The World Bank
International Bank for Reconstruction and Developmentlnternational Development Association

1818 H STREET, NW
MSN G2-202(IBRD)
WASHINGTON, DC 20433
U.S.A

Telephone 202 473 2222
Email: hrservicecenter@worldbank.org
Fax (202) 522-7025
http://www.worldbank.org

February 18, 2011

UNFCCC Secretariat
P.O. Box 260124
D-53153 Bonn
Germany

Dear Sir/Madam,

Re: Call for Inputs - Paragraph 82 of Decision CP.16

The World Bank appreciates the opportunity to submit views on the elaboration of one or more market-based mechanisms by the Ad Hoc Working group on Long-term Cooperative Action (AWG-LCA). The submission is offered in response to invitation included in paragraph 82 of Decision CP.16.

Sincerely yours,

JChassard

Joëlle Chassard
Manager
Carbon Finance Unit

World Bank submission on market-based mechanisms

1. Introduction

The World Bank appreciates the opportunity to contribute to Parties' important work to elaborate one or more market-based mechanisms. Through this submission, the World Bank seeks to offer some considerations for such elaboration and design of new market-based mechanisms. These considerations stem from insights and lessons derived from the World Bank's carbon finance experience across many different types of projects and sectors around the world over the past decade (the bulk of the Bank's experience pertains to the Clean Development Mechanism (CDM) and Joint Implementation (JI)[1] with more limited engagement in the area of Green Investment Schemes). We hope this can be a constructive input to Parties' deliberations.

This submission is not meant to be exhaustive and is made without any prejudice to other mechanisms to mitigate GHG emissions. Market mechanisms are one tool to meet quantified greenhouse gas (GHG) emission reduction objectives. Complementary and supplementary policies are undoubtedly needed to meet the climate change challenge.

2. Scoping of market-based mechanisms

Our understanding of the scope of the work of the AWG-LCA on market-based mechanisms, as outlined in Decision CP.16 (Section D), is that it may cover mechanisms for both *crediting* (ex post credits) and *trading* (allocation of ex ante allowances) under a set of rules decided internationally as opposed to domestic, sub-national or regional mechanisms.

Crediting mechanisms may be either project/ installation-based, program-based, policy-based or sector-based.

Both trading and crediting GHG schemes may cover different sectors and all (or a sub-set) of installations in those sectors.

There are also non-GHG market-based mechanisms that can be implemented to help mitigate GHG emissions, but the primary aim is to achieve another- closely related policy goal (e.g., energy policy). For example, energy efficiency (white) certificates

---

[1] The World Bank has published a more detailed account of its experience in "10 Years of Experience in Carbon Finance – Insights from Working with the Kyoto Mechanisms" (May 2010). It is available on www.carbonfinance.org .

schemes and renewable energy certificates schemes are also market-based mechanisms.

The mechanisms can function as *mandatory* or *voluntary* GHG schemes. Under mandatory schemes, covered entities or installations emitting emissions beyond their allowances or baselines must cover these through the purchase of other eligible allowances or credits. Mandatory schemes ensure that given overall quantitative emission objectives are met. Under voluntary schemes, covered entities or installations emitting emissions beyond their allowances or baselines do not face any obligations to purchase eligible credits or allowances nor do they face penalties, but do not have any allowances or credits to sell. Voluntary schemes also do not provide a guarantee that GHG mitigation objectives will be met.

3. Why consider market-based mechanisms?

A price signal derived from the market is an efficient way to meet GHG mitigation objectives by providing an incentive to mobilize capital – including private – towards no/low GHG options/activities. GHG market-based mechanisms can help meet given GHG objectives cost-effectively. Design features will influence the effectiveness of market-based mechanisms.

Carbon finance – the generic term for revenue streams generated by mitigation activities from the sale of their GHG emission reductions or from trading in GHG allowances - has its roots in the Kyoto Protocol's market-based mechanisms and is now a proven tool to support GHG mitigation and sustainable development

It is important to recognize that all market-based mechanisms may not apply equally well to all sectors and circumstances. Public financing and government policies are also needed to leverage climate financing.

4. Some key considerations for the development of new market-based mechanisms

➢ **The importance of clear policy signals and ambitious targets for an effective price signal**

- The impact and effectiveness of market-based mechanisms are directly correlated to GHG targets and their level of ambition. Ambitious GHG mitigation targets are needed to meet the international community's climate change goal of holding the increase in global average temperature below 2^{o}C and to generate a clear long-term price signal that gives a financial incentive to guide investments towards no/low GHG activities (if emission targets are lax, then market mechanisms cannot stimulate significant GHG reductions).

- The ability to scale up mitigation should be an important objective, given the magnitude of the climate change challenge. This is also tied to the level of ambition of GHG targets.

➢ **Keeping in mind the objectives and strengths of market mechanisms**

- Market-based mechanisms can help mitigate GHG emissions cost-effectively through the establishment of a price signal and thereby contribute to lowering the overall cost of compliance with pre-defined GHG objectives.
- Market-based mechanisms, if designed well, can help stimulate private sector involvement in GHG mitigation activities and associated financing. Private entities can often provide a more competitive and stronger dynamic to get mitigation projects and activities off the ground than what is possible through public sector interventions only.
- Mandatory schemes with ambitious targets can create a demand for eligible emission reduction credits in developing countries. Through crediting mechanisms, this demand can bring financial flows to developing countries to support low carbon development activities and investments. Concretely, crediting mechanisms in developing countries can bring an additional revenue stream for eligible projects or programs, while providing the same – or better – quality of service/benefit (e.g., same or better energy services resulting from the introduction of higher energy efficient technologies). As payments for emission reductions are performance-based, crediting mechanisms can also provide an incentive to sustain emission reductions over time.

➢ **Environmental integrity is key**

- Maintaining environmental integrity is important for the overall climate regime, but also for economic efficiency and for providing confidence and credibility to carbon markets.
- In fact, in the context of co-existing GHG schemes, markets will differentiate and price carbon assets from national/regional GHG schemes and mechanisms accordingly, depending on their real and/or perceived environmental integrity.
    - The co-existence of different schemes with different levels of real and/or perceived environmental integrity is likely to imply added transaction costs to project developers that seek to assess which scheme to sell emission reduction credits into.
    - The linking of co-existing schemes will require the mutual recognition of emission credits or allowances of each scheme, taking into account their respective implementation of additionality and/or MRV stringency.
- *Baselines*
    - Crediting mechanisms generate credits for emission reductions below a given baseline. In the CDM and JI, the baseline represents what would

happen otherwise, or roughly the business-as-usual (BAU) scenario. The Cancun Decision CP.16, paragraph 80(e) stipulates that in the establishment of one or more market-based mechanisms, Parties are to take into account the need to ensure "a net decrease and/or avoidance of global greenhouse gas emissions". The baseline for a new mechanism is thus understood to be more stringent than BAU levels.

- To ensure "a net decrease and/or avoidance of global GHG emissions" from crediting mechanisms, it will require setting ambitious, yet realistic baselines, taking into account sector/industry and country practices and circumstances.

- *Additionality*
    - The CDM experience has shed light on the inherent challenges and uncertainties of demonstrating additionality by assessing whether a project would also be implemented without the CDM which is hypothetical and counter-factual (and can never be proven with absolute certainty).
    - This has contributed to a high CDM regulatory risk, which has made it very difficult to use expected CDM (and JI) revenues as an indicator of a project's financial viability to help convince financiers and lenders and thus enable leveraging of the necessary underlying finance. These regulatory risks dampen the carbon finance potential of mechanisms and have the largest negative impact on those projects and programs that depend most on carbon finance revenues for their financial viability.
        - *The concept of additionality under a new mechanism should seek to better reconcile (i) the reality that good and effective emission-reducing projects need also to be technically and financially solid with (ii) the need to ensure environmental integrity.*
    - CDM (and JI) provide a strong case for seeking to move away from the operationalization of the additionality concept based on trying to assess individual investment decisions and move towards clear, objective and more easily verifiable technical criteria compatible with overall environmental objectives.
        - *The CDM experience shows that the project-by-project assessment of individual investment decisions and their motives, in a way that is constantly subject to questioning, can lead to a large bureaucracy to regulate the mechanism. As noted above, it can also lead to an adverse selection effect: due to high regulatory risks, those projects that depend most on carbon revenues can be perceived as too risky and may not go forward; while those that do not so critically depend on carbon revenues may be best positioned to absorb the CDM regulatory risks.*
        - *The establishment of pre-determined "positive" lists of projects deemed additional and/or "negative" lists of non-additional projects*

could be useful to clarify and streamline the approval process by making it more transparent and predictable.

- At the time of their establishment under the Kyoto Protocol, existing market-based mechanisms aroused concerns regarding the possibility of providing perverse incentives to governments to not implement climate-friendly policies and measures, and to private entities to not adopt climate-friendly technologies and processes, in order to benefit from higher baselines or allocations – which in turn can impact on sub-national and national competitiveness. Similar concerns over possible perverse incentives are likely to remain in the context of elaborating new market-based mechanisms. While the risk of such perverse incentives may not be limited only to market-based mechanisms, acknowledging these up-front and proposing transparent means to address them may help contribute to a more inclusive and constructive discussion.
- In this regard, it may be desirable to design a new market-based mechanism with a more holistic approach, recognizing – and explicitly integrating -- climate and development policy objectives. Such new market-based mechanism could be set, for example, in the context of Nationally Appropriate Mitigation Actions (NAMAs) with the aim of seeking to transparently align incentives from the start, thus eliminating the need to subsequently question the motives for the activities stimulated by the new market-based mechanism.

➢ **Providing regulatory reliability and predictability**

- Markets need policy clarity on longer-term GHG objectives as well as predictability and reliability in terms of the regulatory framework(s). This allows a better integration of GHG mitigation considerations in investment decisions.
- Likewise, regulatory authorities also need long-term clarity and predictability so that they can better assess the implications of their own decisions.
- When elaborating new mechanisms, it is useful to consider early on possibilities and eventual linkages with other mechanisms (this is also true for domestic/sub-national and regional schemes).
- Transparency and a meaningful process for communications and engagement with stakeholders are very important.

➢ **Building-in some flexibility to make adjustments**

- The need for predictability and regulatory reliability does not mean that there should not be any flexibility to adjust. Such flexibility is needed, especially in the context of new mechanisms where learning and data gathering is so important in particular in the early days. But timelines and/or triggers for making/justifying adjustments should be communicated in advance and thus be predictable.

- Building-in periodic reviews is very important.

➢ **Including "linking" considerations early on in design**

- It is important to consider early in the design process how new international mechanisms may potentially link to one another and/or with domestic mechanisms
- This means consideration of common elements for measurement, monitoring, verification and reporting.
- Where multiple mechanisms co-exist, the risks of potential double-counting tend to increase and may become problematic. Considering some (international) oversight function may be an effective way to limit such risks.

➢ **Importance of capacity building and readiness**

- The past decade have shown us that capacity building is necessary and takes time to build up. Scarce human resources can constitute a significant obstacle to the development and implementation of market-based mechanisms in developing countries. Readiness activities (and their support) will be important elements to consider in the development of new mechanisms. Anchoring capacity building in the appropriate national institutions and players, as well as effectively integrating them in ongoing efforts to enhance capacity for overall development will be critical.
- It is important to build on – and ensure we do not lose – the capacity developed over the past decade in many countries, organizations, and companies, in terms of integrating GHG considerations into policy and investment decision-making processes, and sustaining emission reductions over time. As highlighted in paragraph 83 of Decision CP.16, it is important to build upon the rich experience of the Kyoto mechanisms. We also believe it is important to use this as a basis to make necessary adjustments and improvements to confront the climate and development challenges of the next decade and beyond.
    - Indeed the acquired skills and tools in terms of project design and project-level GHG monitoring, reporting and verification, along with the integration of GHG mitigation considerations in decision-making processes may be one of the most important achievements of the Kyoto Protocol and its mechanisms.
    - These skills and tools and capacity in MRV built nationally prior- and during - the first commitment period of the Kyoto Protocol will remain over the medium term and must be taken into account and built upon.
- The experience with CDM Programmes of Activities has highlighted the need to build greater capacity domestically in many developing countries, as PoAs tend to demand greater coordination and oversight (compared to stand-alone projects) at the national level. Should new market mechanisms require greater

domestic involvement in the regulatory process, it will require efforts and resources dedicated to building such necessary capacity.

- **Recognizing that it takes time to develop and implement new market-based mechanisms and planning for a transition**

  - The AIJ pilot phase provided an important basis for the decision to include the CDM in the Kyoto Protocol in 1997. The rules and modalities for the CDM were subsequently agreed in Marrakesh in 2001.
  - A key challenge is how to prepare for new mechanisms while not losing the expertise and capacity developed for the CDM and JI.
  - It is important to clarify and communicate early on how investments considered under the CDM, and associated expected carbon revenues, will be affected by the introduction of new mechanisms.
  - It may be useful early on to elaborate on the conditions for stimulating early actions and possibly piloting to gain some practical experience more rapidly (not unlike the AIJ pilot phase which allowed to pilot project-based mechanism prior to the adoption of the Kyoto Protocol)

- **Aligning market mechanisms with countries' GHG mitigation objectives and policies**

  - Scaling up mitigation is necessary for meeting the climate change challenge. The evolution of market-based mechanisms and the development of new mechanisms will benefit from greater engagement from developing countries to ensure that they better integrate the practical realities of developing countries and offer meaningful opportunities to support their low carbon development priorities. The further contribution of market-based mechanisms – both in terms of GHG mitigation and its contribution to sustainable development – will be enhanced if they can build on synergies with host country policies and other financial instruments.
    - It is important to recognize that in some countries and sectors, current market conditions, on their own, do not pull private entities into investing and adopting more GHG efficient technologies and processes. Policy support is needed and such support should not be automatically viewed as an indicator that the introduction of new market mechanisms would not lead to "additional" GHG mitigation. New market mechanisms must work in synergy with GHG mitigation policies in place.

- **Encouraging innovation and opportunities to scale up mitigation**

    - The elaboration of new market-based mechanisms could offer the opportunity for considering sectors not explored under the CDM, such as in the agriculture sector. It may also offer the opportunity to build on the ongoing PoA experiences and to seek to aggregate baselines and additionality more broadly at a given sector or policy level or to the level of NAMAs building on – and consistent with – paragraph 49 of Decision CP.16. It may also offer the opportunity to consider mechanisms focused on different geographic aggregations, such as city-wide approaches and landscape accounting approaches.

- **Efficiency and effectiveness of mechanisms and good governance**

    - Good governance, transparency and due process are essential to build trust in any new mechanism.

- **Not letting perfection be the enemy of the good.**

    - Building on the lessons from the CDM should involve moving away from seeking to measure every single ton of GHG emission reduced (at each project site) towards estimating with proper justification and confidence the total GHG impact of a project, a program or creditable activity.
    - The concept of materiality[2], which is an important auditing concept, should be incorporated into new mechanisms' verification rules and guidelines. The establishment of clear "materiality" guidance would help avoid spending time and resources on issues that do not alter the total GHG impact.

- **Upfront financing is a major barrier for many climate-friendly activities**

    - Regulatory predictability will help expected carbon revenues make low carbon activities more bankable and enable them to leverage financial support.
    - The experience of Green Investment Schemes – although admittedly not yet fully conclusive - may point towards an efficient model for addressing the upfront financing barrier by providing timing flexibility for the implementation of activities. Indeed, GIS can enable a significant share or all of the carbon

[2] Materiality is defined in the glossary of the International Accounting Standards Board's *Framework for the Preparation and Presentation of Financial Statements* as: "Information is material if its omission or misstatement could influence the economic decisions of users taken on the basis of the financial statement. Materiality depends on the size of the item or error judged in the particular circumstances of its omission or misstatement. Thus materiality provides a threshold or cutoff point rather than being a primary qualitative characteristic which information must have if it is to be useful".

revenues to be paid up-front in exchange for the carbon assets associated with emission reductions to be achieved later, subject to agreed disbursement arrangements to ensure efficient implementation of ”greening activities”, along with agreed monitoring and reporting modalities and appropriate enforcement provisions.

➢ **Manageable transaction costs**

- Transaction costs erode the price signal and thus the impact of market mechanisms. It is useful to note that in the CDM (and JI experience), transaction costs have revealed to be largely insensitive to size.
- Conscious efforts should be made to seek to limit transaction costs.

5. Conclusions

The World Bank appreciates the opportunity to contribute to the considerations for the design of new market-based mechanism(s) and remains available to provide inputs and assistance to the Parties as needed.

Annex 1 – COP 16 Decision calling for a submission on views on new market mechanism(s)

Advance unedited version

Draft decision -/CP.16

Outcome of the work of the Ad Hoc Working Group on long-term Cooperative Action under the Convention

The Conference of the Parties

Recalling its decision 1/CP.13 (the Bali Action Plan), and decision 1/CP.15,

Seeking to secure progress in a balanced manner, in the understanding that, through this decision, not all aspects of the work of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention are concluded, and that nothing in this decision shall prejudge prospects for, or the content of, a legally-binding outcome in the future,

Reaffirming the commitment to enable the full, effective and sustained implementation of the Convention through long-term cooperative action, now, up to and beyond 2012, in order to achieve the ultimate objective of the Convention,

Recalling the principles, provisions and commitments set forth in the Convention, in particular its Articles 3 and 4,

Recognizing that climate change represents an urgent and potentially irreversible threat to human societies and the planet, and thus requires to be urgently addressed by all Parties,

Affirming the legitimate needs of developing country Parties for the achievement of sustained economic growth and the eradication of poverty, so as to be able to deal with climate change,

[…]

D. Various approaches, including opportunities for using markets, to enhance the cost-effectiveness of, and to promote, mitigation actions, bearing in mind different circumstances of developed and developing countries

Acknowledging the need to maintain consistency with the principles of the Convention,

Emphasizing the importance of contributing to sustainable development, including through technology transfer and other co-benefits,

Recognizing the importance of enhancing sustainable lifestyles and patterns of production and consumption,

Aware of the need to provide incentives in support of low-emission development strategies,

80. *Decides* to consider the establishment, at its seventeenth session, of one or more market-based mechanisms to enhance the cost-effectiveness of, and to promote, mitigation actions, taking into account the following:

(a) Ensuring voluntary participation of Parties, supported by the promotion of fair and equitable access for all Parties;

(b) Complementing other means of support for nationally appropriate mitigation actions by developing country Parties;

(c) Stimulating mitigation across broad segments of the economy;

(d) Safeguarding environmental integrity;

(e) Ensuring a net decrease and/or avoidance of global greenhouse gas emissions;

(f) Assisting developed country Parties to meet part of their mitigation targets, while ensuring that the use of such mechanism or mechanisms is supplemental to domestic mitigation efforts;

(g) Ensuring good governance and robust market functioning and regulation;

81. *Requests* the Ad Hoc Working Group on Long-term Cooperative Action under the Convention to elaborate the mechanism or mechanisms referred to in paragraph 49 above, with a view to recommending a draft decision or decisions to the Conference of the Parties for consideration at its seventeenth session;

82. *Invites* Parties and accredited observer organizations to submit to the secretariat, by **21 February 2011**, their views on matters referred to in paragraph 81 above;

83. *Undertakes*, in developing and implementing the mechanism or mechanisms referred to in paragraph 80 above, to maintain and build upon existing mechanisms, including those established under the Kyoto Protocol;

84. *Decides* to consider the establishment, at its seventeenth session, of one or more non-market-based mechanisms to enhance the cost-effectiveness of, and to promote, mitigation actions;

85. *Requests* the Ad Hoc Working Group on Long-term Cooperative Action under the Convention to elaborate the mechanism or mechanisms referred to in paragraph 84 above, with a view to recommending a draft decision or decisions to the Conference of the Parties for consideration at its seventeenth session;

86. *Invites* Parties and accredited observer organizations to submit to the secretariat, by 21 February 2011, their views on matters referred to in paragraph 85 above;

87. *Also invites* Parties and accredited observer organizations to submit to the secretariat, by 21 February 2011, information on the evaluation of various approaches in enhancing the cost-effectiveness of, and promoting, mitigation actions, including activities implemented jointly under Article 4, paragraph 2 (a), of the Convention and any other relevant activities, for synthesis by the secretariat.