WWF background note to the report

"Is the CDM fulfilling its environmental objectives?
An evaluation of the CDM and options for improvement"
prepared for WWF by the Öko-Institut
November 2007

The CDM and environmental integrity

The Clean Development Mechanism (CDM) is one of the flexible mechanisms created by the Kyoto Protocol. It allows industrialised countries with greenhouse gas (GHG) reduction targets to meet a proportion of their target by investing in projects that reduce emissions in developing countries as an alternative to more expensive emission reductions in their own countries. The second, twin aim of the CDM is to assist developing countries, where the projects are hosted, to achieve sustainable development. Both aims depend on proving that projects are additional, i.e. that they would not have occurred without the additional incentive provided by emission reductions credits. If a project is awarded credits in breach of the additionality principle it means that global emissions actually increase, thus undermining the environmental integrity of carbon markets.

Why has WWF commissioned this report?

Recently, concerns have been raised that a portion of the projects registered by the CDM Executive Board are not additional. Furthermore, it appears that the sustainable development objective is often overlooked. WWF, through commissioning this report, wants to highlight some of the shortcomings in the way the CDM has been implemented, and offer possible solutions that should inspire policy makers, companies and other stakeholders to work together to improve the environmental integrity of the CDM. Improvements are needed in order to ensure the CDM remains a central mechanism in the international climate framework beyond 2012. The report – prepared by Lambert Schneider, senior scientist at the German Öko Institut, has undergone extensive expert review. The author makes several important recommendations for improvement.

Importance of the cap-and-trade system in the fight against climate change

Carbon markets are best established for large industrial emitters, carbon-intensive sectors and individual countries. This is the case with the present European Emissions Trading Scheme (EU ETS) covering energy-intensive industries and the power sector.

In principle carbon markets are based on cap-and-trade systems. In such a system, a cap is set to achieve emissions reductions. Participants can decide to achieve their target by reducing their own emissions, by participating in trading, or by investing in greenhouse gas reductions projects elsewhere. WWF believes that cap-and-trade systems can help to achieve both emission reductions and economic efficiency. As these systems offer flexibility, WWF believes they can achieve environmental goals more cost-effectively than e.g. taxes. Besides, they are more accepted by larger emitters.

On the other hand, WWF believes that taxes and energy efficiency standards are more suited to specific sectors. This is certainly true for most energy-consuming products and transport modes, including cars and aviation, as well as for buildings and non-energy-intensive manufacturing and services. Although WWF supports the inclusion of international aviation in the EU ETS – if

done in a robust way – complementary measures will be needed to tackle emissions from this rapidly growing sector.

The role of the CDM

WWF has supported the creation and development of the CDM for both climate and sustainable development reasons. WWF believes that the CDM has a very important role to play in assisting developing countries in the transition towards a low-carbon future. Current weak standards and inconsistent approaches towards 'additionality' need to be addressed with urgency. If developed countries and companies operating under cap-and-trade systems are allowed to buy emissions reductions from non-capped developing countries, those carbon credits need to be truly additional and lead to clean technology deployment.

The report's main finding is that 20% of emissions reductions certified under the initiative may have happened even without CDM financing. This is 34 MT CO_2e per year, equivalent to the emissions of seven 600 MW coal-fired power plants.

Despite these problems the CDM has already had a positive impact on the thinking of decision makers in developing countries and changed GHG emissions in some sectors. If the problems identified here are properly addressed, the CDM will continue to be an important instrument in the fight against climate change.

Key recommendations

To the CDM Executive Board and COP/MOP:

- Step up spot checks on DOEs and publicizing the results using a transparent set of assessment criteria;
- Sanction (suspend / withdraw accreditation) DOEs with a poor track record;
- Hold liable DOEs by requiring them to replace CERs proven excessive in the case of non-conformities;
- Provide guidance for DOEs on verification and validation that promotes consistency, transparency and a high quality of validation and verification;
- Make the guidance on demonstrating additionality of small-scale projects more explicit while keeping transaction costs low;
- Improve the barrier, common practice, and investment tests in the additionality tool so as to reduce the margin of interpretation for DOEs; and,
- Currently projects can be registered many years after they started operation. It is suggested that projects can only request registration if the project started no earlier than one year before.

To the EU – WWF makes the following recommendations:

Since the launch of the European Emissions Trading Scheme (ETS) in 2005, the EU has become the largest carbon market in the world. As the largest buyer the EU needs to ensure the CDM delivers real climate and sustainable development benefits. At the same time, deep domestic reductions in the EU are crucial to realizing a low-carbon economy. CDM credits need to be additional to and not be used instead of domestic action.

But access to excessively large volumes of carbon credits in phase II of the EU ETS (2008-2012) might mean that emissions from sectors covered by the ETS could actually increase by 145 million tonnes of CO_2 over their 2005/06 levels - equivalent to the annual emissions from approximately 30 coal-fired power stations. Clearly, this is not acceptable for a scheme which is meant to be driving down emission reductions within the EU.

In light of the additionality concerns expressed in this report, the unfethered access to such potentially high volumes of CERs paints a very worrying picture.

The review of the scheme is currently underway with a revised Directive expected in 2008. The review offers a vital opportunity to rectify the short comings of the scheme and ensure that the traded sector really starts to play its fair share in reducing emissions post-2012.
WWF recommends:

- The principle of supplementarity should be retained in full in the Directive such that it explicitly applies to emission reductions within the scheme. It should be made operational by clear rules and a harmonised approach across the EU.
- To ensure that projects really are additional, have a positive sustainable development impact, and contribute towards a drive towards a low carbon economy the use of project credits within the EU ETS should be limited to those certified by the Gold Standard.

The Gold Standard is an independent, transparent, internationally recognised benchmark for high quality carbon offset projects. It is restricted to renewable energy and end-use efficiency projects, requires projects to follow a conservative interpretation of the UNFCCC-additionality test and provide evidence by a UNFCCC-accredited independent third party that they are making a real contribution to sustainable development. While the Gold Standard does not guarantee additionality, it can reduce the risk of approval of non-additional projects.

Additionality of Energy Efficiency and Renewable Energy projects
The CDM does not in itself reduce global emissions; it is an offset mechanism allowing industrialised countries/companies with a GHG reduction obligation to invest in projects that reduce emissions in developing countries. If a company decides not to reduce its own emissions but instead purchases credits from a CDM project to offset them, and if this project is not additional, then global emissions increase. Therefore, additionality is a crucial element of the CDM, even in the case of energy efficiency and renewable energy projects. The Gold Standard is designed to ensure the environmental integrity of these projects (see above).

The lack of sustainable development benefits in the CDM
One of the two objectives of the CDM is to assist developing countries in achieving sustainable development. There, however, appears to be a trade-off between the CDM aim of supplying emission credits at the lowest cost and the promotion of sustainable development. The former aim has clearly taken precedence. Promoting sustainable development through poverty alleviation or employment and community benefits seems to have been largely forgotten by project developers, verifiers, and the CDM Executive Board. The same is true for stakeholder consultation, considered by project developers as a burden rather than an opportunity to gain public acceptance and to identify the project's impacts on local communities.

To promote sustainable development through the CDM, WWF helped to establish the Gold Standard. The Gold Standard tries to ensure sustainable development is part of the project development process by extending robust guidelines on sustainability benefits and stakeholder consultation, which must be verified by UN-accredited entities on site.

WWF Position on HFC/N2O destruction Projects

HFC and N2O destruction projects are additional since they would not, in the absence of the CDM, generate any revenues. They rely entirely on emission reductions credits to take place. WWF does not, however, support the inclusion of these projects in the CDM as:

- they do not move countries closer towards achieving a low-carbon economy;
- they do not, in themselves, contribute towards sustainable development – the twin, often forgotten, aim of the CDM;
- they produce very large volumes of emission reduction credits at low cost, thus reducing the incentive for countries/companies to invest in other project types (e.g. renewable energy or energy efficiency) or to take domestic action; and,
- the CDM is not the most cost effective means of delivering emission reductions from these types of projects. Specifically, a recent article in Nature[1] indicated that it would cost around €100 million to install scrubbers onto existing factories producing HFC-23 in the developing world. Yet the same factories look set to make €4.7 billion from the sale of credits into the carbon market.

WWF, therefore, believes that other (regulatory) instruments should be used to phase out HFCs as rapidly as possible.

The CDM beyond 2012

WWF supports the development of voluntary sectoral targets of energy and carbon-intensive sectors of emerging economies as a contribution to the international framework post-2012. These sectoral targets could be set at either the national or even the international level using sectoral baselines substantively below business-as-usual development. Although details have to be worked out, it is clear that such an approach would directly replace the project-based CDM in those sectors. The buyer's demand for credits from a sectoral CDM would depend on the setting of ambitious emissions reductions targets in developed nations.

Ambitious dynamic benchmarks could replace the assessment of additionality in some carbon-intensive industries if the necessary data become available. The performance of the top 20% plants in the industry could be used as the basis for establishing the benchmarks. In order to generate sufficient demand, and as a first step towards decarbonisation of the global economy, WWF demands that all Annex 1 countries reduce their emissions 30% by 2020 based on 1990 levels through domestic action alone (including cap and trade in Annex 1).

In addition, WWF urges developed countries to contribute substantively to the low-carbon development of non-Annex 1 developing countries. This can be achieved if at least 15% of all Annex 1 base year emissions are reduced through flexible mechanisms, including a reformed CDM that is deepened and expanded. Investments in developing countries in clean and efficient technologies, as well as programs to combat deforestation, can be made through both market and non-market mechanisms. To ensure the overall environmental integrity of the system and promote supplementarity, those reductions shall be additional to the Annex 1 30% domestic target.

WWF International, November 2007

[1] Nature, volume 44518, February 2007 "Is the global carbon market working?"

Table 1: number of CDM projects registered, CERs issued, number of projects in pipeline

As of October 2007	Number of project registered	% of total projects registered	CERs issued (kCERs)	% of total CERs issued	Number of projects in pipeline
Energy Efficiency	91	11%	7,538	4	392
Renewable Energy	486	61%	30,696	18%	1,549
Fossil Fuel Switch	19	2%	3,910	2%	80
Afforestation / Reforestation	1	0,1%	26	0%	11
HFC/N2O	29	4%	94,809	56%	63
Other industrial gases	18		6,908		50
Methane	63	8%	19,296	11%	220
Agriculture	94	12%	4,363	3%	177
Other	2	0,2	301	0,2%	9
Total	803		167,848		2,551

Table 2: location of projects

As of October 2007	Number of projects registered	% of projects registered	Number of CERs issued (kCERs)	% of CERs issued
Latin America	290	36%	33,625	20%
Asia Pacific	476	59%	124,439	74,1%
Europe and Central Asia	8	1%	371	0,2%
Sub-Sahara Africa	13	2	3,823	2,3%
North Africa	16	2	5,590	3,3%
Total	**803**	**100%**	**167,848**	**100%**