greenhouse gases for each industrialized country, as percentages of their 1990 emissions.

Analysis and discussion until now have been devoted mainly to quantified commitments and "flexibility mechanisms." However, they do not stand alone and must be understood in the context of the whole protocol.

14.2 Policies and Measures (P&M)

After the definitions in Article 1, the protocol has (Art. 2), a menu of mandatory policies and measures to be implemented by industrialized countries in order to achieve the quantified limitations and reductions of Article 3 and the annexes. The mandatory versus the indicative character of these policies and measures was discussed until Kyoto. The European Union insisted on the mandatory approach, and the United States rejected any kind of references to policies and measures. The final text seems to have little beyond Article 4 of the convention, but it brings additional emphasis on coordination (paragraphs 1.b

and 4), and a specific reference to ICAO and IMO (paragraph 2) with the consequent complication of different memberships in those organizations and the protocol.

According to Article 2.3, the parties shall strive to implement policies and measures in such a way as to minimize "adverse effects" on climate change and trade, as well as social, environmental and economic "impacts" on other parties, especially developing country parties and especially on those sensitive to the fossil fuel trade and the small islands states. OPEC countries proposed this paragraph and the similar one in Article 3.14.

14.3 Quantified Emissions Limitation and Reduction (QELROS)

Article 3 establishes the commitment of developed countries to reduce their emissions of greenhouse gases listed in Annex A by at least 5% below the base year in the period 2008–12, in the context of the differentiation of Annex B. Actually, the algebraic addition of reductions and limitations means –5.2%, which might seem a modest target. Its real significance is appreciated when compared with the "business as usual" projected increase of 24% because then it becomes clear that the real reduction will be close to 30%.

14.3.1 Emissions Levels Indicated in Annex B Are Called "Assigned Amounts" — By 2005 each party shall have made "demonstrable progress" in achieving its commitments under the protocol (Art. 3.2), but it has not yet been decided how progress should be demonstrated.

Opting for the "net emissions" approach, Article 3.3 establishes which removals of greenhouse gases can be taken into account. The following paragraph (Art. 3.4) requests information on carbon stocks, provides for the adoption of new modalities to be applied in future "budgets," but also opens the possibility for the immediate application of those modalities. They both enshrine a form of flexibility and important criteria for the implementation of the protocol.

Articles 3.5 and 3.6 create flexibility for the so-called economies in transition in order to select the base year and to implement commitments in other articles.

"Target year" versus "budget" was one of the main issues of negotiation, and finally the "budget" concept was adopted under the name "commitment period." That is defined in Article 3.7, and according to Article 3.9 subsequent periods shall be established in amendments to Annex B. Article 3.8 provides additional flexibility on the base year.

Article 3.10–.13 links flexibility mechanisms and commitments. They provide for additions and subtractions in cases of trading and joint implementation and additions derived from the application of the Clean Development Mechanism (CDM) and from "banking." Trading, joint implementation, and CDM will be the subject of further comments, but "banking" is regulated only by Article 3.13, and the purpose is to allow a party that was able to emit below its "assigned amount" to preserve that portion for the following "commitment period" as it was proposed by the United States.

14.4 Bubbles

Article 4 gives the parties the possibility of creating a "bubble" in order to implement their commitments together. They must notify the secretariat of the protocol of the terms of their agreement. They need not belong to a regional economic integration organization (REIO) to create the bubble, nor need they be neighbors. If they do belong to an REIO, changes in its membership will not alter the commitments. Each party to a bubble shall be responsible for its own level of emissions and if the REIO is a party to the protocol (the European Community is a party to the convention), each country party and the REIO shall be responsible for its levels of emissions.

The bubble concept was also a difficult issue of negotiation and remains a matter to be analyzed. It is well known that individual countries in the European Union have agreed on a "burden sharing" in which some countries are going to reduce emissions, others will keep the 1990 level, and finally a group will increase emissions. However, all of them appear in Annex B with the same percentage of reduction, but after the formal notification of the burden sharing agreement, each country party will be responsible for its commitment under the agreement, not the one in Annex B, and the European Community will also have an established commitment. A discussion on the legal competence of the European Community to achieve its commitment will most probably arise.

14.5 Methodologies

Article 5 requires that each party in Annex I of the convention have a national system for the estimation of emissions and removals before 2008, consistent with methodologies already adopted by the convention bodies. It is necessary to recall that certainty in the estimation of emissions differs significantly between different gases and different sources of the same gas. The "global warming potential" (GWP) concept, utilized by the (IPCC) to compare and add

emissions of different gases, is evolving methodologically. The point has special relevance in relation to the additions and subtractions allowed in accordance with flexibility mechanisms.

14.6 Flexibility Mechanisms: Common Issues

- (a) Emissions and removals: May emissions be compensated by removals in units of GWP despite the uncertainties on sources and removals?
- (b) Gases: May reductions and increases of emissions be exchangeable despite the unlike degree of uncertainty on the GPW of different gases? Or should exchanges be done on the same gas?
- (c) Sources: Similar questions as in (b), because the certainty of the estimation of emissions of gases varies with the sources.
- (d) Supplemental: Joint implementation (JI), emissions trading (ET), and "certified emission reductions" from CDM shall be "supplemental" to the domestic effort, but a "supplemental" needs to be defined.
- (e) Private-sector players are foreseen for JI, trading, and CDM. Should they be regulated in some way?
- (f) Will monitoring of the flexibility mechanisms be unified?

14.7 Joint Implementation (JI)

In addition to the common issues of flexibility mechanisms spelled out previously, JI (Art. 6) needs clear guidelines on the baselines that will be used to determine the reduction or removals of greenhouse gases, and that is not easy. In order to participate in JI, it is necessary to have a national system for the estimation of emissions and removals (Art. 5), to report on inventories and on compliance with commitments (Art. 7) and to be free of any question on the implementation raised in the review process (Art. 8).

The possibility of having JI projects based on removals is explicit in Article 6.

14.8 Inventories, Communications, and Reviews

Article 7 provides that parties shall add to their inventories and national communications information related to the implementation of the protocol, and Article 8 institutionalizes the in-depth review process of national communications already in force for parties to the convention. Article 8 adds that the

review shall identify potential problems and factors influencing the fulfilment of commitments. The secretariat shall list "questions of implementatrion" to be considered by the meeting of the parties.

Periodical review of the protocol is foreseen by Article 9 and shall be coordinated with the pertinent reviews under the convention.

14.9 All Parties Commitments

Article 10 elaborates on nonquantified commitments for industrialized and developing countries. To identify progress beyond Article 4.1 of the convention requires quite a semantic effort. However, that part of the protocol should be used to promote action from both industrialized and developing countries.

14.10 Financial Mechanism

Article 11 adds the Kyoto Protocol's emphasis to the convention provisions on the financial mechanism.

14.11 Clean Development Mechanism (CDM)

Article 12 defines the Clean Development Mechanism (CDM) that has been called the "Kyoto Surprise." A Clean Development Fund was in previous drafts of the protocol but it had different features. Explanations given in the U.S. Senate show the CDM as JI between developed and developing countries, with participation of the private sector. In addition to common questions related to all flexibility mechanisms, CDM raises specific points:

- 1. As in the case of JI, it will be necessary to define "baselines."
- 2. Because recipient countries will not have quantified commitments, it will also be needed to define "reductions in emissions that are additional to any that would occur in the absence of the certified project activity."
- 3. Another question to solve is, What are "proceeds from certified project activities" (the whole cost of the project, only the donor part of the cost, and so on?). How much will be used to cover "administrative expenses"? How much assistance is needed in adaptation projects?
- 4. How much are transaction costs increased that way?
- 5. Article 12 refers to emissions limitation and reduction, not to removals of GHG by sinks, as Article 6 does: May carbon sequestration projects be included in the CDM?

6. Certified emission reductions from 2000 to 2008 can be used in the first commitment period, but the implications of that rule shall be analyzed before the entry into force of the protocol. Most likely the analysis should be preceded by adoption of preliminary rules for the CDM.

14.12 Institutional Economy

Articles 13 to 16 deal with the bodies of the protocol and their procedures, with a tendency to use as far as possible bodies and procedures of the convention.

14.13 Trading

Article 17 mandates the Conference of the parties to define principles, modalities, rules, and guidelines for trading before the entry into force of the protocol. It has to be done for the purposes of verification, reporting, and accounting, and a number of governments have announced that the trading is substantive for their participation in the protocol.

In addition to the general points for all flexibility mechanism described previously in paragraph 14.6, specific aspects of trading will need to be agreed upon:

- During the debate in Kyoto, the need to establish equity criteria for trading was crystal clear. "Paper tons" and "hot air" were expressions used to indicate the need to verify emission projections from some developed countries willing to participate in trading.
- 2. The possible role of the private sector in trading needs to be regulated.
- 3. Some of the drafts used during negotiations not only mentioned privatesector participation but also included references to intermediaries.
- 4. The possible creation of transaction body for trading is a question opened by a number of proposals, including some from the World Bank and UN Conference on Trade and Development (UNCTAD).

14.14 Noncompliance

Cases of noncompliance shall be addressed by procedures adopted by the meeting of the parties to the protocol, in conformity with Article 16. In fact Articles 7 and 8 of the protocol already have a device to detect and assess noncompliance (see Article 15), and parties in noncompliance will not be able to use the flexibility mechanisms.

14.15 Additions to Annex B

Among other issues in the final clauses, the extreme rigidity established to modify Annexes A and B, complicating the addition of new parties to Annex B even with the consent of the interested party, can be pointed out.

14.16 Volume of Emissions Required to Enter into Force

Last, but not least, the entry into force of the protocol requires 55 parties, including Annex I parties, which accounted for at least 55% of the total carbon dioxide emissions for the base year (Art. 25). That does not give veto to any individual country, but it does give veto to the United States and Russia together. The protocol can enter into force without one of them but not without both of them. Other, similar combinations of parties are possible under the provisions of Article 25.