

Emission Trading, Joint Implementation and the Clean Development Mechanism: The Role of the Private Sector and other State Actors in Implementation

Laura B. Campbell¹

Introduction

The Kyoto Protocol, concluded on December 10, 1997, contains a number of market-based instruments referred to as “flexibility mechanisms” which are aimed at achieving the environmental goals of the treaty through the use of economic forces. Key among these flexibility mechanisms contained in the Protocol are the provisions related to: 1) emissions trading, 2) joint implementation and 3) the Clean Development Mechanism. In the case of each of these flexibility mechanisms, the principles, rules and guidelines for their operation are yet to be elaborated. Governments have continued since the conclusion of the Kyoto Protocol in December 1997 to negotiate on the specifics of implementation of the flexibility mechanisms, and this will be a key area for negotiation at the Fourth Conference of the Parties to the United Nations Framework Convention on Climate Change (COP 4) to be held in Buenos Aires in November 1998.

One of the key purposes of this project organized by the Global Environment Information Centre (GEIC) and the Institute of Advanced Studies (IAS) of the United Nations University (UNU) is to develop innovative policy scenarios for the implementation of these flexibility mechanisms. In line with the over-arching goals of the GEIC/IAS project, the purpose of this paper is to explore the potential roles to be played by non-State actors in effective implementation of the flexibility mechanisms related to emissions trading, joint implementation and the Clean Development Mechanism.

In exploring the role to be played by non-State actors in implementation of the flexibility mechanisms, this paper discusses: 1) key provisions of the Kyoto Protocol concerning joint implementation, emissions trading and the Clean Development Mechanism; 2) some of the international organizations involved in activities related to implementation of the flexibility mechanisms; and 3) ways in which private sector entities and non-governmental organizations (NGOs) might participate in activities concerning joint implementation, emissions trading and the Clean Development Mechanism.

Key Provisions of the Kyoto Protocol Concerning Joint Implementation, Emissions Trading and the Clean Development Mechanism.

The United Nations Framework Convention on Climate Change (UNFCCC), signed at the Earth Summit in 1992, established a pilot phase for Activities Implemented Jointly (AIJ). The term AIJ implies that governments or companies will contract with parties in another country to implement an activity that reduces greenhouse gas (GHG) emissions in that country. During the years following its entry into force of the UNFCCC, a limited number of AIJ projects were carried out, primarily on a bilateral basis but also under the auspices of intergovernmental organizations such as the World Bank.

¹ Abe Fellow, Sophia University Faculty of Law

AJI related activities were the precursor for the provisions on joint implementation among Annex I countries, emissions trading and the Clean Development Mechanism included in the Kyoto Protocol. The relationships among the provisions on joint implementation, CDM and emissions trading are rather complex. However, in general, Annex I countries can receive credit for reducing greenhouse gas emissions for carrying out either joint implementation or CDM projects, and such credits can be used to meet the Annex I countries' commitments to reduce emissions under Article 3.

The Kyoto Protocol to the UNFCCC includes provisions authorizing joint implementation of Annex I country commitments in Article 3:

Paragraph 1. states that: "The Parties included in Annex 1 shall *individually or jointly*, ensure that their aggregate anthropogenic carbon dioxide equivalent emissions of the greenhouse gases listed in Annex A do not exceed their assigned amounts, calculated pursuant to their quantified emission limitation and reduction commitments inscribed in Annex B and in accordance with the provisions of this Article, with a view to reducing their overall emissions of such gases by at least 5 per cent below 1990 levels in the commitment period 2008 to 2012."

Other provisions in Article 3, specifically Paragraphs 10 and 11, provide a mechanism for calculating the Parties emissions limitation and reduction obligations under a joint implementation scenario involving the transfer of "emission reduction units":

Paragraph 10 states:

"Any emission reduction units, or any part of an assigned amount, which a Party acquires from another Party in accordance with the provisions of Article 6 or of Article 17 shall be added to assigned amount for the acquiring Party."

Paragraph 11 states:

"Any emission reduction units, or any part of any assigned amount, which a Party transfers to another Party in accordance with provisions of Article 6 or 17 shall be subtracted from the assigned amount for the transferring Party."

Article 6 of the Kyoto Protocol discusses emissions trading among Annex I countries in more detail:

"1. For the purpose of meeting its commitments under Article 3, any Party included in Annex I may transfer to, or acquire from, any other such Party emission reduction units resulting from projects aimed at reducing anthropogenic emissions by sources or enhancing anthropogenic removals by sinks of greenhouse gases in any sector of the economy, provided that:

- (a) Any such project has the approval of the Parties involved;
- (b) Any such project provides a reduction in emissions by sources, or an enhancement of removals by sinks, that is additional to any that would otherwise occur;
- (c) It does not acquire any emission reduction units if it is not in compliance with its obligations under Articles 5 and 7; and
- (d) The acquisition of emission reduction units shall be supplemental to domestic actions for the purposes of meeting commitments under Article 3."

Article 12 establishes the Clean Development Mechanism, a scheme for encouraging Annex I countries to carry out emission reduction projects in developing countries by providing credit for “certified emission reductions” which can be used to meet the Annex I countries’ commitments under Article 3.

“2. The purpose of the clean development mechanism shall be to assist Parties not included in Annex I in achieving sustainable development and in contributing to the ultimate objective of the Convention, and to assist Parties included in Annex I in achieving compliance with their quantified emission limitation and reduction commitments under Article 3.

Under the clean development mechanism:

- (a) Parties not included in Annex I will benefit from project activities resulting in certified emission reductions; and
- (b) Parties included in Annex I may use the certified emission reductions accruing from such project activities to contribute to compliance with part of their quantified emission limitation and reduction commitments under Article 3, as determined by the Conference of the Parties serving as the meeting of the Parties to this Protocol.

As noted above and stated in Article 17, the Conference of the Parties to the Climate Change Convention are expected to define “the relevant principles, modalities, rules and guidelines, in particular for verification, reporting and accountability for emissions trading.” In other words, while the Kyoto Protocol authorized emissions trading as a mechanism under which Annex I countries can receive credit for emission reductions for both joint implementation and CDM activities, the specifics of how these inter-related programs will function remains to be elaborated.

The Role of International Organizations in Joint Implementation, Emissions Trading and the Clean Development Mechanism.

The authority for the involvement of International organizations in the flexibility mechanisms discussed in this paper arises primarily from language in Article 12 of the Kyoto Protocol. Paragraph 5 of Article 12 states that “Emissions reductions resulting from each project activity shall be certified by operational entities to be designated by the Conference of the Parties serving as the meeting of the Parties to this Protocol...” and also refers to the participation of “public entities” in CDM activities more generally in paragraph 9.

The World Bank

The World Bank has been involved from the early 1990’s in carrying out AIJ activities and has proposed a Global Carbon Initiative. Under the Global Carbon Initiative, the Bank would serve as a broker between buyers and sellers of certified emission reductions, assist developing countries in CDM project development and aid potential buyers in identifying projects and groups of projects of interest to them.

United Nations Conference on Trade and Development

UNCTAD has proposed playing a role as an intermediary in trading certified emission reduction credits.

Regional Development Banks

While no clear role has been articulated for regional development banks, they are well suited to assist developing countries in identifying CDM projects that meet their goals for sustainable development and achieve emission reductions. The regional development banks could also serve as regional commodity exchanges emissions trading and monitor and enforce CDM contracts.

United Nations Commission on International Trade Law

For both government sponsored and private sector activities carried out under both the joint implementation and CDM schemes, there will be a compelling need for consistency in contractual arrangements. Among other things, such consistency would facilitate monitoring and enforcement of the agreements. UNCITRAL could play an important role in drafting model agreements for this purpose.

The Role of Private Sector Entities and NGOs

The Kyoto Protocol explicitly provides for the participation of private sector entities in activities to implement the flexibility mechanisms both in Article 6 (emissions trading) and Article 17 (Clean Development Mechanism).

Article 6, paragraph 3 states:

“3. A Party included in Annex I may authorize legal entities to participate, under its responsibility, in actions leading to the generation, transfer or acquisition under this Article of emission reduction units.”

Article 17, paragraph 9 states:

“Participation under the clean development mechanism, including in activities mentioned in paragraph 3(a) above and in the acquisition of certified emission reductions, may involve private and/or public entities, and is to be subject to whatever guidance may be provided by the executive board of the clean development mechanism.

There are two basic reasons that the private sector will be motivated to participate in activities related to joint implementation, emissions trading and the clean development mechanism. First, in order to achieve their emission reduction commitments under the Kyoto Protocol, national governments will need to allocate rights to emit greenhouse gases among the current and/or future sources of emissions in their own countries, most of which will be in the private sector. As a consequence, the private sector will be required to achieve reductions and, if allowed to do so, may choose to meet some of its obligations by carrying out joint implementation or clean development projects or through trading emission rights.

Second, private sector entities may be motivated to participate in project activities or emission trading in order to make a profit, if they are engaged in lines of business which are related to these emission reduction activities such as technology development, power generation, contract negotiation and monitoring and commodities trading.

Multinational and Domestic Corporations

To the extent that corporations in Annex I countries operate plants which are subject to national emission limitations, they may have an interest in achieving their emission reduction obligations by carrying out projects in other Annex I countries or developing countries. Multinational corporations in particular may be interested in trading emissions among subsidiaries located in different countries.

Commodity Exchanges

On both the national and international levels, private commodity exchanges can help to create a market for the sale of greenhouse gas emission rights, provide a forum for emissions trading and monitor the quality of the transactions. While it is possible that international organizations such as the World Bank or UNCTAD will play a role in emissions trading related to CDM projects, private sector commodity exchanges may be more qualified to handle private sector emission trading transactions.

International Power Industry

The international power industry may play a role both in emissions trading to meet its own emissions reductions obligations and as an executor of projects aimed at generating power in a manner which reduces GHG emissions. Power generators are also involved in cross-border sales of energy, which impact on both national and private sector emission limitations.

Technology Developers and Manufacturers

The private sector has a critical role to play in the development and diffusion of technology that results in lowering emissions of greenhouse gases. Developers of energy efficient technologies and processes may seek market opportunities created by joint implementation and CDM activities.

Non-Governmental Organizations

NGOs have an important role to play in the implementation of the flexibility mechanisms. In particular, they may be critical in helping to ensure that: 1) real reductions in emissions take place as a result of joint implementation and emissions trading (NGOs can do this by monitoring the joint implementation arrangements and emission trading transactions which take place among Annex I countries); and that 2) the dual objectives of sustainable development in non-Annex I countries and emission reductions are achieved under the Clean Development Mechanism, and that 3) non-Annex I countries have the capacity to request technology and projects which help them to achieve their sustainable development goals.

Conclusion

The participation of non-State actors, authorized by the Kyoto Protocol, will be critical in achieving the treaty's environmental objectives. The roles of international organizations, private sector entities and NGOs, in implementation of the Protocol's provisions on joint implementation, emissions trading and the Clean Development Mechanism, should be discussed as an integral aspect of the negotiations on elaboration of these flexibility mechanisms leading to COP 4 in Buenos Aires.

Selected Bibliography

International Workshop Addresses Emissions Trading Among Annex B Countries, Tomen and Hourcade, August 11, 1998, Resources for the Future.

Changing the Market Climate for Emissions Trading, Heather Ross, August 19, 1998, Resources for the Future.

The Importance of Trade for the Ratification of the 1992 Climate Change Convention, June 10, 1998, Fredriksson and Gaston, The World Bank.

Questions and Answers on Emission Trading Among Annex I Parties, Information Paper, December 1997, OECD.

Report of the Third Conference of the Parties to the United Nations Framework Convention on Climate Change, December 10, 1997.

Contractual Aspects of Implementing the Clean Development Mechanism and Other Flexibility Mechanisms Under the Kyoto Protocol, Worika, Brown, Vinogradov and Waelde, Centre for Energy, Petroleum and Mineral Law and Policy, University of Dundee, August 30, 1998.

Linking Technology Transfer with Clean Development Mechanism (CDM): A Developing Country Perspective, Jyoti K. Parikh, Indira Gandhi Institute of Development Research, undated.

From Kyoto to Buenos Aires: Implementing the Kyoto Protocol on Climate Change, Campbell and Carpenter, July 22, 1998, International Environment Reporter.