

Promoting Sustainable Development in New Market Mechanisms – Options and Limitations

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Summary

This paper assesses options to implement criteria for sustainable development in new market mechanisms (NMM) like sectoral crediting and sectoral trading.

The analysis is based on the assumption that the promotion of sustainable development is a necessary part of the combat against climate change. This view is deeply inscribed in fundamental decisions of the UNFCCC climate negotiation process. However, implementation in terms of verifiable criteria has been weak in the existing market-based mechanisms. One fundamental point of critique on the Clean Development Mechanism (CDM) is that the objective to promote sustainable development has effectively never been implemented. Consequently, some countries and NGOs demand that new market mechanisms should explicitly promote sustainable development and that international rules on safeguards and sustainability criteria should be implemented.

Against this background this paper analyses options to implement voluntary or mandatory criteria for sustainable development in the design of sectoral crediting and sectoral trading as key mechanisms discussed as possible new market mechanisms. The analysis shows that the implications for introducing standards for sustainable development are distinctively different from project-based approaches such as the CDM. In sectoral approaches achieved GHG emission reductions are assessed on a sectoral level. Thus, the credit generating process is deliberately delinked from individual mitigation actions.

As a consequence, a principle of “credits only for actions which meet minimal requirements” is factually very difficult to implement. In almost all sectoral trading and sectoral crediting schemes, a meaningful assessment of the contribution to sustainable development implies to introduce SD criteria for the whole participating sector. Limiting SD criteria to a subset of participating installations is only possible in implementation schemes for sectoral crediting with installation level crediting. For all other schemes, the introduction of internationally-agreed SD criteria for NMM would come close to an international agreement on sustainable development for all the sectors encompassed in the NMM. Under the current circumstances of the international political debate we consider the political feasibility to agree on effective standards for sustainable development within new market mechanisms to be extremely unlikely.

Deutsche Zusammenfassung

Diese Studie befasst sich damit, wie Kriterien für nachhaltige Entwicklung in Neuen Marktmechanismen (speziell Sectoral Crediting und Sectoral Trading) implementiert werden könnten.

Ausgangspunkt unserer Analyse ist die Annahme, dass es notwendig ist, eine nachhaltige Entwicklung aktiv zu unterstützen. Dieser Standpunkt ist in den grundlegenden Entscheidungen der UNFCCC-Verhandlungen fest verankert. Allerdings ist die tatsächliche Umsetzung dieses Anspruchs innerhalb der marktbasieren UNFCCC-Mechanismen bisher nur schwach ausgeprägt. So wurde z.B. der Clean Development Mechanism (CDM) wiederholt dafür kritisiert, dass sein Ziel, einen Beitrag zu einer nachhaltigen Entwicklung zu leisten, nicht wirklich umgesetzt wurde. Daher fordern manche Länder und einige NGOs, dass neue Marktmechanismen explizit nachhaltige Entwicklung fördern sollen und dass internationale Regeln zur Sicherung von Mindeststandards etabliert werden sollten.

Vor diesem Hintergrund wird in diesem Papier analysiert, welche Möglichkeiten es gibt, freiwillige oder verpflichtende Kriterien für nachhaltige Entwicklung im Design der neuen Marktmechanismen Sectoral Crediting und Sectoral Trading zu verankern. Die Analyse zeigt, dass die Einführung von Mindeststandards in sektoralen Mechanismen eine völlig andere Bedeutung als in projektbasierten Mechanismen wie dem CDM hat. In sektoralen Mechanismen erfolgt die Bewertung der erreichten Emissionsreduktionen auf Ebene des gesamten Sektors. Das heißt, dass der Prozess der Vergabe von Zertifikaten absichtlich von der Bewertung einzelner Minderungsaktivitäten eines Sektors entkoppelt wird.

Dies hat zur Konsequenz, dass sich ein Grundsatz wie „Emissionszertifikate nur für Aktivitäten, die auch Nachhaltigkeitskriterien erfüllen“ in der Praxis nur sehr schwer umsetzen lässt. In den meisten Varianten sektoraler Marktmechanismen können effektive Nachhaltigkeitskriterien nur dann eingeführt werden, wenn sich diese auf den gesamten beteiligten Sektor beziehen. Eine Eingrenzung von Nachhaltigkeitskriterien auf eine Auswahl von Anlagen ist faktisch nur in einer Variante (*installation level crediting*) sinnvoll umsetzbar. In allen anderen Varianten käme die Einführung effektiver Nachhaltigkeitskriterien innerhalb sektoraler Marktmechanismen einem internationalem Abkommen für nachhaltige Entwicklung in den beteiligten Sektoren gleich. Unter den derzeitigen Umständen auf der Ebene der internationalen Politik halten wir die Etablierung von wirksamen Nachhaltigkeitskriterien im Rahmen sektoraler Marktmechanismen für extrem unwahrscheinlich.

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1 Introduction

It is undisputed that the path towards low-carbon development should be in line with the overarching goal to globally move towards sustainable development. Thus, mitigation actions should – as a minimum requirement – not contradict sustainable development targets, but in contrast contribute to these. In the fundamental UNFCCC decisions on new market mechanisms, this point of view is explicitly expressed: The decision made in Cancun (COP 16, 2011) on “Various approaches, including opportunities for using markets, to enhance the cost-effectiveness of, and to promote, mitigation actions...” emphasizes “*the importance of contributing to sustainable development, including through technology transfer and other co-benefits*” (UNFCCC 2011). This language echoes the mandate of the Clean Development Mechanism (CDM) in Art. 12 of the Kyoto Protocol, according to which the “purpose of the clean development mechanism shall be to assist Parties not included in Annex I in achieving sustainable development...” However, up to date it has neither been defined internationally what actually “sustainable development” is, nor have mechanisms been implemented that would ensure that sustainability criteria are actually met.

Currently there is a strong debate on how to design new market mechanisms (NMM), which should tackle mitigation more broadly and more effectively than the current project-based instruments. With a perspective of NMMs being an option for a major mechanism, which promote a large share mitigation actions undertaken in developing countries, it seems highly necessary to develop effective schemes how to promote sustainable development within NMMs,

Against this background, this paper analyses how criteria for sustainable development (SD) could be introduced in new market mechanisms, namely sectoral crediting and sectoral trading. Chapter 2 summarises the status quo: the lessons learnt from the CDM as well as an overview of positions of Parties and NGO on the issue of sustainable development and new market mechanisms. Chapter 3 sketches different types of new market mechanisms, explicitly sectoral crediting and sectoral trading. Chapter 4 highlights key implementation options for NMM. The core of the analysis is done in chapter 5: for each implementation scheme it is analysed in detail how criteria for a sustainable development assessment could be implemented on project, policy or sector level. Each option is assessed against their effectiveness. Based on this assessment, conclusions are formulated in chapter 6. The annex contains lists of possible SD-criteria derived as well as relevant excerpts of countries’ submissions on new market mechanisms.

2 Status Quo

2.1 Lessons learnt from CDM

In the Clean Development Mechanism there is no mandatory procedure at international level to guarantee that CDM projects do contribute to a broader sustainable development beyond GHG emission reductions. Instead, it has been left to the project host countries to determine whether a proposed project contributes to their sustainable development or not. This has been criticized by various stakeholders and analysts e.g. (Sterk 2008), (CAN 2012), who claim that host countries have an incentive to attract as many CDM projects as possible and therefore in most cases do not perform a strict analysis of projects' impacts. Environmental organisations allege that even projects that are implicated in human rights violations have been registered as CDM projects (CDM Watch 2012). As response, the Gold Standard has been developed and offers a voluntary methodology to assess CDM projects with respect to their contribution to sustainable development. The aim of the Gold Standard is to establish a "premium" segment in the market, based on the expectation that buyers will be willing to pay higher prices for credits from certified high-quality projects.

Based on a thorough assessment of the CDM and the Gold Standard approach (Sterk et al. 2009), we draw three key conclusions:

1. It is possible to develop (minimal) universal criteria for sustainable development that are applicable to CDM projects. Thus despite the quite contrary views of the various countries' governments what sustainable development is in their specific national context, it seems feasible to define sustainable development within a political process well enough to make the concept workable for market mechanisms.
2. The effort for assessing whether or not a project qualifies for the CDM Gold Standard is reasonable. Thus, it is technically feasible to set-up a process, including quantitative and qualitative, mandatory and additional indicators to audit projects at reasonable extra costs. In the annex a list of possible "do-no-harm-criteria" (e.g. no involuntary resettlement) as well as indicators to assess positive project criteria (e.g. improving the livelihood of the poor) are given as examples.
3. The assessment of CDM projects shows that only a marginal number of Gold Standard certified emission reductions (CERs) have been issued. In analogy to the CDM, we see the danger that mitigation actions carried out under a new market mechanism will not support or may even be impeding sustainable development unless sustainable development is explicitly addressed in the framework of new mechanisms – this could be done by mandatory regulations on UNFCCC level (e.g. MRV metric) or by strong and compulsory minimal requirements of credit buyers (e.g. SD criteria of credits imported into the EU ETS).

2.2 Sustainable Development in Recent Submission

In this section, we analyse the position of Parties and NGOs on the issue of sustainable development requirements in NMM. This is done on the basis of submissions of Parties published by the UNFCCC between April and August 2012 on “views on the new market-based mechanism” (UNFCCC 2012a), (UNFCCC 2012b), (UNFCCC 2012c), (UNFCCC 2012d) as well as NGO submissions on this issue (UNFCCC Website 2012), some of which contain the term “sustainable development” or reference to the concept of sustainable development or co-benefits. Relevant excerpts of the documents are given in the Annex (see also (Sterk 2012) for a detailed discussion of all submissions).

Most outspoken with respect to sustainable development are the submissions of Bolivia, Ecuador, the EU and NGO submissions:

- **Bolivia** maintains its fundamental opposition to carbon markets, highlighting that they create a false equivalence of different GHGs while they have in fact different retention times in the atmosphere and different biochemical impacts, faulty baselines, lack of additionality, incompatibility with sustainable development and human rights violations.
- **Ecuador’s** submission is most detailed on the issue of sustainable development within NMMs. Ecuador proposes that in each country participating in an NMM a designated national authority is responsible for the assessment and approval of proposals in terms of their contribution to sustainable development. Ecuador lists criteria which would need to be fulfilled including social criteria like “social equity, poverty reductions”.
- **EU:** The EU submission proposes a process for the implementation of a NMM. In the process, a requirement for reporting of how NMM contributes to the sustainable development of the host country is proposed. However it is not specified whether criteria for SD are to be defined on national or international level and whether there should be mandatory minimal requirements.
- **NGO submissions:** CAN, Forum U&E and CDM Watch advocate for a UNFCCC framework for NMM which must ensure that all internationally traded credits come from activities that uphold human rights and that there should be international standards and guidance to define sustainable development indicators and social and environmental safeguards, as well as associated reporting and verification standards.

Furthermore, several countries call for sustainable development promotion within NMM, without going into details how this should be achieved:

- **AOSIS:** The Alliance of Small Island States argues that gradual participation of developing countries in international emission trading (and New Market Mechanisms) can assist them to increase their capacity to implement nationally appropriate mitigation actions (NAMAs) and broader sustainable development goals. In this respect, examples for sustainable development are given, namely: energy efficiency, energy security, reduced dependency on fossil fuel imports – thus a rather narrow scope of SD development goals.

The submission furthermore lists criteria to identify sectors which are “most promising” for inclusion in new market mechanisms, one of them being that “substantial potential to contribute to the host country’s sustainable development is present”.

No indication is made how sustainable development can be ensured in the implementation of NMMs.

- **Coalition for Rainforest Nations and like-minded countries.** The submission of Bangladesh, Cameroon, Central African Republic, Congo, Costa Rica, Côte d’Ivoire, Democratic Republic of the Congo, Dominica, Dominican Republic, Fiji, Gabon, Ghana, Guyana, Honduras, Kenya, Pakistan, Panama, Papua New Guinea, Sierra Leone, Solomon Islands, Suriname and Uganda states that developing countries may voluntarily implement a market-based mechanism “with the view to strengthen their contribution to the ultimate objective of the Convention, to assist them in achieving sustainable development and poverty eradication, ...” Thus, it is clearly stated that an objective of a market based mechanism should contribute to sustainable development and explicitly to poverty eradication. However, no indication is given how this objective is to be implemented in the design of the NMM.
- **Least Developed Countries:** In the submission of Gabon on behalf of the LDCs, it is stated that modalities and procedures for a NMM need to be clarified to ensure that sustainable development in the host countries is supported.

Some countries name sustainable development in their NMM submission, but do not demand that a NMM should promote sustainable development:

- **Japan:** The submission of Japan does not call for any SD criteria, but states that dissemination of technologies is essential for sustainable development.
No indication is made how sustainable development can be ensured in the implementation of NMMs.
- **Switzerland:** The submission of Switzerland claims that the CDM has proven to support sustainable development in terms of “positive co-benefits such as technology transfer and access to cleaner energy services”.
No indication is made how sustainable development can be ensured in the implementation of NMMs.

In summary, most submissions make some reference to sustainable development and new market mechanisms. Developing countries, the EU and some NGOs explicitly demand that NMMs should support sustainable development. However only three submissions go into more detail of how this could be achieved (see also Table 2-1), two of which – Ecuador and CAN, Forum U&E and CDM Watch – explicitly demand safeguards or SD-criteria and associated reporting and verification standards.

Table 2-1: Key Inputs on Sustainable Development in Recent Submissions

Ecuador	<p>Activities should demonstrate their contribution to sustainable development in the following areas:</p> <ul style="list-style-type: none"> • Environmental criteria: Reduction of GHG emissions, protection of local resources, and improvement of local conditions; • Social criteria: Improve the quality of life, social equity, poverty reduction, employment creation, and linkages with the policies, national strategies and rulings on sustainable development of the activity, in such a way that it helps to strengthen national policies and rulings. • Economic criteria: Provision of financial returns, technology transfer, improving the economy of the areas of direct influence. <p>In addition, the mechanism must assure additional benefits, such as:</p> <ul style="list-style-type: none"> • Possibility of synergies to contribute to multiple environmental objectives of international conventions. • Creation of incentives to increase the possibilities to mitigate climate change in developing countries. • Contribute to the conservation and sustainable management of biodiversity by implementing the mechanisms in areas that are rich in biodiversity. • To provide global benefits and at the same time decrease the gap relative to the local benefit.
EU	Initial reports need to show that the implementation of the NMM contributes to the sustainable development of the host country.
CAN, U&E, Watch Forum CDM	There should be explicit human rights safeguards as well as international standards and guidance to define sustainable development indicators and social and environmental safeguards for national authorities. Associated reporting and verification standards to monitor and verify claims to ensure actual realization of the stated sustainability benefits need to be put in place.

Source: (Sterk 2012)

3 Types of New Market Mechanisms

Sectoral approaches have been discussed for almost ten years now in the hope that they will be able to deal with some of the shortcomings of the current CDM and allow for larger-scale emission reductions. Four basic types of mechanisms have been proposed in the negotiations, as illustrated in the table below: a project-based system, sectoral crediting, sectoral trading and NAMA crediting (see also Sterk / Mersmann 2012).

Table 3-1: Types of Proposed New Mechanisms

		What	Proposed By
Project-Based	Individual Performance Approach	Similar to CDM and JI	China, Japan
Sectoral Crediting	Group Performance Approach	Decoupled from specific activities, credits are awarded if emissions from a sector are kept below a pre-defined level	EU, AOSIS, Norway, Papua New Guinea
Sectoral Trading	Group Performance Approach	Decoupled from specific activities or policies, allowances are issued ex ante based on a sectoral target, with penalty for missing target	EU, AOSIS, Norway, Papua New Guinea
NAMA Crediting	Group or Individual Performance Approach	Crediting of specific NAMAs or based on sectoral thresholds.	South Korea, (Switzerland)

Source: Based on (Sterk / Mersmann 2012)

For this analysis we will focus on sectoral crediting and sectoral trading. Project-based approaches are generally quite close to CDM and most of the lessons learned regarding implementing sustainable development criteria can easily be transferred and need not to be analysed in more detail (for implications for project-based mechanisms see for example Sterk et al. 2009). For NAMA crediting, no specific framework has been developed yet. However, both negotiations and scientific discussions on this topic are very close to sectoral crediting and trading approaches. Thus it does not seem necessary to differentiate between NAMA crediting and sectoral crediting for the purpose of our analysis.

3.1 Sectoral Crediting

Sectoral crediting would be based on an agreed emissions threshold or “no-lose target” at sectoral level. That is, countries would agree on a level of emissions for a sector. This threshold could be either in terms of absolute emissions or intensity-based, for example in terms of emissions per unit of GDP, emissions per unit of electricity generated, etc. The developing country could then undertake actions to reduce its emissions to the agreed level, either unilaterally or with some international support. If emissions are reduced below the target, the developing country would receive credits. If the target is not achieved, there would be no penal-

ties. The maximum environmental benefit of a crediting system would be the difference between the BAU scenario and the crediting baseline - or lower, if the country misses its target (see Figure 3-1).

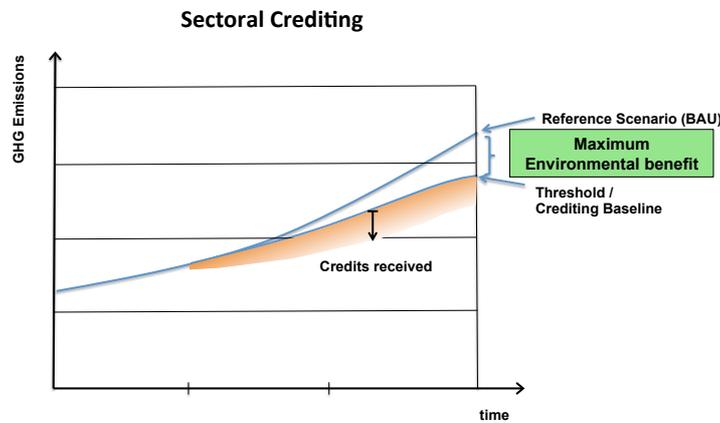


Figure 3-1: Sectoral Crediting – Environmental benefit and credits generated

3.2 Sectoral Trading

By contrast, sectoral trading would follow the cap-and-trade approach. The sectoral target would be a mandatory cap and the developing country would receive tradable units ex ante, essentially equivalent to the assigned amount units (AAUs) industrialised countries receive under the Kyoto Protocol. If the country manages to reduce its emissions below its target, it would thereby achieve a surplus of trading units, which it could sell. If the country does not achieve the sectoral target, it would need to buy trading units to cover the shortfall. A trading system would therefore have a fixed environmental benefit.

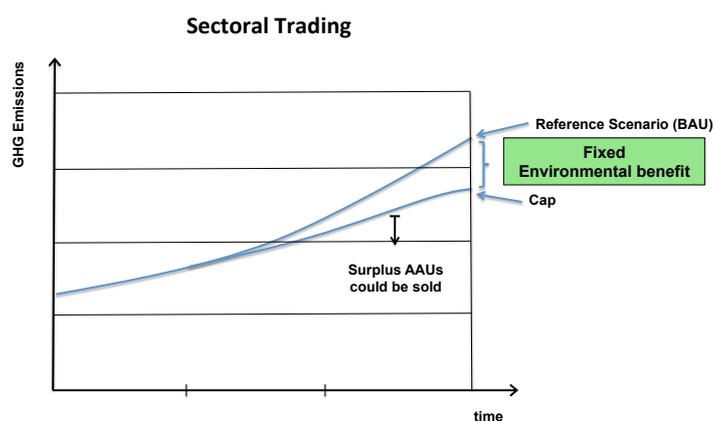


Figure 3-2: Sectoral Trading – Environmental benefit and calculation of allocated units

4 National Implementation Schemes

New sectoral mechanisms would probably operate at the government level, at least in the first instance, as private entities can hardly take responsibility for entire sectors. This would introduce an intermediary (the developing country governments) between the carbon market and those who actually undertake the investments. It would therefore be necessary for the developing country governments to implement appropriate policies to pass the incentive on to investors or those affected by the policies.

As an alternative to governments implementing policies, sectoral mechanisms may also be devolved to the installation level. While not explicitly envisaged in the negotiation texts, not only sectoral trading but also sectoral crediting mechanisms could be broken down to the installation level (Marcu 2009). The process would be similar to an allocation in a cap-and-trade system, but instead of allowances each installation would be given a crediting baseline. However, the responsibility for meeting the targets would stay with the host governments. This is a significant difference to the current project-based mechanisms, where the liability for project failures lies solely at the hands of private project developers. New market mechanisms would give host governments a much more active role in the ensurance of greenhouse gas reduction achievements (Butzengeiger et al. 2012).

On this basis, three basic design options for national implementation of both sectoral crediting and sectoral trading can be conceived, plus one additional option for a crediting which directly distributes credits internationally (see Figure 4-1).

International handling of credits / emission units	Government receives credits / allowances			D) Installation receives credits
National implementation	A) Government policies & measures	B) Installation- level crediting	C) Binding Installation Targets	

Figure 4-1: Options for Implementation at Government or Installation Level

Source: Wuppertal Institute

These options are described in more detail for a sectoral crediting system:

- **A) Government Policies:** The government adopts a sectoral baseline or target and implements non-ETS policies and measures to reduce emissions. These may be either mandatory “sticks” or voluntary “carrots”. At the end of the crediting period, the government receives credits according to the overall sector performance. It may use these credits at its own discretion to cover (part of) the costs caused by the mitigation actions.

This option has specific advantages in sectors with highly dispersed emission sources (e.g. transport) where measurement of mitigation effects / GHG emission on source level would cause prohibitive high transaction costs. Instead sector emission data can be calculated based on national fuel consumption statistics.

- **B) Installation Level Crediting:** The government sets a sectoral baseline and defines individual targets for the installations within the sector. If an installation beats its target, it receives credits from the government. If not, there are no penalties. However, at the end of the crediting period, the government receives credits according to the overall sector performance. Thus, the installation baselines need to be set low enough to cover for those installations which do not beat the baseline – or the government has to cover for the mismatch by buying credits on the international market.

This option is suitable for sectors with a limited number of sources, preferably similar sources (e.g. technologically, so that indicators like emission over output could be used as reasonable benchmarks. However, generally for sectoral crediting, the sector should not be too small. In sectors with only very few installations, project based mechanisms seem to be more appropriate (Butzengeiger-Geyer et al. 2010).

- **C) Binding Installation Targets:** The government sets a voluntary sectoral baseline and defines binding installation-level emission targets, possibly forming the basis for a national ETS. At the end of the crediting period, the government receives credits according to the overall sector performance. With these it can cover (parts of) the costs of the ETS and may distribute (part of) the credits among ETS participants.
- **D) Installation directly receives credits:** (IETA 2010) has also proposed that instead of going through governments sectoral crediting might be established with a direct relation between the installations and the international authority. In this version, installations would receive credits directly from the international authority if they beat their installation-level crediting thresholds. However, the national government would have to cover the mismatch between credits allocated and a possible lower performance of the whole sector.

These are prototypical archetypes; in practice overlaps and combinations are likely. In particular, even if a binding ETS is implemented, it is likely that other policies will also be pursued in parallel, as is done in the EU.

5 Operationalizing Sustainable Development – Technical Criteria and Options

In this paper we define the term “SD criteria” as a means of quality control, which can be used to check whether a project/policy/measure can be considered as “contributing to sustainable development”. We use the term criteria in a broad sense, as it may encompass indicators, parameters or requirements for procedures (e.g. stakeholder involvement).

From the perspective of institutional implementation, there are different approaches how to implement a quality control system for sustainable development:

1. SD criteria are at the discretion of the host country as it is the case in the CDM. Within this option there is a broad scale of sub-options, regarding transparency and binding nature: SD can be defined ad-hoc at project / policy level or SD can be defined in coherence with other development strategies (e.g. low-carbon development strategy).
2. Voluntary, but globally harmonised SD criteria could be introduced, similar to the CDM Gold Standard. In addition to regular credits, premium SD credits could be issued. Credit buyers (both governments and companies) could decide to buy only credits with certain SD ratings. There are two basic options to issue premium credits
 - a) Voluntary total assessment: If the SD criteria are met, premium credits are issued. If the SD criteria are not met, standard credits are issued
 - b) Voluntary percentage: In a more complex scheme it could be quantified to which degree the SD criteria are met (overachieved), this would result in a predefined percentage of credits to be issued as premium credits.
3. SD criteria and processes for new market mechanisms could be made mandatory and be implemented at UNFCCC level for all participating countries and sectors (although the specific criteria may vary from sector to sector, or even from country group to country group). Again there are two options to deal with the SD-criteria:
 - a) Fully mandatory: If the SD criteria are not met, no credits are to be issued
 - b) Mandatory – discounting of credits: If the SD criteria are not met, only a certain percentage of credits are to be issued

Option 1 is a very weak option in terms of defining and enforcing minimum standards for sustainable development. Formally this option needs no agreement on UNFCCC level as this is the default situation if no other solution is defined at international level. One major disadvantage of this option is that it incentivises a race to the bottom: The less stringent sustainable development criteria are, the easier it is to generate credits. As a consequence, national governments benefit from weak (or no) SD-criteria even though stricter SD-criteria could be in the interest of the country (supporting other development goals, like poverty reductions, reducing local pollutants, improving health and living standards, ...), especially if they fear competition from

other countries, which may loosen SD-criteria to receive a higher return on investment for their mitigation actions.

In contrast, options 2 and 3 offer the advantage of a level playing field for mitigation investments and simultaneously supporting sustainable development. The question is, how could these options be implemented?

In the following sections of this chapter we analyse the options to assess sustainable development within the framework of the design options for new market mechanisms as explained in chapter 4.

5.1 Three levels to assess sustainable development

To include sustainable development criteria in new market mechanisms, there are basically three levels on which sustainability can be assessed: project level, policy level or sector level. An overview of the options is given in the table below.

It needs to be noted that the types of criteria which can be applied vary between the three levels: Indicators (e.g. emissions of non GHG gases) can be applied to all levels. However, process oriented minimum standards, such as stakeholder participation, work well on project level, but are difficult to operationalise on sector level and are almost synonymous to a certain democratic law-making process if applied to policy level.

Table 5-1: Types of SD criteria for different intervention levels

Level of SD-Assessment	SD criteria
Project / Installation Level	Procedures and indicators similar to Gold Standard possible: <ul style="list-style-type: none"> - Safeguards and minimum standards (e.g. protection of human rights) - Quantitative (e.g. local emissions, job creation, gender impacts) and qualitative indicators (stakeholder involvement) for project impacts
Policy Level	Mandatory audits defined in legislation → testing on project level Definition of scope of policy measure (inclusions/exclusion of specific technologies, social eligibility criteria for support etc.)
Sector Level Indicators	Additional to GHG emission inventories for sector, SD indicators for sector are being monitored. E.g.: local emissions / toxic agents, soil depletion, number of jobs in the whole sector; either as total number or relative (e.g. per € turnover)

At this point it needs to be noted, that some of the submissions on new market mechanisms (see section 2.2), demand that credits generated by a NMM should only come from actions which fulfil certain SD-criteria. This implies that it is effectively possible to assess SD-criteria on project, installation or policy level and then award (full or premium) credits only in case both SD-criteria are passed and mitigation is achieved.

However, in NMM the emission reduction assessment is done on sector level – how could this be brought in line with a SD-assessment on project, installation or policy level? In the literature on NMM it has been argued that the introduction of SD-criteria is generally difficult in NMM as “there is hardly a chance to exempt certain technologies or policies from the mechanism, as is possible today with the assessment and approval of CDM methodologies” (Hermville 2009). However, detailed analyses are lacking.

From the above stated views, two questions arise, which will be analysed in detail in the following section:

- How can a SD-assessment within a new market mechanism be designed in order to be effective?
- Is it possible to restrict this SD-assessment to those installations / policies / actions which contribute to the mitigation / generate credits? Or is an SD-assessment within a sectoral mechanism by definition an assessment of the SD-performance of the whole sector?

To answer these questions, the different options to assess sustainable development are analysed against the options for the national implementation schemes for NMM (as introduced in chapter 4):

5.2 Sectoral crediting: options within different implementation schemes

A) Government Policies and Measures

In option A) the government introduces policies and measures to reduce emissions (see page 11). If it is successful, it receives credits and can use these at its own discretion – either to distribute them among market actors or to directly refund some of the expenses the government had in implementing its policies and measures. In this set-up there is no proof needed which measures effectively led to the emission reduction. As soon as a threshold is passed, the government receives credits or allowances. Not establishing a direct link between measures and achieved emission reductions is a deliberate key feature to allow a wide variety of actions and simultaneously reducing MRV efforts.

To safeguard sustainable development benefits within this set-up, it would be necessary to assess the impact of the policies and measures implemented against a set of SD criteria. Defining and MRVing such criteria is possible, however, the non-existence of the link between individual policies and measures and the achieved emission reductions causes a problem:

Imagine a country introducing a policy package for the power sector, consisting of a carbon tax, a feed-in tariff and one large hydro project. The first two could possibly pass the SD assessment. However, if we assume the hydro power plant was to result in the displacement of thousands of people and the loss of cultural heritage it would not pass the SD assessment. In this case the country could argue that only the first two measures were part of the sectoral activity for which it claims credits. The hydro power plant was part of

its business as usual development. Since there is no formal link between the measures and the emission reductions achieved thereof, this argument cannot be falsified.

In conclusion, in this implementation option, an assessment of SD criteria on project or policy level would either give the host country's government the possibility to exclude any policy or measure from the SD assessment – which would completely undermine the original intention. Thus, a policy level assessment (e.g. all new policies would have to pass certain SD-assessments) would not be effective. To effectively implement a SD standard, it would be necessary to apply project level SD criteria to all installations in the sector or to introduce sector-level SD criteria. It is not possible to restrict this SD-assessment to those installations / policies / actions which contribute to the mitigation / generate credits. A NMM based on government policies and mitigation actions would need to apply SD-criteria to the whole sector in order to implement effective standards for sustainable development. In this case the four options to issue credits according to mandatory and voluntary SD-criteria (described on page 13) could be used.

B) Installation Level Crediting

In this crediting scheme, the government receives credits (based on sector performance) from an international credit-issuing agency and hands these on to installations (based on individual performance).

There are two options to introduce SD-standards:

1. SD-criteria for installations

The definition of indicators and procedures for SD assessment are in principle quite similar to options discussed with the CDM. For example a “Gold Standard” could be developed and certified voluntarily or even be made mandatory.

As the credits are issued by an international credit issuing agency (ICIA) and handed on to the national government for re-distribution among installations, it would be the responsibility of the national government to ensure compliance with the SD standards. Consequences / penalties for non-compliance would need to be defined beforehand and would most likely be a pre-requisite for the host country to participate in the NMM.

○ Mandatory Standards

With a mandatory SD standard an installation failing to meet the SD criteria would not receive credits – even if the respective mitigation requirements were achieved.

In the case of a company anticipating not to meet the SD criteria, it would most likely refrain from the investment in the mitigation action altogether (as this should not pay off without the revenues from the crediting). Depending on how hard the SD criteria are to meet, introducing mandatory SD criteria may reduce the mitigation effect and consequently the credits to be issued. An option to decrease strictness would be that those installations not meeting the SD criteria would only receive a share of the credits they would be entitled to otherwise.

○ Voluntary Standards

As sketched on page 13, in a voluntary standard system (a minimum of) two kinds of credits exist: regular credits (the mitigation action *does not* fulfil the SD-criteria) and premium credits (the mitigation action *does* fulfil the SD-criteria). The difficulty is that the ICIA is not aware of the number of premium credits when issuing the credits. Thus, it would be up to the

national government to either “upgrade” the credits it receives (based on MRVable criteria) or the national government would have to claim premium credits before issuance. Both processes have pros and cons but seem generally feasible.

2. Sector level SD-criteria

SD-criteria could be set on aggregated sector level. The national government could report these together with sector emission data to the ICIA. In a mandatory SD-assessment the ICIA would only issue credits if the SD-criteria were passed (all or nothing). Alternatively, not meeting the SD-criteria could result in a penalty (e.g. x% less credits issued). In a voluntary SD-assessment scheme, the ICIA would either issue premium or regular credits, depending on whether the SD-criteria are met or not.

However, in a sector-level SD-criteria scheme there is a risk for the individual installation not to receive credits (or less credits or regular credits instead of premium credits) because the overall sector performance does not fulfil the SD-criteria – despite the fact that the individual installation would pass the SD criteria. One option to resolve this is that the government would step in to provide some sort of guarantee. But this would mean that the government has to cover the risk if the SD criteria are not met by the sector (e.g. by buying additional credits in the international market). If a government is not willing to cover this risk, and costs for achieving the SD criteria are relatively high, a race to the bottom is likely as soon as market actors perceive the risk of meeting the sector SD criteria to be high. In a voluntary system, this would result in collectively not improving SD levels. In a mandatory system this may even lead to actors reducing mitigation efforts altogether.

C) Binding Installation Targets

In this implementation option it is important not to confuse the two levels of emission trading:

- On the international level, the national government sets a voluntary reduction target. At the end of the crediting period it receives internationally tradable credits if it overachieves the target.
- On the national level, the government sets a mandatory target and may issue national emission allowances (which may nationally be tradable in an ETS). At the end of the (international) crediting period, the government could offer to exchange unused national allowances against international credits. A company, which reduces emissions, would thus be rewarded with internationally tradable credits.

Therefore, this system differs essentially from installation level crediting. Due to the existence of the national ETS, it may well be that an installation owns many allowance at the end of the trading period, because it has bought these – despite the fact that emissions have gone up.

This is important when analysing how sustainability criteria could be introduced: Internationally, the government could agree that only those installations may trade their national allowances against international credits which also fulfil the SD criteria. However, in an ETS installations failing to meet the SD-criteria would simply sell their allowances. Thus, this approach would be toothless: as soon as only one installation meets the SD criteria, the whole sector would be able to sell their allowances.

In conclusion, in this implementation option, promoting sustainable development would require to introduce SD criteria for the whole sector – either by sector level indicators or by SD assessments on installation level,

for all participating installations. With respect to implementing SD criteria, this option is quite similar to option A (government policies and measures).

D) Installation receives credits directly

The difference to implementation option B is only that the credits are directly disbursed from an international credit-issuing agency and not through the national government. With respect to the options to introduce SD criteria, this would not cause major differences. As described for option B, choosing sector level indicators would imply the risk of a race to the bottom, as actors with good SD performance would face penalties if the whole sector fails to meet the SD criteria. More appropriate would thus be the introduction of installation level SD-criteria. The four options to disburse credits within a voluntary or mandatory system (as described on page 13) would apply.

5.3 SD-assessment options within sectoral trading

A sectoral trading system can be implemented nationally using the options A), B) and C). However, in a sectoral trading system, the emission allowances are issued in advance (based on historic emissions or baseline definition). It would be possible to set aside a certain share of allowances, which would only be distributed if certain sustainability criteria are met. However, since allowances are issued for all participating installations / the whole sector, the sustainability assessment would also have to be made for all installations / the whole sector. Consequently, defining sustainability criteria in a sectoral trading scheme would imply that a participating country would have to fulfil these criteria – fully, for the whole participating sector. Otherwise it would suffer from predefined penalties in the case of mandatory SD criteria (penalties can be negotiated to be: no allowances at all, fewer allowances) or fewer (or none) premium standard allowances in a voluntary SD criteria scheme.

5.4 Summary: Implications of different design options

In sectoral crediting the link between individual mitigation activities / policies and the GHG emission reduction achieved is deliberately rather weak – to non-existent. As a consequence in some design options it is difficult to link the SD contribution of mitigation to the credit issuing process. Thus, introducing an effective SD assessment may only work if the whole sector is covered and can hardly be limited to specific installations, which generate credits (see Table 5-2).

Table 5-2: Effective SD-assessment in different design options

Design Option	Project / Installation level SD criteria	Policy level SD criteria	Sector level SD criteria
A) Government Policies and Measures	✘ Not possible to define, which projects are not part of NMM	✘ Not possible to define, which policies are not part of NMM	By definition whole sector Sector level indicators can be defined, but include (by definition) whole sector
B) Installation Level Crediting	✓ SD-criteria can be assessed on installation level	✘ Assessment of SD-criteria on policy level not helpful for distribution of credits on installation level	By definition whole sector Who covers risk if sector does not pass SD-criteria?
C) Binding Installation Targets	✘ One good performer may serve as loophole to sell all allowances (even those of bad performers)	✘ Assessment of SD-criteria on policy level not helpful for distribution of allowances on installation level	By definition whole sector Allocation of allowances would need to be based on historic performance of sector. Or penalties at end of crediting period
D) Installation receives credits directly	✓ SD-criteria can be assessed on installation level	✘ Assessment of SD-criteria on policy level not helpful for distribution of credits on installation level	By definition whole sector Who covers risk if sector does not pass SD-criteria?

First row in each cell gives indication on key question: Is it possible to implement an effective SD-assessment, which is limited to the mitigation actions, which generate credits? (✓ = effective SD-assessment feasible at installation / project level in NMM). Furthermore, explanations or general comments on barriers are given.

For the design options which employ an individual crediting scheme (either through the national government, design option B, or directly by an international credit-issuing agency, design option D), SD-assessments can be implemented quite similar to project based approaches (like CDM): It is possible to introduce SD-standards (e.g. similar to the Gold Standard). Such a standard could be voluntary – compliance would then entitle to premium credits, which could achieve higher revenue in specific markets (voluntary markets or ETS with minimal requirements for SD) – or the standard could be mandatory, with non-compliance resulting in penalties (fines, less credits issued, no credits issued at all).

For crediting schemes, which rely on government policies and measures (design option A) the missing link between credit issuance and mitigation action makes it virtually impossible to implement an effective SD-assessment scheme, unless the SD-assessment is extended to the whole sector. Quite similar in crediting-schemes, which employ a domestic ETS (design option C), the SD-criteria have to be extended to the whole sector to be meaningful. A limitation to good performers seems not feasible. However, there is the option to adapt the penalties for non-compliance in such a way that the introduction of SD-criteria is less drastic (e.g. transition periods, discounting of credits instead of strict eligibility criteria).

In conclusion, for sectoral crediting, effective SD assessments, which work with all implementation options, must be implemented at sector level: either by introducing sectoral indicators or by assessing SD-criteria for all installations / projects in one sector – irrespectively whether they intend to receive credits for mitigation actions or not.

For sectoral trading schemes, implementing an effective SD-assessment would factually imply the introduction of SD-criteria for the whole sector – irrespectively of the implementation scheme used.

6 Conclusions

Several Parties (including the EU) as well as NGOs have demanded that new market mechanisms should be designed in a way to explicitly support sustainable development. Internationally agreed sets of rules should be established to safeguard environmental integrity, human rights and contributions to sustainable development in terms of environmental contributions (beyond GHG emission reductions) and social contributions (e.g. poverty reduction).

In contrast, if it was left to each countries' discretion to define its own SD-criteria, a race to the bottom could be incentivised: If passing the SD-criteria was perceived to cause increasing costs for mitigation – thus would decrease the return on investment of credits received – countries may choose to lower their SD-criteria in order to receive a maximum benefit from a NMM scheme, even though higher SD-criteria would be in the countries' self interest. Thus, internationally agreed SD-criteria could ensure a level playing field, promoting both emission reductions and sustainable development.

The CDM lessons – a Gold Standard is feasible

Experiences from the CDM show that SD criteria can be defined to support the above stated objectives (e.g. Gold Standard). The effort for assessing such SD-criteria is reasonable. Thus, it would be possible to internationally define SD-criteria, which would have to be passed before credits for NMM are issued. It would be possible to introduce either voluntary or mandatory SD-criteria. Fulfilling voluntary criteria could be rewarded by the issuance of premium (Gold) standard credits/allowances, which may achieve higher prices if some buyers (e.g. the EU) decided to buy only premium standard credits/allowances. If mandatory criteria are set in an NMM scheme, a country not meeting these criteria could be penalised by receiving less (or even none) credits/allowances than it normally would based on emission reductions.

However, despite the general feasibility of introducing international SD-criteria, the specific design features of new market mechanisms lead to consequences, which are distinctively different from introducing SD-criteria in a project-based mechanism like the CDM.

Implications of different NMM design options

As analysed in chapter 5, introducing effective SD-criteria into new market mechanism leads to the necessity of sector-wide SD criteria in most design options of NMM. Limiting SD criteria to a subset of participating installations is only possible in the implementation schemes for sectoral crediting with installation level crediting. Here it would at least principally be possible to link emission reduction crediting with voluntary or mandatory SD criteria. Thus, with some similarity to project-based mechanisms (like the CDM), it would be possible to introduce a system where promotion of sustainable development would be rewarded or even be made mandatory – but still give actors in the sector the option to choose not to participate (and not to receive the respective reward, but with no further penalty).

However, for all other implementation schemes analysed in this paper (sectoral trading in general, sectoral crediting based on national implementation with policies and measures as well as sectoral crediting based on national binding target / ETS) internationally agreed SD-criteria for NMM would directly imply that these criteria would have to be applied to the whole sector of a participating country in order to be effective. Any attempt to limit SD assessments to selected projects and installations (e.g. those which generate credits) will factually create loopholes, which will render the whole SD assessment ineffective.

Thus, mandatory SD-criteria would factually introduce mandatory SD-criteria for a whole sector – with the consequence of a participating country receiving less (to none) credits even though the respective emission reductions were achieved. Voluntary SD-criteria would imply that the country achieves less (to none) premium credits unless the SD-criteria were met by the whole sector. Very unlike in the CDM, in most design options for NMM it is not possible to limit the SD-assessment to those actions / installations which contribute to GHG emission reductions.

Political feasibility

Introducing meaningful, internationally agreed SD-criteria in a sectoral market mechanism is much more restrictive than doing so in a project-based mechanism like the CDM. As noted, in all but one national implementation scheme it would be necessary to introduce SD-criteria for the whole sector. We anticipate that many countries would perceive this as a very strong interference with their sovereignty. Consequently, we can hardly see that Parties would agree on UNFCCC level to introducing even voluntary internationally agreed SD-criteria for NMM, let alone mandatory standards.

Different rules for different implementation schemes?

One approach on the political level to introduce SD standards in NMM could be to do so for installation level crediting – and leave it to the countries' discretion for other implementation schemes. This implies, however, that UNFCCC agreements deal with the implementation scheme at all. It is possible that what is agreed on UNFCCC level is limited to the crediting process on country level only – leaving distribution of credits to the country. In this case it would not be possible to define international SD criteria for installation level crediting as this would not be part of what would be negotiated internationally.

General prerequisite - Significant carbon price

A general prerequisite for any new market mechanism to function is the existence of a substantial demand for generated credits or tradable emission allowances – thus, overall ambitious mitigation targets by countries with mandatory commitments. If additionally meaningful (ambitious) SD criteria are introduced, the extra effort to meet these criteria must be covered by an adequately higher revenue from generated credits or carbon trading. Thus, to promote sustainable development with new market mechanisms an even higher demand for offsets is a necessity.

Final conclusion

Despite the demand formulated by Parties and NGOs to explicitly support sustainable development in new market mechanisms, to introduce safeguards and internationally agreed rules, we see strong restrictions in

the practical implementation. In sectoral approaches the credit generating process is deliberately delinked from individual mitigation actions. Thus, a principle of “credits only for actions which meet minimal requirements” is implementable only for one specific scheme (installation level crediting – which again is not suitable for all sectors). For all other schemes, the introduction of internationally agreed SD-criteria for NMM would equal an international agreement on sustainable development for all the sectors encompassed in the NMM. Consequently we consider the political feasibility to achieve such an agreement within the UNFCCC to be as limited as the feasibility to do so outside of the UNFCCC. In the light of how difficult it is to establish effective and measurable indicators for sustainable development in dedicated processes, like the United Nations Conference on Sustainable Development (UNCSD), we see extremely limited prospects to implement hard criteria for SD standards in sectoral market mechanisms.

Consequently, we see only the following realistic options to promote sustainable development in new market mechanisms:

- Develop a set of guidelines for good governance and promotion of sustainable development, which could be given as recommendations for national implementation. Factually this would in most cases be done in various national laws e.g. on human rights, social and environmental legislation.
- Transparency should be increased. Countries participating in the NMM could be asked to monitor and report on sustainable development achievements in the respective sectors.
- Achieving sustainable development and safeguarding basic principles can be promoted outside the UNFCCC process.

However, all these approaches are in no way satisfactory and will most likely not lead to stringent promotion of sustainable development.

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7 Annex A - Examples for SD criteria and indicators

The Wuppertal Institute developed criteria and indicators which could be used to assess the contribution to sustainable development of project based mechanisms in a post 2012 climate regime (Sterk et al. 2009). Although originally designed for a project based mechanism, we consider these criteria and indicators generally also to be suitable for use in new sectoral market mechanisms (adaptations may be needed for some criteria). In any case the below list of criteria and indicators give a good indication of the topics and general scope, when in this paper we use the term “SD-criteria”.

Table 7-1: Suggested Do No Harm Criteria and Indicators

Criteria	Possible Indicators
Environment	
Air quality	Concentrations/emissions of NO _x , SO _x , lead, CO, ozone, POPs ¹ , mercury, CFCs ² , halons, NH ₃ etc.
Water quality and quantity	Levels of biological oxygen demand, biochemical oxygen demand, thermal pollution, mercury, NO _x , SO _x , POPs, lead, coliforms, etc.
Soil condition	Levels of lead, NO _x , SO _x mercury, cadmium, etc.
Other pollutants	Level and frequency of noise etc.
Biodiversity	Number of affected or threatened plants, animals and natural habitats, occurrence of non-native species etc.
Social and Economic	
The project respects internationally proclaimed human rights including dignity, cultural property and uniqueness of indigenous people. The project is not complicit in Human Rights abuses.	
The project respects property rights and other national legislation.	
The project does not involve and is not complicit in involuntary resettlement.	
The project does not involve and is not complicit in the alteration, damage or removal of any critical cultural heritage.	
The project respects the employees' freedom of association and their right to collective bargaining and is not complicit in restrictions of these freedoms and rights.	
The project does not involve and is not complicit in any form of forced or compulsory labour.	
The project does not employ and is not complicit in any form of child labour.	
The project does not involve and is not complicit in any form of discrimination based on gender, race, religion, sexual orientation or any other basis.	
The project provides workers with a safe and healthy work environment and is not complicit in exposing workers to unsafe or unhealthy work environments.	
The project does not involve and is not complicit in corruption.	
The project does not lead to a net loss of employment.	

¹ Persistent Organic Pollutants.

² Chlorofluorocarbons.

Table 7-2: Suggested Criteria and Indicators to Assess Positive Project Impacts

Criteria	Possible Indicators
Social	
Quality of employment	Wage level, required skill level of jobs created etc.
Livelihood of the poor	Quantified access of people to health services, sanitation, waste management, etc.
Access to affordable clean energy services	Change in traditional fuel consumption, electricity consumption per person, etc.
Human and institutional capacity	Quantified access to education and skills, changes in income and asset distributions by region, ethnicity, religion and socio-economic groups
Gender equality	Changes in female enrolment in schools, female literacy rate, female earned income, number of jobs and positions for women, women in government or other decision-making bodies
Social well-being of communities	Costs and benefits are equally shared among community groups and members
Economy and Technology	
Quantitative employment and income generation	Number of jobs created, level of income from the project, etc.
Balance of payments and investment	Amount of domestic and foreign direct investment
Technology transfer and self-reliance	Use of previously not available technology, number and nature of training activities and number of participants
Adaptation to climate change	Use of new harvesting techniques, new business approaches, protection of facilities and/or infrastructure against heavy weather events

Source: Wuppertal Institute

8 Annex B - Examples from current submissions

8.1 Parties submissions

The following section contains exemplary excerpts from the Submissions of Parties (11th April, 7th May, 18th May and 13th August 2012,) on “views on the new market-based mechanism” (UNFCCC 2012a), (UNFCCC 2012b), (UNFCCC 2012c), (UNFCCC 2012d) which contain the term “sustainable development” or reverence to the concept of sustainable development or co-benefits (highlighted in grey).

Bangladesh, Cameroon, Central African Republic, Congo, Costa Rica, Côte d’Ivoire, Democratic Republic of the Congo, Dominica, Dominican Republic, Fiji, Gabon, Ghana, Guyana, Honduras, Kenya, Pakistan, Panama, Papua New Guinea, Sierra Leone, Solomon Islands, Suriname and Uganda

FCCC/AWGLCA/2012/MISC.6

(...) Voluntary and Account for National Circumstances: Developing country Parties may, on a voluntary basis and taking into account national circumstances and different capacity and capabilities, implement a market-based mechanism with the view to strengthen their contribution to the ultimate objective of the Convention, to assist them in achieving sustainable development and poverty eradication, while helping developed country Parties in achieving compliance with their commitments under the Convention and the Kyoto Protocol. (...)

Bolivia

FCCC/AWGLCA/2012/MISC.6/Add.2

(...)

SECTION C: ASPECTS OF INCONCISTENCY BETWEEN THE "OBJECTIVES OF THE CARBON MARKET" AND THE "CONTRIBUTION TO SUSTAINABLE DEVELOPMENT"

(...) HUMAN RIGHTS There are CDM projects that ignore human rights and the will of the surrounding villages, such as mandatory removal of indigenous peoples to implement hydroelectric dams, or installations on landfills that are harmful for the development and health of the surrounding populations.

14. LOW HANGING FRUITS: CDM projects have concentrated on the various mitigation options that were easier and cheaper to implement, which has been for the benefit of buyers in developed countries. Subsequently, it is expected that in the framework of the Durban platform also developing countries will have to make commitments for emissions reductions, but in this case, the mitigation options that will still be available will be the more expensive and difficult to implement.

15. INCONSISTENCY OF CARBON MARKETS IN THE CONTRIBUTION TO SUSTAINABLE DEVELOPMENT AND POVERTY REDUCTION IN DEVELOPING COUNTRIES

- Low impact on sustainable development projects: Several CDM projects specify among their benefits the reduction of noise and pollution and the protection of natural resources, state job creation, however no further relevant information is presented on this issues.

- The state sovereignty and the right of ownership of forests is possibly affected, In the case of potential REDD projects, the buyer of the CERs would have the final word on the fate of carbon stored in forests, and therefore the fate of forests themselves.

There are several complaints associated with incorrect and/or deficient consultative processes on the social aspects, among them:

- a) Poor identification of stakeholders.
- b) Triggering internal social conflicts..
- c) Conflicts with the rights of land ownership
- d) Conflict with the sovereign rights of local communities and indigenous peoples

Moreover, many studies conclude that projects related to hydrofluorocarbons (HFCs) and nitrous oxide N₂O have the lowest benefits for **sustainable development** (UNEP, 2010). 40. However, it is precisely these trifluoromethane (HFC-23) projects that constitute the majority (48%) of the CERs issued in the history of CDM as well as projects based on the destruction of N₂O, which have similar problems and additionally cover 23%. Therefore it can be concluded that over 70% of the carbon credits are not real emission reductions, let alone contribute to **sustainable development**.

(...)

FCCC/AWGLCA/2012/MISC.6/Add.3

PERFORMANCE EVALUATION OF EXISTING CARBON MARKETS

In the framework of the work program on methods and procedures of the mechanism, with an initial essential character it is necessary and urgent to develop an inclusive processes through the development of technical workshops, as well as calls to the Country Parties and observer organizations, to submit to the secretariat, opinions to assess the lessons learned and experiences of current arrangements, citing the main themes, among others identified in the bolivian submission of May 18, 2012

(...)

Evaluation of the real contribution to **sustainable development** in its three pillars (environmental, economic and social) and identification of indicators, measures and verification procedures.

Costa Rica on behalf of Costa Rica, Dominican Republic, Mexico, Panama and Peru

FCCC/AWGLCA/2012/MISC.6/Add.1

(...) Consequently, a new market mechanism should allow a country to identify which and how its current practices, lifestyles and infrastructure are contributing to the current global mitigation effort, to assess the value of this contribution, and have available incentives for their preservation in its road to development. These contributions could be measured employing similar standards for a world average for assets, practices lifestyles or infrastructure providing analogue functions, under a baseline and goal scheme considering future emission growth, or under any other scheme that rewards the effective use and preservation of these low carbon assets. Such an instrument has the potential to provide a global contribution to a collective low carbon future at a fraction of the cost of another than entails supporting a country to shift from a high carbon trajectory into a low carbon one, while providing incentives for **sustainable future** for all. (...)

Denmark and the European Commission on behalf of the European Union and its member States

FCCC/AWGLCA/2012/MISC.6

(...) An initial report (ex ante) sets out the national implementation of the NMM. It demonstrates that the host country has appointed a competent authority that ensures the implementation of NMM, and that it has set up a system for monitoring, reporting and verification of emissions in the sector or broad segment of the economy covered. The report should also describe that the host country has in place a functioning registry or arrangements for use of an international

registry administered by the UNFCCC secretariat. It describes the coverage (i.e. sectors and gases), estimates the baseline emissions pathway, chooses a crediting or a trading route, determines crediting threshold or target for broad segment of the economy, describes the measures it will undertake to reach this threshold or target, and describes how the implementation of the NMM contributes to the **sustainable development** of the host country. It demonstrates that all the above meets the requirements as set out in the modalities and procedures. (...)

Initial reports need to show that the implementation of the NMM contributes to the **sustainable development** of the host country (preamble of the section III D - Various approaches - of the Decision 1/CP.16) and safeguards environmental integrity (para 80d of Decision 1/CP.16) by preventing both double counting of emission reductions and carbon leakage. For this purpose, host countries need to carefully analyse potential risks of carbon leakage, in particular to other segments of the economy outside the NMM, or double counting of emission reductions, estimate their volume and describe measures being taken to prevent or limit those effects. (...)

FCCC/AWGLCA/2012/MISC.6/Add.3

(...) In addition to the principles above stipulated in paragraph 80 of the decision 1/CP.16, the EU sees the following element, which was a part of the preamble to the abovementioned decision⁷, important for the design of the NMM: Contributions to **sustainable development** – The design of the NMM should, by setting up **all necessary national infrastructure**, allow Parties to implement the NMM in such a way that it would contribute to the **sustainable development** of the Parties. (...)

Lessons learned and the experiences with existing mechanisms (...)

23. Moreover, experiences from the existing mechanisms suggest that when scaling up mitigation efforts to cover sectors or broad segments of the economy, the governance system should allow and require a more active role for the developing country, e.g. to put in place regulation that supports the NMM. At the same time, an internationally agreed set of rules must be followed in order to safeguard the environmental integrity of the emissions reductions and ensure contribution to **sustainable development** of the NMM.

Ecuador

FCCC/AWGLCA/2012/MISC.6/Add.1

(...) B4. NATIONAL AUTHORITY

Each developing country Party that intends to participate in NAE should designate to the UNFCCC a National Authority to evaluate NAE activities. National Authority is the entity that approves and validates the proposals from the country with respect to the contribution to **sustainable development**, the baseline scenario and the quantification of NAE units. (...)

G. CONTRIBUTION TO SUSTAINABLE DEVELOPMENT

(ENVIRONMENTAL, SOCIAL AND ECONOMIC)

The developing countries that wish to implement NAE, should ensure that the activities that are eligible for NAE should demonstrate their contribution to Sustainable Development in the following areas:

G1. ENVIRONMENTAL CRITERIA

- Reduction of GHG emissions
- Protection of local resources
- Improvement of the local conditions

G2. SOCIAL CRITERIA

- Improve the quality of life Social equity, poverty reduction
- Employment creation

- Linkages with the policies, national strategies and rulings on **sustainable development** of the activity, in such a way that it helps to strengthen national policies and rulings.

G3. ECONOMIC CRITERIA

- Provision of financial returns
- Technology transfer
- Improve the economy of the areas of direct influence

Additionally, the mechanism must assure additional benefits, such as:

- Possibility of synergies to contribute to multiple environmental objectives of international conventions.
- Creation of incentives to increase the possibilities of mitigate climate change in developing countries.
- Contribute to the conservation and sustainable management of the biodiversity by implementing the mechanisms in areas that are rich in biodiversity.
- To provide global benefits and at the same time decrease the gap relative to the local benefit.

(...)

Consequently, a new market mechanism should allow a country to identify which and how its current practices, lifestyles and infrastructure are contributing to the current global mitigation effort, to assess the value of this contribution, and have available incentives for their preservation in its road to development. These contributions could be measured employing similar standards for a world average for assets, practices lifestyles or infrastructure providing analogue functions, under a baseline and goal scheme considering future emission growth, or under any other scheme that rewards the effective use and preservation of these low carbon assets. Such an instrument has the potential to provide a global contribution to a collective low carbon future at a fraction of the cost of another than entails supporting a country to shift from a high carbon trajectory into a low carbon one, while providing incentives for **sustainable future** for all.

FCCC/AWGLCA/2012/MISC.6/Add.3

(...)

Considerations for a NMM:

(...)

1. The NMM should seek to deliver a real contribution to climate change The new approaches proposed by parties under the NMM should be designed to deliver a real contribution to climate change mitigation, building upon their potential to facilitate increased mitigation ambition of developed country parties and the provision of opportunities for achieving **sustainable development** objectives in synergies with other international Conventions such as the Convention on Biodiversity.

(...)

NMM should comply with strict, commonly-agreed standards for environmental integrity Standards must be set in order to ensure that new market mechanisms are delivering real mitigation outcomes, and may include: rules for permanency; tools for proving Additionality, rules to account for leakage, and contribution to **sustainable development**.

Gabon on behalf of the group of least developed countries

FCCC/AWGLCA/2012/MISC.6

(...) The LDCs believe that the new market-based mechanism referred into paragraph 83 of the Durban LCA conclusion needs to be further defined and its modalities and procedures clarified. This is essential to ensure real, permanent, additional and verified mitigation outcomes, avoid double counting of effort and achieve a net decrease and/ or avoidance of greenhouse gas emissions while supporting the **sustainable development** of host countries. (...)

Japan

FCCC/AWGLCA/2012/MISC.6

(...) With regard to the mechanisms which operate under the guidance and authority of the COP, the COP itself should decide standards. The CDM, a representative example of such mechanisms, should maintain the project-based approach primarily, and the modalities and procedures for the CDM must be improved to increase its efficiency and transparency. Development and wider use of standardized baselines and positive lists may help to improve efficiency in a transparent manner, and also contribute to the further dissemination of technologies which are essential for sustainable development of developing countries. (...)

Nauru on behalf of the Alliance of Small Island States

FCCC/AWGLCA/2012/MISC.6

(...) Nevertheless, gradual participation in international emissions trading using the model that has developed under Article 17 of the Kyoto Protocol can assist developing country Parties in improving their national capacity to assess and monitor emissions, and assist these Parties in accessing mitigation financing at a greater scale. This in turn can assist in achieving nationally appropriate mitigation actions and broader sustainable development goals (e.g., energy efficiency, energy security, reduced dependency on fossil fuel imports).

(...)

Different sectors might be phased in for interested countries over time, once reliable inventories are available and the necessary eligibility criteria are satisfied. This will provide greater access to mitigation financing for developing country Parties, support expansion of the international carbon market and support sustainable development.

(...)

The most promising sectors for inclusion in the new market-based mechanism from developing country Parties are those in which:

- 1) substantial emission reductions need to be achieved;
- 2) data is readily available;
- 3) the degree of uncertainty in emission estimates is low;
- 4) substantial potential to contribute to the host country's sustainable development is present; and
- 5) it can be shown that real and additional reductions in emissions that would otherwise have occurred to the atmosphere can be achieved.

(...)

Saudi Arabia

FCCC/AWGLCA/2012/MISC.6

(...) As Saudi Arabia supports all initiatives for enhancing mitigation actions by developed countries to meet their obligations in a cost-effective manner under the guiding principles of the Convention, it should be noted that using new markets in developing countries is actually a new idea that requires a great deal of understanding and building awareness and knowledge. This knowledge and experience primarily reside with developed countries and needs to be effectively disseminated to developing countries to identify the pros and cons of different market approaches and assess potential impact on their sustainable development. (...)

Switzerland

FCCC/AWGLCA/2012/MISC.6

(...) International experience with a market-based instrument - the Clean Development Mechanism (CDM): The CDM has proven to be a useful instrument to encourage the reduction of global GHG emissions and to support **sustainable development**. It has brought positive co-benefits such as technology transfer and access to cleaner energy services. The CDM is facing some challenges, in particular regarding additionality, the design of specific methodologies and the geographical distribution of the CDM. The concept of additionality is under review, methodologies are being improved and efforts for promoting the equitable distribution of the CDM have to be maintained, for example through the continued targeted support for CDM capacity-building under the Carbon Finance Assist program of the World Bank. All these current improvements of the CDM are well underway and should continue. (...)

8.2 NGO Submissions

CAN – Climate Action Network, CDM Watch, Forum Umwelt und Entwicklung

UPHOLD HUMAN RIGHTS

The CDM has recently come under criticism because of human rights abuses connected with several CDM projects. There are no explicit safe-guards under the CDM to avoid credits that come from projects that violate international conventions such as the human rights declaration. Human rights are mentioned in the chapeau of the Cancun Agreements.⁷ A Framework must ensure that all internationally traded credits come from activities that uphold human rights.

DELIVER **SUSTAINABLE DEVELOPMENT** BENEFITS

Experience with the CDM shows that the sustainable development criteria set at the national level are usually too general and vague. For a meaningful contribution to sustainable development, international standards and guidance are needed to define sustainable development indicators and social and environmental safeguards for national authorities. In addition, associated reporting and verification standards to monitor and verify claims to ensure actual realization of the stated sustainability benefits need to be put in place.

The positions expressed in this paper are strictly those of the authors and represent neither the opinion of the Wuppertal Institute nor of the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety.

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