

Beauty.... or the Beast?

The Challenge of Designing the CDM

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The current negotiations of the United Nations Framework Convention on Climate Change are giving rise to an innovative financial mechanism which seeks to help industrialized countries reach their emission reduction targets in a cost effective manner, while at the same time promoting sustainable development in developing countries.

Although still in its design stage, the Clean Development Mechanism has the potential to become a beauty: it could become an important source of foreign private capital for the financing of clean, energy efficient economic development in the South, and for addressing environmental issues such as deforestation and loss of biodiversity in developing countries.

However, whether the CDM will reach that potential or not, depends on the successful attainment of two main objectives of the CDM:

- ❑ CDM projects must contribute toward the sustainable development objectives of the host country; and,
- ❑ Host countries must be able to attract sizeable investments.

The CDM is being currently designed as part of the international effort to implement the Kyoto Protocol. Developing countries have a major role to play in determining the design of the CDM. It behooves us all to carefully consider how we may wish to pursue the above objectives in order to avoid creating a beast: a mechanism so cumbersome that it will neither reduce the global cost of reductions, nor support sustainable development in developing countries.

1. Contribute to achieving the sustainable development objectives of host countries

The World Commission on Environment and Development in its report Our Common Future (1987) first defined sustainable development as "meeting the needs of the present without compromising the ability of future generations to meet their own needs". The word 'sustainable' has acquired tremendous currency in recent years, particularly after the Earth Summit '92 in Rio de Janeiro, Brazil. Moving beyond the concurrent growth-oriented, top-down development paradigm, sustainable development emphasizes a development framework based on an appreciation of the finite human and natural resources available on planet earth. However, the concept has yet to be integrated to the operational aspect of development strategies of the industrialized and developing

countries. It remains the sovereign right and responsibility of each country to define sustainability in its own terms, and to ensure that sustainable development is being pursued.

In order to meet sustainable development objectives, a country must formulate clear policies, develop effective legal frameworks, and implement efficient financial instruments. These financial instruments can include direct budget allocations, debt conversion transactions, habitat destruction and pollution charges, environmental taxes and user fees, etc. The sale of carbon offsets through the CDM can be one of the financial instruments which support national sustainable development, but it clearly cannot be the only one.

During the past five years many developing countries have criticized the fact that the pilot phase of Activities Implemented Jointly did not contribute to the sustainable development of their nations. This is true in as much as investment was concentrated in very few regions. It is especially true of those projects which were investor-driven, serving the emission reduction interests of the investors and not the development interests of the host country. There is clearly a fear that the emerging CDM will perpetuate this.

However, the responsibility for insuring that CDM projects will contribute to the sustainable development of the host country cannot be placed on the international system which is being created. This responsibility continues to rest on the shoulders of developing countries themselves. They must ensure that their project approval criteria accurately reflect the nation's sustainable development goals and priorities both at the national as well as at the local levels. Projects must then be evaluated and approved according to their contribution to those objectives. Ultimately, the congruence between mitigation projects and national sustainable development goals is not only a sovereign right, it is an inescapable national obligation.

2. Attract sizable investments

Were the CDM the only means for industrialized countries to attain international carbon offsets, it would inevitably channel high levels of foreign direct investment somewhat independently of the elements of its design. However, the Kyoto Protocol calls for the creation of three international mechanisms which will ultimately compete with each other. The CDM will have to compete with Joint Implementation and emissions trading on at least three basic design elements:

- (i) Supplementarity
- (ii) Model
- (iii) Transaction costs

(i) Supplementarity is the proportional use which will be made of each of the flexibility mechanisms. During the negotiation of the Kyoto Protocol, non Annex I delegates feared that the price differential between reductions in industrialized countries and reductions in developing countries/economies in transition would result in minimal

domestic efforts to reduce, as well as minimal incentive to develop cleaner technologies and practices. In order to force a reasonable amount of domestic action, developing countries were instrumental in inserting the concept of complementarity into the three flexibility mechanisms, expressed as “supplemental to” in Articles 6 and 17, and “part of” in Article 12.

The effect of the final decision on this issue is best understood by projecting probable supply and demand of carbon offsets. The International Energy Agency (IEA) predicts that the OECD members of Annex B will have to reduce 27% from their projected emissions in 2010 (called the “business as usual” or BAU scenario), the equivalent of 1,036 million tons of carbon (mtC) for each of the five years of the commitment period.¹

The United States would like to see no caps imposed on the use of the flexibility mechanisms. Under this no limit scenario OECD countries would probably reduce 10% of the billion tons through domestic action, 16% through JI in other Annex I countries, 17% through the purchase of hot air, and 57% through the CDM.²

The strongest opposition to that possibility has come from the European Union, AOSIS and G77 in general. The European Union has recently presented a proposal which calls for each industrialized country to attain 50% of the billion tons domestically. The remaining offsets would probably be supplied by the flexibility mechanisms in the following proportions: hot air the usual 17%, JI 8%, and CDM 26%. Although the relative proportion of the market share for the CDM under this scenario is less than half of the previous, it is foreseeable that the market clearing price of carbon will be higher than under the first scenario, due to the higher domestic reduction costs.

(ii) Model: Since Kyoto the debate about the structure of the CDM has revolved around two contrasting conceptions of the nature and functioning of the CDM. Most industrialized countries favor the *bilateral or free market model*, which not surprisingly emphasizes the needs of investor Parties and the interests of their private sectors. The CDM would define certain guidelines for operation, but the development and implementation of CDM projects would be dealt with on a project by project basis between the buyer and the seller of offsets. This approach minimizes the CDM institutional structure which is reduced to a clearing-house mechanism putting investors in touch with interested hosts.³

The alternative, the *portfolio model*, being presented by developing countries, stresses the multilateral character of the CDM. The basic idea behind the portfolio model is to protect host countries from unfair pressure on the part of the buyers. Instead of approaching host countries directly, the CDM would be the only authorized purchaser of certified emission reductions, and the only source of CERs for the buyers. The CDM would “bundle”

¹ International Energy Agency, World Energy Prospects to 2020, G8 Meeting, Moscow, March 1998.

² Haites, Erik, Estimate of the Potential Market for Cooperative Mechanisms 2010. 1998. Unpublished

³ Yamin, Farhana, Unanswered Questions, The CDM: Issues and Options, UNDP, 1998.

projects, sell the CERs to industrialized country parties, and channel funding received back to host countries. Proponents of this model argue that it will promote a more equitable participation of developing countries in the CDM since the bundling would spread the risk inherent in single projects under the bilateral model.⁴

Although this aspect of broad participation is certainly appealing to developing countries, we must be careful to not overburden the CDM with so much administrative weight that becomes uncompetitive with the other international flexibility mechanisms. Perhaps more effort should be made to conceive of a hybrid model which would allow host countries some flexibility in the marketing of their CERs, and investors a choice in where to buy.

(iii) Transaction costs: the third design element which will severely affect the competitiveness of the CDM is the list of transaction costs which will be associated with CDM projects. A simple comparison of Articles 6, 17 and 12 of the Protocol points out at least four types of transaction costs which are currently included in the CDM but not in Joint Implementation or emissions trading.

- Host country approval: this procedure is critical to any CDM project. From the perspective of developing countries, it constitutes the basis of a CDM project because it is the only way we will ensure that projects are consistent with and contribute to our sustainable development priorities. The host country approval will undoubtedly represent a transaction cost, but it is one developing countries are willing to pay.
- Additionality: the requisite that carbon offsets represent climate change activities which would not have occurred in absence of the project is a key consideration in terms of the environmental integrity of the project. However, the determination of adequate additionality has been one of the major challenges of each project during the pilot phase, and is currently not a prerequisite for JI.
- Certification: Article 12 establishes certification by the operational entities as a necessary component of certified emission reductions. Although it has not yet been determined how this certification process will occur, it is clear that it will represent a transaction cost which is currently not required of Joint Implementation or emissions trading.
- Share of the proceeds: finally, Article 12 calls for a share of the proceeds from certified project activities to be used to cover administrative expenses as well as to assist developing countries that are particularly vulnerable to the adverse effects of climate change to meet the costs of adaptation. This fee is not levied on either of the two other mechanisms.

Since the certified emission reductions can assist Annex I Parties in complying with their quantified emission limitation and reduction commitments assumed under the Kyoto Protocol, the CERs will eventually compete with reductions or offsets achieved domestically, or internationally through the other mechanisms. Parties must consider that the above transaction costs contribute to the environmental integrity of the system, but at the same time make the CDM less competitive with the alternate mechanisms.

⁴ Ibid

Overburdening the design of the CDM will create a beast with diminished share of the emission reduction market.

Developing countries can hardly afford for the CDM to go awry. It represents the clearest opportunity we have to decarbonize our development path. If appropriately designed, the CDM could effectively “green” direct private investment in developing countries. Therein lies the beauty of the CDM: in its potential to act as an effective incentive to implement more greenhouse gas efficient projects than what would otherwise have occurred. Investment in the energy sector, transportation, and extractive industries in developing countries will continue. Through the CDM the world may begin to see a trend of investments in the same sectors, even at the same or higher levels, but with choices of cleaner technologies and practices.

From a financial point of view, the CDM represents a clear way to securitize the environment by providing private capital markets with the means to invest in carbon reductions as a commodity. It also will provide an unprecedented opportunity for developing countries. Many of them are reaching a critical juncture in their economic development. Decisions are being made in energy generation that will affect worldwide greenhouse house gas (GHG) emissions for many years to come. Currently, they can only choose a low emissions path of development if there is a clear economic reason to do so. The CDM offers this opportunity.