

# **BACKGROUND INFORMATION**

Press Release "UN Under Pressure to Halt Gaming and Abuse of CDM"

#### The Clean Development Mechanism

The United Nations Clean Development Mechanism (CDM) is the world's largest greenhouse gas offsetting programme. Under the programme, offset credits are issued from projects that abate greenhouse gas emissions in developing countries. The credits can be used by governments or companies to fulfil their greenhouse gas reduction commitments. The CDM has two purposes: it should assist developing countries in achieving sustainable development and help industrialised countries to reduce the costs of greenhouse gas abatement. There are currently more than 2000 registered CDM projects in 58 countries. The CDM could generate more than 1 billion credits by the end 2012, worth about 10 to 15 billion EUR. More information on the CDM can be found at: <a href="http://cdm.unfccc.int">http://cdm.unfccc.int</a>

#### Destruction of HFC-23 generates enormous amounts of credits

The destruction of HFC-23 is the most important project type under the CDM. The 19 registered projects are expected to deliver a volume of about 500 million Certified Emission Reduction Units (CERs) up to 2012. While all 2236 currently registered projects are estimated to generate about 1 billion credits by 2012, only 19 registered CDM HFC-23 projects would be accountable for half of the issued credits under current rules.11 out of the 19 HFC-23 reduction projects are located in China, 5 are in India, and South Korea, Argentina and Mexico host each one project.

HFC-23 is a powerful GHG with a Global Warming Potential (GWP) of 11,700 for the first commitment period under the Kyoto Protocol. HFC-23 is an unwanted waste gas from the production of HCFC-22 which is a GHG and ozone depleting substance (ODS) regulated under the Montreal Protocol on Substances that Deplete the Ozone Layer. Hydrochlorofluorocarbons (HCFCs) were introduced as an alternative to the highly ozone-depleting chlorofluorocarbons (CFCs) because of their lower ozone depleting potential. However, they are currently being phased out under the Montreal Protocol and replaced by substances that do not deplete the ozone layer at all. HCFC-22 is mainly used as refrigerant in refrigeration and air conditioning appliances and as a feedstock in the production of polytetrafluoroethylene (PTFE).

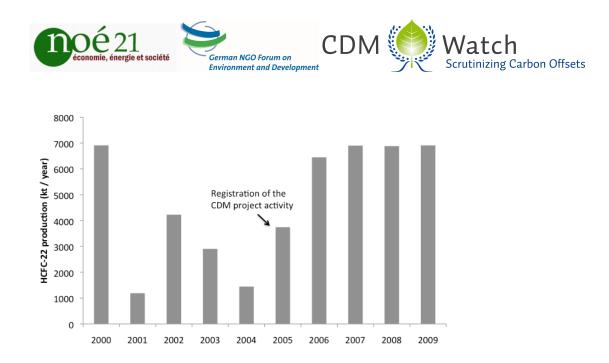
#### Why does the CDM create perverse incentives?

The costs for abating HFC-23 emissions are about US\$ 0.20 per ton of CO2 equivalent and revenues from selling credits exceed the costs for producing the HCFC-22 by several times. The current amount being paid to destroy HFC-23 exceeds the actual cost of destruction by up to 70 times.

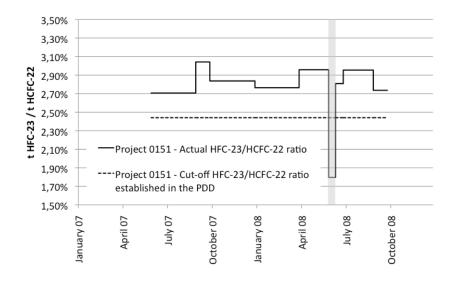
This has created perverse incentives for plant operators to artificially increase HCFC-22 production and the rate at which the waste product HFC-23 is generated. The current methodology for crediting HFC-23 destruction aimed to provide safeguards against such plant manipulation by capping the amount of HCFC-22 production and the waste product rate of HFC-23 that is eligible for crediting to historically observed levels. However, the new evaluation of data on the operation of the plants revealed that these safeguards were not effective in preventing such perverse incentives.

#### Examples of how plant operation changed with the CDM

The figure below shows the HCFC-22 production for the Ulsan project located in South Korea. The figure illustrates that from 2001 to 2005 the plant produced HCFC-22 in the range from about 1000 – 4000 kt/year. When submitting the project for CDM registration, the plant operators declared that they would produce about 4111 kt/yr. However, after the registration of the CDM project in 2005, the annual HCFC-22 production increased to about 7000 kt/year.



The figure below illustrates for the Quimobasicos HFC Recovery and Decomposition Project in Mexico the quantity of the waste by-product HFC-23 generated per HCFC-22 production. The figure shows that the HFC-23/HCFC-22 ratio varied between 2.71 and 3.04 percent except for a short period, marked in grey, during which the plant was not eligible to claim any offset credits. During this period the ratio fell to 1.80 percent and hence significantly less HFC-23 was generated.



#### What are the environmental consequences of the current way of crediting?

While the CDM aims to contribute to achieving global GHG mitigation, the issuance of credits from these projects can actually increase global greenhouse gas emissions. If more HFC-23 is produced as a result of the CDM, the subsequent destruction does not present any real emission reductions. However, the credits issued for this activity allow governments or companies in industrialised countries to increase their emissions above their assigned targets. The exact amount of the environmental damage can not be determined but the data suggests that several millions of credits have been issued which may not present real emission reductions.



### How can these flaws be addressed?

The flaws in the current way of crediting HFC-23 destruction can be addressed by removing the strong economic incentives from the CDM to increase HCFC-22 production and HFC-23 generation. An ambitious emission benchmark for baseline emissions would remove these incentives. CDM Watch submitted a request the Board to revise the methodology accordingly.

The technical panel under the CDM Executive Board will consider the proposal by the end of June. The CDM Executive Board which finally decides on this matter should deal with this issue at its next meeting in Bonn, Germany, from 26-30 July.

### What are the implications of the proposed revision?

The proposed revision would avoid perverse incentives for plant operators to increase HCFC-22 production and HFC-23 generation as a result of the CDM. The proposal would also cut the exaggerate number of credits that are currently issued for the destruction of HFC-23 by more than 90%. The plant operators would still have sufficient economic incentives from the CDM to mitigate the HFC-23; however, the revenues from selling CERs would not exceed anymore the HCFC-22 production costs. In addition, the CDM would in this way contribute to achieving global GHG mitigation because the amount of credits issued would be considerably lower than the amount of HFC-23 destructed. The revision would also reduce the dominance of HFC-23 projects in the offset market and would thereby indirectly promote the development of projects which have higher benefits for sustainable development and which are located less developed countries.

## About CDM Watch

CDM Watch is an initiative of international NGOs and was re-established in April 2009 to provide an independent perspective on CDM projects, methodologies and the work of the CDM Executive Board. The ultimate goal is to help ensure the current CDM as well as a reformed mechanism post-2012 are effectively verified, and to contribute to sustainable development in CDM host countries.

Ends.