

**Policy Department
Economic and Scientific Policy**

**Workshop
"Effort sharing under the Climate Package –
Assessing the role of the Clean Development
Mechanism"
Brussels, 3 June 2008**

Consolidated Texts

This study was requested by the European Parliament's Committee on the Environment, Public Health and Food Safety.

Only published in English.

Experts invited for the Workshop **Jürgen Salay**, DG Environment, European Commission
Lambert Schneider, Oëko Institute
Niklas Höhne, ECOFYS
Joyeeta Gupta, Institute for Environmental Studies, VU Amsterdam
Christoph Suttor, South Pole Carbon Asset Management
Mahi Sideridou, Greenpeace

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Manuscript completed in June 2008.

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1. Introduction

On 3 June 2008, the Environment, Public Health and Food Safety Committee of the European Parliament hosted a half-day workshop entitled: "**Effort sharing under the Climate Package - assessing the role of the Clean Development Mechanism**". The workshop was chaired by Satu Hassi MEP, EP Rapporteur for the Effort Sharing Decision, and moderated by R. Andreas Kraemer, Director of Ecologic.

The workshop explored the role of CDM under the proposed legislative climate package. A panel of prominent experts focussed on the contribution of CDM in meeting the EU targets and the global objective of maintaining climate change to +2°C compared to preindustrial levels, the quality and types of projects, and the link with the negotiations under the UNFCCC on an international agreement for after 2012. Views of key stakeholders were also presented and an extended question-and-answer session closed the workshop.

The European Parliament ENVI Committee, ECOLOGIC together with the European Parliament's Policy Department A and ENVI Committee Secretariat therefore have organised a workshop on "Effort Sharing and CDM".

Date: Tuesday 3 June 2008, 15h00 - 18h30

Venue: European Parliament, Brussels, room PHS 5B001

All documentation is available on the ECOLOGIC website:

<http://www.ecologic-events.de/cdm-workshop/index.htm>

2. Workshop - Programme

WORKSHOP

"Effort sharing under the Climate Package -- assessing the role of the Clean Development Mechanism"

European Parliament, Paul-Henri Spaak PHS 5B001, Brussels
Tuesday 3 June 2008, 15:00-18:30

PROGRAMME

Chair for the day: Mrs. Satu HASSI, MEP

15:05 Welcome and opening – Rapporteur

15:15 **Presentations by the expert panel** – moderated by **Andreas KRAEMER**, Ecologic

15:20 **Dr Jürgen SALAY**, DG Environment, European Commission: *"The Climate Package and the use of CDM"*

15:30 **Mr Lambert SCHNEIDER**, Oeko Institute: *"Concerns about quality: project types, additionality and credibility"*.

15:50 **Dr Niklas HÖHNE**, Ecofys: *"Internal vs. external effort – the impact of using CDM"*.

16:10 **Dr Joyeeta GUPTA**, Institute for Environmental Studies, VU Amsterdam: *"Post-2012: CDM's role in the climate negotiations"*.

16:30 **A critical assessment by stakeholders of the Commission's proposal** [short moderated opening responses, followed by initial panel discussion]:

Dr Christoph SUTTOR, South Pole Carbon Asset Management

Ms Mahi SIDERIDOU, Greenpeace

17:00 Discussion and debate with the Members, European Commission, Council, panel of experts and stakeholders

Closing Remarks (18:15 – 18:30) (*Satu HASSI MEP*)

3. Proceedings of the workshop: summary of the findings and the debate

by *ECOLOGIC*

Opening of the workshop

MEP Ms. Satu Hassi, Rapporteur, welcomed the participants and described the background and objectives for the workshop on CDM and effort sharing:

The EU Climate Package, consisting of four legislative measures, is currently under review in the European Parliament. Under the proposal, the EU would reduce its greenhouse gas (GHG) emissions to at least 20% below 1990 levels by 2020 (increasing to at least 30% in the context of an international climate agreement). Ms. Hassi explained that she is the Rapporteur for the effort sharing portion of the Climate Package, which looks at emissions outside the EU's Emissions Trading Scheme (EU ETS). The workshop covers one aspect of the effort sharing legislation: the use of CDM credits as offsetting measures for GHG emissions in the EU. The key question being discussed generally in the EP regarding the Climate Package is whether the ambition level of the legislation is enough. Regarding the use of CDM specifically, the key question being raised is whether such a large portion of the reductions should be met through offsetting rather than domestic reductions within the EU. Other key questions are: 1) Is the use of CDM compatible with the 25-40% reductions in emissions the IPCC believes are required to keep average global temperature within 2°C of historical levels? 2) Is the quality of the CDM credits adequate? 3) Should the CDM mechanism create credits that only offset emissions or should clean development funding go to funding absolute reductions in overall emissions?

The moderator, **Mr. Andreas Kraemer**, Director of Ecologic, introduced the speakers.

Expert speakers

Four experts made presentations on the different aspects of effort sharing and CDM, covering in particular the issues of project additionality, CDM's suitability to achieving EU climate targets, and the role of CDM in the international climate negotiations.

“The Climate Package and the use of CDM”

Dr. Jürgen Salay, *DG Environment, European Commission*

Dr. Salay provided background on the climate package, focusing on the allowed use of CDM credits under the proposed legislation. He stated that the climate package proposal provides certainty to emissions credit markets on the use of CDM/JI credits through 2020, regardless of whether there is an international climate agreement after 2012. In addition, the legislation differentiates the use of CDM both in the case where an international climate agreement is reached and in the case where no agreement materialises. The proposed legislation allows for the use of any of the following credit types: 1) CDM and JI credits issued between 2008 and 2012; 2) CDM credits issued after 2012 for projects registered between 2008 and 2012; 3) CDM credits from projects in the least-developed countries regardless of their approval date; and 4) credits specified in bilateral agreement with third-party countries. Allowed project types are those accepted by all Member States under the EU ETS during the 2008-2012 period. Explicitly not allowed are nuclear projects and carbon-sink projects. The Commission estimates that, under the proposal and without an international agreement, CDM/JI credits totalling 1.4 billion tons would be used through 2020, corresponding to approximately one third of EU ETS reduction effort in 2008-2020.

In addition, up to 3% of 2005 non-ETS emissions can be offset with CDM/JI credits. If an international agreement is reached, additional CDM credits can be used, with up to half of the additional reduction effort in the EU coming from CDM offsets. Dr. Salay stressed that this automatic increase in CDM provides a strong incentive for third countries to join an international agreement. It is Dr. Salay's view that in the long term, we need to go beyond offsetting mechanisms and strengthen the CDM's ability to contribute to sustainable development and technology transfer. He also emphasised that going beyond the Commission's proposed use of CDM undermines other policy goals, including: 1) the EU renewable energy target; 2) prospects for achieving a sound international agreement; and 3) EU leverage to improve the climate effectiveness of CDM.

"Concerns about quality: project types, additionality and credibility"

Mr. Lambert Schneider, Oeko Institute

The source countries of CDM credits are mainly emerging economies, with the top three countries contributing 72% of CDM projects (China has 36% of projects, followed by India (28%) and Brazil (8%). Very few projects occur in the least-developed countries. Mr. Lambert stated that the problem of proving project additionality is currently a central concern regarding CDM. In his presentation, he pointed to evidence that CDM projects are being approved that should not be under the CDM approval criteria. A key reason for this is that the CDM permitting system is inherently at risk of manipulation due to its dependence on a counter-factual (i.e. what would happen were the CDM not in existence?). This has led to several cases of abuse, include manipulations of investment analysis to show a project would have not been implemented without CDM, as well as the use of subjective barriers to prove additionality (e.g. statements that prior to CDM, company management was unwilling to invest in such a project). In a Delphi survey of CDM market participants done two years ago, 71% of respondents believed that "many projects would also be implemented without CDM registration". As an offsetting mechanism, CDM enables EU firms to buy CDM credits in place of reducing the firms' own emissions. This creates another critical problem: non-additional CDM credits do not effectively offset EU emissions, resulting in a net *increase* in global GHG emissions. Mr. Lambert drew some key lessons from the CDM experience so far and concluded that limits are required on the use of CDM/JI credits to ensure decreases in EU emissions. He also called for the eventual replacement of offsetting mechanisms with other mechanisms in developing countries. Possible alternatives include sectoral no-lose targets, and the discounting of CDM credits. Critiques of CDM aside, the CDM experience has yielded two key achievements: 1) activation of a market mechanism that seeks out GHG reductions in developing countries, and 2) extensive capacity building and awareness raising about CDM among key stakeholders.

"Internal vs. external effort – the impact of using CDM"

Dr. Niklas Höhne, Ecofys

Dr. Höhne discussed the likely emissions reductions needed to attain the EU's 2°C target for maximum change in global average temperature. According to the IPCC, GHG concentrations of 400-450 ppm CO₂e are required in order to achieve a 2-2.4°C target. Achieving this ppm concentration would require a reduction of -25% to -40% below 1990 levels in Annex I countries, and a reduction of -15% to -30% below the baseline in non-Annex I countries. These reduction figures exclude use of CDM.

According to Dr. Höhne's estimates, reaching the 2°C target would require corresponding EU emission reductions of at least -30% below 1990 levels through domestic reductions along with EU support for approximately 10% reductions in developing countries through CDM or a similar mechanism. Achieving the 2°C target thus requires EU emissions reductions that are significantly higher than the 20% and 30% targets (with CDM) detailed in the current climate package.

"Post-2012: CDM's role in the climate negotiations"

Dr Joyeeta Gupta, Institute for Environmental Studies, VU Amsterdam

Dr. Gupta focused on the sustainable development (SD) context of CDM, which is a component that has been overly neglected by both investors and host countries. Additionality is also a core problem: according to a recent article in the *Guardian* newspaper in the UK, half of CDM projects stem from national policies in developing countries that promote GHG reductions. This puts developing countries in a Catch-22 situation of CDM projects only being additional if they do *not* stem from national policies, which creates an incentive for developing countries to not pass laws requiring GHG reductions. In addition, many developing countries have vague written policies supporting climate action and energy efficiency, but poor implementation and enforcement; this further confuses the additionality issue. Key reasons for requiring CDM to contribute to sustainable development are to: 1) prevent diversion of scarce resources; 2) embed projects in the community as a means of maximising success; 3) encourage short-term reduction projects that establish trajectories leading toward emissions reductions. Under the CDM, sustainable development is seen as a contextual issue, so host-country governments are allowed to determine whether a project is sustainable using their own varied criteria. There is a risk, therefore, of a race to the bottom in terms of SD quality, unless investor countries establish policies that provide incentives to increase SD benefits (e.g. paying a premium for CDM credits with high SD benefits). Dr. Gupta praised the success of CDM in raising awareness among investors and local communities, but called for additional policy measures that could be used to increase SD success in CDM (e.g. quantitative SD targets, basing project approval on achieving SD targets).

Stakeholder comments

Dr. Christoph Sutter, South Pole Carbon Asset Management

Commenting on the speakers' remarks and the CDM theme generally, Dr. Sutter emphasised his support for the Commission's proposal to emphasise projects in LDCs and those that especially support sustainable development. He called for clear, predictable post-2012 rules for high-quality CDM projects that could reduce uncertainties in the CDM market. Such uncertainties endanger additionality, as project developers are then more likely to do projects that would be a financial success even in the absence of CDM. He also argued for the elimination of volume restrictions on LDC/highly sustainable projects.

Ms. Mahi Sideridou, Greenpeace

Ms. Sideridou pointed out that the EU has distinguished itself in the international community through its target of staying below a 2°C increase in global average temperature. She called for a change in orientation from the current focus on the 20% reduction target being the EU baseline (assuming no international agreement) to orienting instead around the 30% reduction target, with the failure to achieve a global agreement being seen as the fallback option.

Regarding CDM, she called for increased safeguards that ensure high-quality CDM projects that deliver climate and development benefits, and argued that an alternative market-based mechanism is needed that yields additional GHG savings rather than only generating offsets.

Questions and answers from the MEPs

MEPs raised several questions/issues in particular on:

- the need to make reduction mechanisms transparent and the need for CDM to be additional rather than a substitute for EU reductions. - the possibilities for incorporating transport, where calculations are quite difficult: what CDM projects might be possible in the transport sector? **Christoph Sutter** agreed this is a difficult area and pointed to current interest in developing qualifying projects, specifying rapid bus transport systems, biofuels and metro systems.

- further information on so-called “gold plated” CDM projects. What criteria are being considered for such a standard in addition to sustainable development and additionality? **Lambert Schneider** replied that the “Gold Standard” CDM label already exists that allows only renewable energy and energy efficiency, and generates credits that trade at about 2 EUR above other CDM credit types. One approach to increasing project quality is through 1) negative/positive lists identifying projects that can qualify as offsets in the EU, or 2) through discounting the value of certain credit types. Long term, though, he said we need to go beyond offsetting, and he mentioned so-called “sectoral no-lose targets” that identify sectoral targets below business as usual, with further reductions below this target generating credits that can be sold in carbon markets. He also pointed out that the carbon market cannot achieve needed reductions alone; what is needed is an enabling policy framework of both regulatory and market tools. **Christoph Sutter** mentioned that the UN has many requirements for CDM credits besides additionality and SD (e.g. monitoring requirements). Establishing benchmarks for certain sectors could be one possible means of improving additionality.

- on whether the 30% emissions reductions target should include CDM or should CDM rather be additional to these reductions. **Niklas Höhne** replied, stating he is clearly in favour of a 30% target for the EU without CDM and adding a target for use of CDM. Niklas echoed the point that policy tools in addition to the carbon market are of central importance, pointing to the need for standards-based policies where markets fail.

- on what an international agreement might look like that achieves the 15-30% reductions in developing countries that Dr. Höhne identified as necessary to achieving the 2°C target. Lambert Schneider was asked whether a policy that generated additional international credits (rather than offsets) would suffer from the same issues he mentioned for CDM. Dr. Höhne was asked whether his models assumed that the Annex I and non-Annex I groupings stay the same as in the current climate agreement. **Jürgen Salay** responded that a future agreement needs a larger group of countries to take on emissions reductions than are doing so currently, including the larger emerging economies. It may be possible to use sectoral approaches to bring in industry in developing countries. **Joyeeta Gupta** replied that asking developing countries for 15-30% reductions would be seen as excessive in the context of developed countries’ own failures to make reductions on this level. She also pointed to the problem that weak state effectiveness in many developing countries hampers their abilities to implement such cuts. She provided examples of specific incentives that might be provided to particular countries that could help increase willingness to make emissions reductions.

- on doubts about whether the proposed policy measures are adequate, given the performance record of the EU on emissions reductions, and suggested hefty fines for Member States not meeting targets. What are the possibilities for addressing lifestyle issues and what is the EU preparedness for such lifestyle changes?

Closing remarks

MEP Ms. Satu Hassi observed that the workshop raised many important issues, including interesting insights such as the additionality Catch-22 that dilutes incentives for developing countries to implement rigorous climate policies. The discussion strengthened her belief that we should seek to develop clean-development funding mechanisms that cause additional emissions reductions rather than merely offsets for EU emissions. Energy efficiency also needs further attention in developing countries, which tend to have higher carbon intensity to their economies. In addition to further technological innovations, we also need further social innovations that enable us to make the most use of existing technologies. She agreed that the orientation of EU policy needs to change to the default policy being a 30% reduction (with a 20% fallback option should no global agreement materialise), and believes that tighter qualitative and quantitative limits on CDM are necessary.

4. Annex: Workshop briefings and CVs

All briefings are annexed to this document; please refer also to the website of the ECOLOGIC Institute for the online versions:

<http://www.ecologic-events.de/cdm-workshop/presentations.htm>

Time to rethink the CDM

Current uncertainty around the Clean Development Mechanism has deeper roots than the EU ETS review – and needs longer-term solutions, says **Jos Delbeke**

The European Commission's recently announced proposal for a revised EU Emissions Trading Scheme (ETS) beyond 2012 provides, for the first time, continuity for Clean Development Mechanism (CDM) projects and an enlarged market until 2020 for the certified emission reductions (CERs) they generate. But we recognise that proposals to set conditions upon CER imports into the EU ETS – ahead of a new international climate regime – have been met with unease by some. Those that make a living from the CDM have claimed that unnecessary "limitations" and "uncertainty" have been created.

However, the source of this uncertainty is not Europe. It is the early stage of the negotiations on a post-2012 international climate change framework that is its main cause.

The international community aims to agree in late 2009 in Copenhagen the way forward in international climate policy. This agreement will determine the political framework for the global carbon market for at least the next decade while, in tandem, concrete regulations will be defined in domestic legislation in an increasing number of countries (US, Australia, New Zealand, Japan etc).

The post-2012 negotiation process and the forthcoming elaboration of federal legislation in the US means the carbon market is likely to enter a period of political uncertainty. Unfortunately, this comes just after the creation, in Europe, of a stable regulatory environment following the process to set the cap for the second trading period of the EU ETS.

The Commission places high importance on providing regulatory stability for the carbon market. However, we can only provide stability for the European part of the market. For the international element – including the CDM, and links to other schemes – the means to provide stability are less in the EU's hands.

To a large degree, emission reduction commitments by developed countries, and the participation of developing countries, are going to determine the future carbon market.

Developing countries have so far participated in the market via the CDM. Simple arithmetic with respect to the CDM tells us the following: were all developed countries to offset all their emissions using CERs, we would not get close to at least halving global emissions by 2050. It also means that, if all developing countries, regardless of their stage of development, continue on a permanent basis to be simply suppliers of CERs, we simply will not arrive at the needed emission reductions.

This leads to a very important conclusion.

To tackle climate change successfully, we need to seriously rethink the CDM. In the medium-term, voluntary offsetting mechanisms such as the CDM can only continue for some countries, and eventually only for the least developed countries. A gradual transition from mere project-based offsetting approaches to implementing cap-and-trade systems, first by advanced developing economies and their main sources of emissions, seems to be inevitable.

Once developing countries start to make contributions to cap or reduce their emissions, CER supply will become more limited over time. Countries will transition to participate in the carbon market in different ways. Less CDM as we know it doesn't mean fewer opportunities in the carbon market in developing countries, but it implies an evolution to different, yet-to-be-defined market mechanisms.

Market participants should also take into account the persistent concerns about the environmental integrity of the CDM. This is not a new question. It was at the source of the qualitative and quantitative restrictions on the import of CDM credits into the EU ETS introduced via the EU's Linking Directive, back in 2004. It expresses itself in, for instance, the reluctance of some US senators to recognise CDM credits in a proposed federal carbon market. In the post-2012 negotiations, a solution will have to be found to remedy these concerns.

Furthermore, many developing countries do not see how the CDM actually contributes to their sustainable development, given its limited transfer of new, low-carbon technologies.

The future scale of the CDM, its environmental integrity and technology transfer all need to be addressed during this round of international negotiations. Fortunately, there are many ideas around on reforming and improving the CDM.

One promising avenue would be to turn the CDM from an offsetting into a crediting approach, where crediting no longer takes place from the business-as-usual level, but from an environmentally demanding baseline, or is focused on massively scaling-up deploy-



To tackle climate change successfully, we need to seriously rethink the CDM

ment of key clean technologies such as renewable energy. This would follow in the tradition of the credit trading approaches pioneered in the US in the 1970s and 1980s. Such a crediting approach would bring increased environmental integrity and facilitate developing country contributions. In practical terms, part of the reductions achieved against business-as-usual could continue to be monetised in the carbon market, while the remainder could count as a developing country action contributing to global mitigation efforts.

Thinking beyond an improved CDM as a project-based, voluntary approach, we need to find other means for scaling up participation among developing countries. Such means could include sector-based approaches such as 'no-lose targets' (where credits are awarded for beating targets, but no penalties imposed for missing them) or binding sectoral targets. Such approaches might be attractive in richer emerging economies, some of which already enjoy a higher income per capita than some EU member states. Ultimately, this should lead to the implementation of cap-and-trade mechanisms like the EU ETS which, in the first phase, can also help advanced developing countries to stimulate the private sector to invest in highly profitable energy efficiency measures with a short pay-back period.

The evolution of the CDM away from a mere offsetting approach is a necessity – and will be a cause of uncertainty over the next 20 months. This uncertainty cannot be resolved in the EU ETS review, but should be an essential part of the global agreement to be concluded in Copenhagen in 2009.

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CDM in the EU Climate Package – Internal vs. external effort

Dr. Niklas Höhne, Ecofys, n.hoehne@ecofys.de

31 Mai 2008

Presented at: Effort sharing under the Climate Package - assessing the role of the Clean Development Mechanism, European Parliament, 3 June, 2008

1. NECESSARY EFFORTS TO MEET THE EU'S 2°C LIMIT

Stabilization of atmospheric concentrations in the 21st century at any level requires a significant departure from current emission levels. Global emissions will need to decline significantly compared to today's level. They will have to drop below the 1990 level and decline to almost zero over time. The earlier the emissions peak and decline, the lower the stabilized concentration level as well as the absolute level of climate change and the earlier climate change is attenuated. Figure 1 provides possible pathways and corresponding temperature increase.

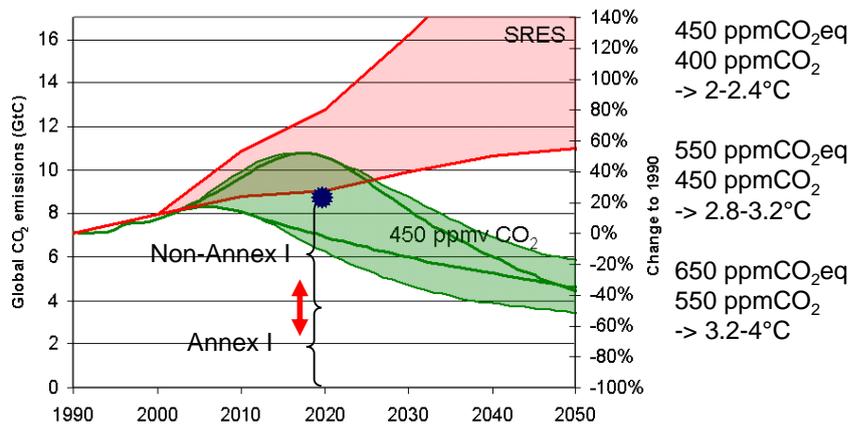


Figure 1. Required stabilization levels and corresponding equilibrium temperature increase.

Table 1 shows necessary reductions below 1990 levels for Annex I countries and the below the baseline for Non-Annex I countries. The values were prepared by the IPCC by comparing studies that have analysed various proposals to share efforts among countries.

Table 1. Necessary reductions in 2020 to keep stabilization at various concentration levels within reach (Source: IPCC 2007, Box 13.7 and Den Elzen and Höhne 2008)

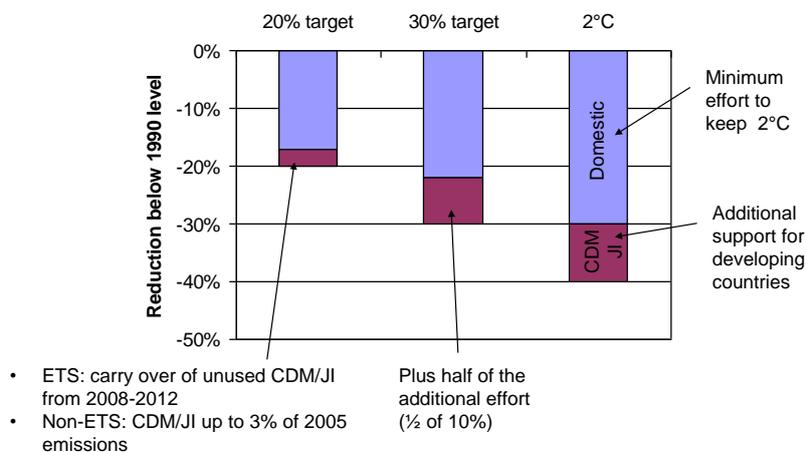
Scenario category	Annex I	Non-Annex I
A-450 ppm CO ₂ -eq ²	-25% to -40% below 1990	<ul style="list-style-type: none"> Substantial deviation from baseline in Latin America, Middle East, East Asia and Centrally-Planned Asia Non-Annex I: -15% to -30% below baseline
B-550 ppm CO ₂ -eq	-10% to -30% below 1990	<ul style="list-style-type: none"> Deviation from baseline in Latin America and Middle East, East Asia Non-Annex I: 0% to -20% below baseline
C-650 ppm CO ₂ -eq	0% to -25% below 1990	<ul style="list-style-type: none"> Non-Annex I: 10% above to 10% below baseline

2. COMPARISON TO PROPOSAL OF CLIMATE PACKAGE

The targets proposed in the energy and climate package allow for the use of CDM and JI. For an overall reduction of 20% below 1990 level roughly 3 percentage points by CDM/ and JI is allowed. For the stricter 30% target, 8 percentage points CDM/ and JI would be allowed (see Figure 2).

A target that is compatible with 2°C would however require at least 30% domestic reductions plus support for developing countries, e.g. as demand for credits from CDM/JI. Assuming that developing countries' emissions can be reduced by roughly 10% below baseline by no-regret measures (Höhne et al. 2008), substantial additional support by developed countries may be necessary, so that their emissions are reduced 15% to 30% below baseline.

Figure 2. Emission reductions in the EU split in domestic and external (CDM/JI)



3. CONCLUSIONS

Limiting global temperature increase to 2°C requires Annex I countries to reduce their emissions -25% to -40% below 1990 level and at the same time Non-Annex I countries' emissions to be -15% to -30% below baseline. Some 10% reduction below baseline can be achieved in developing countries as "no-regret options", meaning there are monetary or other benefits (such as energy security) in implementing them. For the remaining reductions, developing countries may receive some support from developed countries.

An EU target that would be compatible with limiting climate change to 2°C would be to reduce emissions at least -30% below 1990 domestically plus to provide support for developing countries through CDM or other carbon mechanism at the order of magnitude of additional 10 percentage points.

References

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Post 2012: CDMs Role in the Climate Negotiations

Joyeeta Gupta

A policy note for the meeting on ‘Effort Sharing Under the Climate Package – Assessing the Role of the Clean Development Mechanism’, European Parliament, Brussels, 3 June 2008.

1. Introduction

The Clean Development Mechanism has two goals:

- To reduce the growth of greenhouse gas emissions in specific projects against a base line of expected emissions in developing countries financed by the purchase of such emission reduction by investors from the developed countries, and
- To contribute to the sustainable development goals of developing countries.

This paper briefly evaluates the CDM as it has evolved thus far in meeting these two goals and hence its ability to actually contribute to the further development of the climate change regime in the post 2012 period.

2. Contribution to reducing emissions

2.1 The CDM is prima facie successful in mobilising funds

The CDM must be seen as a successful instrument from the point of view that barely 8 years after its operationalisation, enthusiasm to participate in CDM has exploded and more than 128 Designated National Authorities exist today, and at least 948 CDM projects have been registered and 85,049,697 million certified emission reductions (CERs) have been issued. The projects in the pipeline are increasing and although there is a dip in project registration at present since the post 2012 period is uncertain, it is most likely that the number of projects will continue to increase. The market is worth 20 billion USD a year and may grow to 100 billion USD in four years.

2.2 The CDM however may not be efficient, equitable or additional

At the same time there are key weaknesses. First, the Executive Board of CDM is unable to handle the applications within a time period that reduces the transaction costs for the

project developers. For example, as of 16 January 2008, of the 1068 projects China has submitted, only 150 have been approved and/or handled.

Second, although, there are 35 DNAs in Africa, the percentage of projects going into Africa is very small and is in line with the trends regarding the direction of foreign direct investment. For example in 2007, Africa hosted only about 2.6 % of the registered CDM projects and only 55 (less than 2%) of the 3000 projects in the pipeline. The share of sub-Saharan Africa is 41 projects (1.4 %) of which 23 are from South Africa.

Third, the question of “additionality” is critical. CDM projects should deliver “additional” emission reductions. This is problematic since if government policy promotes such projects and such projects are in line with government policy, are they still additional? This may either give a perverse incentive to governments to not make explicit policies in this field, which would go counter to their obligations under Articles 4 of the Convention and 10 of the Protocol. Since the developing countries are under an obligation to make policies, it becomes very difficult to prove whether these projects are additional or not. Most developing country policies are never implemented because of investment constraints, so this could be used as an argument to state that such projects are nevertheless additional as seen against baselines drawn on the basis of clearly designed methodologies. However, a recent report also concludes that about 2/3rds of the projects being conducted would have happened anyway and the additionality of such projects is highly questionable! The counter-factuals are nevertheless difficult to prove.

Lastly, investing in cheap reductions in developing countries takes away the incentive to invest in new technologies in the North.

2.3 Inferences

Clearly the CDM has the potential to mobilise funds and to promote activities that ostensibly lead to emission reductions. It still has many problems. However, the bottom-line may be that despite its many problems, it may still be one way to put the issue of climate change clearly on the agenda of many actors all over the world and may be an interim solution by creating large-scale publicity and hopefully awareness. Its limited additionality was a problem known from the start and has been adequately discussed long before the instrument was launched.

3. Contribution to sustainable development

3.1 Reasons why CDM projects should contribute to SD

There are three reasons why CDM should contribute to sustainable development. First, because such investments should not divert scarce resources to non-priority areas in the developing countries. Second, the success of individual projects tends to be higher when it is embedded in the context where it is implemented. Taking sustainable development criteria into account may imply incorporating local perspectives and positions and may guarantee the sustainability of the project. Third, such investments should not focus on

short-term emission reductions while locking-in countries in non-sustainable technological trajectories. A focus on sustainable development may imply taking a long-term perspective into account in the transfer of technologies.

3.2 Host country responsibility

However, sustainable development is a fuzzy concept and highly contextual. The legal situation is that host countries must decide if the proposed CDM project meets its sustainable development criteria. Many countries are engaged in developing criteria for sustainable development. Some countries see sustainable development as meeting national laws including environmental impact assessments (e.g. Argentina); others as something that is contextually determined (e.g. Costa Rica, Nepal); and only some have operational criteria for testing whether a projects meets the sustainable development criteria (eg. Brazil, India). In practice, however, the scramble to access as many CDM projects as possible implies that very often the application of the SD criteria is minimized to meeting national legislation.

3.3 Interpreting sustainable development

Since sustainable development is fuzzy, the literature argues that this could either mean that economic, social and environmental aspects are taken into account, or that a procedure is set up to engage local stakeholders in the design of the project so that its sustainability and contextual embedding is guaranteed, or that it should indeed lead to an accelerated switch to renewable energy or a sustainable development path. But the latter does not imply that other sustainable development criteria are taken into account.

3.4 Sustainable development in AIJ/CDM projects

Although Activities Implemented Jointly Projects launched in 1995 did not aim explicitly at achieving sustainable development, they were to be in line with host country priorities, they were part of the Climate Convention that explicitly focuses on achieving sustainable development in Article 3, and further if AIJ projects are to be converted into CDM projects then they need to meet sustainable development criteria. AIJ projects provide some degree of information regarding the ability of such projects to contribute to sustainable development.

AIJ projects have generally speaking a poor record in achieving sustainable development. Where they make some contributions to sustainable development, this is often the result of the degree to which investor government funding is put in such projects.

CDM projects may or may not contribute to sustainable development. The literature is sceptical about its ability to contribute to sustainable development. One can distinguish between the direct sustainable development components and the indirect sustainable development components. The direct component refers to that which is automatically achieved as a direct result of the narrow implementation of the project, e.g. reducing local pollution through setting up a wind energy plant. The indirect component refers to those benefits that are not a direct result but for which additional efforts need to be made. It is highly likely that the direct SD benefits will be achieved. However, the indirect SD benefits are unlikely since their implementation are generally not monitored, contract

failure is not linked to the failure to achieve the SD component, and since implementing these come at a cost and directly contradict the cost-effectiveness drive behind establishing CDM projects.

3.5 Implications

The implications of the above are that in a business as usual scenario, CDM projects are unlikely to achieve indirect sustainable development criteria, because host countries would like to attract as many projects as possible and because investors want to achieve emission reductions cost-effectively.

Unless, of course, clear rules regarding what is sustainable development are made, new rules to monitor the implementation of such goals are taken into account, developed countries make rules regarding the SD character of the CERs they would like to purchase and it is made legally mandatory in the contracts.

4. Conclusion

If we see CDM as a limited instrument for creating awareness and commitment worldwide on the issue of climate change, it may be quite successful.

If we see CDM as an instrument for achieving sustainable development, it is unlikely that that goal will be achieved. CDM is unlikely to contribute to a change in global production and consumption patterns, and instead may bring liberal market approaches that encourage greater production and consumption to every corner of the globe. While CDM projects may meet the direct sustainable development components of projects and meet national laws in host countries, they are unlikely to deliver the “indirect” sustainable development components, without a significant alteration of the design of the instrument and this may interfere with the cost-effectiveness driver of the instrument.

If we see CDM as actually reducing the rate of growth of global greenhouse gas emissions through a collection of projects, we may be fooling ourselves except where there are clear substitution effects.

But CDM may be the interim instrument needed to keep the issue alive and investors engaged by meeting their short-term interests.

Dr. Christoph Sutter, CEO, South Pole Carbon Asset Management

Clearer post 2012 rules are needed in the EU-ETS to foster those CDM projects that are truly additional and contribute to sustainable development

Briefing paper on the Commission's proposal to revise the EU Emissions Trading Scheme; Workshop at the EU Parliament, 3 June 2008.

Given the global challenge of climate change we welcome the increased efforts towards domestic greenhouse gas emission reductions in industrial countries and towards a robust international climate regime after 2012, which can be seen in the Commission's proposal for Directive 2003/87/EC.¹ We especially support the proposal to emphasise projects that either are located in Least Developed Countries (LDCs) or that especially promote sustainable development.² Such provisions might help to overcome some of the shortcomings of the current CDM.

However, to ensure an effective fostering of CDM projects in LDCs and highly sustainable projects:

- i) rules for developers of truly additional projects need to be predictable;
- ii) volumes of LDC/highly sustainable emission reductions that are allowed in the EU-ETS have to be significantly increased.

i) Rules for developers of truly additional projects need to be predictable. One of the clear successes of the Kyoto Protocol is that a fully fledged CDM sector (incl. project developers, technology providers, carbon finance institutions, etc.) has been built up in record time. This new CDM sector now has to handle the uncertainties regarding the international post-2012 regime.

The EU – as a leader in the global climate change process – is expected to lead the way in establishing clear incentives for high priority projects. Truly additional and sustainable projects need the CDM to be feasible and typically have long lead times. They can only happen if the rules are clearly predictable. For rules relating to projects in LDCs/with high contribution to sustainable development we strongly recommend deleting volume restrictions which are subject to a satisfying global reduction target.

ii) Volumes of LDC/highly sustainable emission reductions that are allowed in the EU-ETS have to be significantly increased. The Kyoto Protocol clearly defines the objective of the CDM to contribute to sustainable development of the host country. However, various analyses of the current CDM show that there are clear differences between CDM projects with regard to their contribution to sustainable development.³

To create a significant and effective incentive for LDC/highly sustainable emission reductions, the volumes allowed in the EU-ETS have to be higher than currently proposed by the Commission. For the period post 2012 we suggest allowing volumes in the similar range as for the period 2008-2012 (approximately 50% of total emission reductions could come from third countries). However, in the post 2012 scheme we suggest to restrict these volume to emission reductions resulting from LDC/highly sustainable projects. This would set the right incentives to overcome the current shortcomings of the CDM.

About South Pole Carbon Asset Management

South Pole is a carbon asset management company with outstanding technical expertise and a reputation for developing innovative and cost-effective emission reduction projects. The company has globally more than 100 CDM projects under contract. It was the first company worldwide that generated issued CERs with the Gold Standard quality label and concluded the first ever international CER transaction.

About Christoph Sutter

Dr. Christoph Sutter is the CEO of South Pole Carbon Asset Management. He has been member of the Methodology Panel of the CDM Executive Board since 2005.

Before joining South Pole Ltd. Christoph was a consultant with McKinsey & Company and a CDM project developer with several small companies. During the last 10 years, he advised successfully registered CDM projects with a forecasted total of more than 100 million t CO₂e.

Christoph holds a Ph.D. from the Swiss Federal Institute of Technology, Zurich. He wrote his Ph.D. thesis on sustainability of CDM projects.

¹ Commission of the European Communities (23.1.2008): Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL amending Directive 2003/87/EC, p. 10.

² Commission of the European Communities (23.1.2008): Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL amending Directive 2003/87/EC, Article 11a

³ Sutter, C.; Parreno, J.C., 2007. Does the current clean development mechanism (CDM) deliver its sustainable development claim? An analysis of officially registered CDM projects. *Climate Change* 84 (1), 75-90. and Olsen, K. H., Fenhann, J., 2008. Sustainable development benefits of clean development mechanism projects. A new methodology for sustainability assessment based on text analysis of the project design documents submitted for validation. *Energy Policy* (in press).

20 May 2008

Greenpeace draft position paper on the European Commission legislative proposal on Effort Sharing of the EU-27 climate targets for 2020.

Introduction

In January 2008, the European Commission presented new legislation on climate and energy as a follow-up to the relevant objectives set by the 2007 Spring European Council. These laws, when finally adopted, will demonstrate to the world the extent of Europe's commitment and leadership in the global effort to prevent dangerous climate change.

In this position paper we present some first recommendations by Greenpeace on how to strengthen the environmental effectiveness and climate ambition of the Commission's proposal for a "Decision on the effort of Member States to reduce their greenhouse gas emissions to meet the Community's greenhouse gas emission reduction commitments up to 2020" (COM 2008 17 final).

The 'Umbrella Issue' – the magnitude of the EU Climate Target for 2020

The backbone of the climate targets within the proposal is the internal EU agreement struck in spring last year in which the EU promised it would reduce its greenhouse gas emissions by 30% by 2020 (compared to 1990 levels) as part of a new global deal. The 2007 Spring Summit also agreed that until the new deal is concluded, the EU would only commit to reducing its emissions by 20%.

Greenpeace believes that this 20% cut is a political and scientific mistake which needs to be rectified by amending the legislation for the following two reasons:

- Firstly, as the Commission has already recognised¹, this target is inconsistent with the EU objective of keeping mean temperature increase below 2 degrees Celsius compared to pre-industrial levels. The EU committed to this temperature threshold over a decade ago with the intention of preventing the most devastating impacts of climate change. Only if the EU commits to reducing its emissions by at least 30% domestically will it respect its own objective; this -20% target is a purely arbitrary number.
- Secondly, this cut is weaker than what was agreed for developed countries during the international climate negotiations in Bali in December 2007. There, the range agreed for developed country reductions was set at 25-40% by 2020².

In light of recent political agreements reached within the Kyoto Protocol post-2012 discussions and the scientific evidence consistent with the 2-degree objective, Greenpeace asks for the unilateral commitment to be revised so as to ensure that the EU cuts its domestic emissions by 30% by 2020, compared to 1990 levels.

¹ January 2007, European Commission Communication, *Limiting Global Climate Change to 2 degrees Celsius. The way ahead for 2020 and beyond*, COM (2007) 2 final.

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2007:0002:FIN:EN:PDF>
² December 2007, *Conclusions adopted by the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol at its resumed fourth session held in Bali, 3–11 December 2007*.
http://unfccc.int/files/meetings/cop_13/application/pdf/awg_work_p.pdf

Additionally, this legislation should have a longer-term emission horizon. Therefore, Greenpeace is calling for a 2050 target – an EU emission cut of at least 80% by 2020, compared to 1990 levels.

Other Cross-Cutting Issues – External credits & Reinforcing the post-2012 UN framework

In the proposal, the Commission has failed to acknowledge the continuation of the United Nations Framework Convention on Climate Change (UNFCCC) and of the Kyoto Protocol after 2012. This is particularly startling given that the EU is fully engaged in the ongoing UN post-2012 framework negotiations, which were officially launched over two years ago and should be ideally completed in Copenhagen in the end of 2009. Instead, the text vaguely refers to '*a future international agreement*'.

- Greenpeace believes that the 'trigger' for increasing the ambition of the EU climate targets (for both the ETS and the non-ETS sectors) should be explicitly linked to the UNFCCC process.

We are also gravely concerned about the provisions on use of external credits after 2012. They currently allow for a significant use of external credits which can count towards the fulfilment of the EU target.

Most importantly, there are no safeguards whatsoever on the quality of projects that would qualify after the conclusion of an international agreement.

This *de facto* acceptance of a large volume of external credits poses two significant risks. Firstly, it reduces the EU's weight in the global negotiations on the post-2012 shape of the Clean Development Mechanism and Joint Implementation (or of any new form of flexible mechanism). It declares that EU governments and industry will be prepared to purchase a great deal of external credits, no matter what shape or form they take. Secondly, it precludes the outcome of these negotiations. Within the post-2012 Kyoto framework, the EU should reserve the right to select which overseas projects governments - and EU industry through the ETS - should be giving priority to and which ones, if any, they want to exclude.

- A more logical approach would be for EU countries to first secure an adequate level of domestic effort by 2020 (an overall 30% cut compared to 1990 levels). Then, external credits should only be eligible for use if they come on top of this minimum effort and if they fulfil strict criteria (verifying their climate benefit and guaranteeing their environmental integrity).

Greenpeace believes that external credits from certain projects should be explicitly excluded in the future: sinks³, carbon capture and storage, large hydroelectric projects and, of course, nuclear power generation. Project-developers should also need to provide evidence on whether projects are additional and environmentally friendly.

The simplest way of ensuring this would be to only allow credits from sustainable and additional renewable energy and energy efficiency and conservation projects.

Finally, we are fully aware that the reasons for using the year 2005 as the baseline for setting EU targets for the ETS and non-ETS sectors are purely technical (i.e. data availability).

³ Claiming credit for carbon stored in forests and other vegetation ('sinks') is one of the most contentious and problematic issues in the Kyoto Protocol. Sinks are not permanent and they can very easily turn into a carbon time-bomb. They are also very difficult to monitor.

- In the interest of consistency with the current UNFCCC targets, as well as of continuity and comparability, the overall EU target must continue to refer to a baseline of 1990. The distribution of this target across countries and sectors through this legislation is an internal EU matter. But it is of paramount importance that in the external context of the global negotiations, the EU should always refer to and seek to maintain the 1990 baseline.

Deatiled comments on the Commission's proposal

As explained above, Greenpeace's first criticism is on the magnitude of the total non-ETS emission cap, given that it has not been set to match a total 30% reduction by the EU by 2020, but is instead derived from the inadequate 20% cut.

- ❖ The overall, unconditional emission commitment by the EU should be a 30% domestic cut by 2020 compared to 1990 levels. The Member State targets must therefore be revised to match this level of ambition.

In the current text, there is a stated limit on the maximum emission cut for any individual Member State. In our view, each Member State would need to reduce its emissions so that it adequately contributes to meeting a 30% domestic cut by the EU as a whole. In certain cases, this will mean setting reduction targets that are considerably more ambitious than the maximum cuts set in the current draft. Furthermore, there is no real justification for including this limit in the Decision, even if it is only mentioned in the preambular text.

- ❖ The limit capping the maximum emission cut by any given Member State should be deleted from the preambular text of the proposal.

Furthermore, the draft decision already announces the number of credits from external projects that can be used towards fulfilling each national climate target, such as those currently obtained through the Kyoto Protocol's Clean Development Mechanism.

- ❖ As stated earlier, Greenpeace is asking for a strict quality check on any external credits that will then be used on top of a total 30% domestic emission reduction effort.

The Commission's decision is also allowing for trading⁴ between Member States of any 'leftover' external credits.

- ❖ The legal text allowing for the trading between Member States of their unused quotas of external credits should be deleted.

As mentioned earlier, another concern arises with respect to the use of a 2005 baseline for emission reductions instead of using 1990, the year mostly used for the Kyoto Protocol commitments set for 2008-2012. EU countries that have shown little climate progress by the year 2005 towards their existing Kyoto commitments will have more lenient targets (than the ones they would have been allocated had they done more). This applies to all the EU climate laggards, like Spain, Italy, Luxembourg, Austria, Ireland, Denmark, Portugal, Slovenia, Greece....

- ❖ This unwelcome consequence from the change of baseline to 2005 needs to be corrected when setting individual 2020 targets.

One of the drawbacks of the Kyoto Protocol was that the individual country targets were set in 1997 for 2008-2012, i.e. there was over a decade between the setting of the target and the target date itself. What happened in practice was that many governments failed to adopt the

⁴ See Articles 4.4 and 6.4

necessary climate policies, with the expectation that their successors would do so. We now need to learn from the existing Kyoto experience and improve its second commitment period by setting both short and medium term targets.

- ❖ The EU and the Member States should also adopt intermediate targets for 2015.

Finally, there is no compliance mechanism included in the Decision, which is needed to specify the penalties that countries would face if they do not respect their individual climate commitments. This is a critical oversight that needs to be corrected.

- ❖ Penalties should be defined for Member States failing to meet their individual targets (for 2015 and 2020), similar to the ones set through the Emissions Trading Directive.



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CVs

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Salay has followed Kyoto mechanisms and EU relations with Russia in the international climate negotiations since 1999. He was lead negotiator for the EU on Joint Implementation at COP11 in Montreal. He started his career in 1988 as a researcher and advisor on Eastern Europe affairs focussing on energy and environment. He has a PhD in Environmental and Energy Systems Studies from Lund University, a Masters degree in Energy and Resources from University of California, Berkeley and a Bachelor degree in Economic History and East European Studies from Uppsala University.

Lambert Schneider, Öko-Institut e.V.

Lambert Schneider, born 1971, has been researcher in the Energy and Climate Protection division at Öko-Institut in Berlin since November 2000. He studied energetic and chemical engineering (M.S.) and environmental engineering (B.S.) at the Technical University of Berlin. Since 2001 he has been a member of the German delegation for the UN climate negotiations, responsible for the implementation and further development of flexible mechanisms and methodological questions concerning the reporting of greenhouse gases. He was also a representative of the European Union in the "Consultative Group of Experts (CGE) on National Communications from Non-Annex I Parties". Since 2005 he has been a member of the "Methodological Panel" under the UN Executive Board for the CDM. He carries out research projects on the CDM, innovative energy production technologies as well as the implementation and further development of the flexible mechanisms.

Dr. Niklas Höhne, Ecofys

Dr. Niklas Höhne follows the international climate change negotiations since 1995. As staff member of the UNFCCC secretariat (1998 to 2001), he was responsible, amongst other issues, for reporting and review under the Kyoto Protocol including accounting for the Kyoto Mechanisms. Since 2001 he has been a project manager at Ecofys working on projects related to the international climate change negotiations and the Kyoto Mechanisms. He holds a PhD of the University of Utrecht on "What is next after the Kyoto Protocol - Assessment of options for international climate policy post 2012". He is lead author for the IPCC Fourth Assessment Report. Since 2005, he is Coordinator of the Energy and Climate Strategy department of Ecofys in Germany.

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