# EIA response to call for public inputs on issues to be addressed in the CDM policy dialogue

**16 January 2012**

EIA welcomes this opportunity to provide its views on issues to be addressed in the upcoming CDM policy dialogue. The following submission will explain why EIA believes HFC-23 abatement projects should be removed and the methodology retired from the CDM at the earliest possible opportunity.

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HFC-23 is a by-product of HCFC-22 manufacture. It is one of the most powerful known greenhouse gases with a GWP of 14,800[1] and an atmospheric lifetime of 270 years.[2] Since 2007, several billion euros have been channelled through the CDM for 19 HFC-23 abatement projects - 11 in China, five in India and one each in Argentina, Mexico and South Korea. This enormous financial outlay, borne primarily by the EU and Japan, has been spent to purchase almost half the Certified Emissions Reductions (CERs) ever generated under the CDM.[3]

Although HFC-23 can be destroyed for just €0.17 per CO2-equivalent tonne, when this destruction is commoditized and sold as CERs, it can command as much as €12-€15, or 70-90 times more than it costs to destroy the gas.[4] As a result, the value of HFC-23 credits may exceed that of the primary product (HCFC- 22)[5] since every tonne of HFC-23 that is destroyed generates 11,700 credits (the CDM uses a GWP of 11,700).

EIA has long contended that the Clean Development Mechanism – and carbon markets in general - are an unsuitable vehicle for tackling HFC-23 emissions. It would be of far greater benefit to the climate, and considerably more cost-efficient, to address HFC-23 emissions through the Montreal Protocol, which in the past 25 years has secured emissions reductions amounting to hundreds of gigatonnes of CO2-equivalent.[6]

EIA rejects claims that the CDM Executive Board's recent decision to apply a revised methodology for new crediting periods of HFC-23 abatement projects[7] combined with current depressed CER prices have adequately addressed the perverse incentives contained in the current methodology AM0001. On the contrary, continuing to channel millions of dollars for HFC-23 abatement through the CDM is an expensive distraction which directly undermines the objectives of the Montreal Protocol and continues to provide host countries with an incentive to block progress both on phasing out HCFC-22 consumption and production and on finding a definitive and truly comprehensive solution for addressing fugitive HFC-23 emissions. It is also important to note that

[1] http://www.ipcc.ch/publications_and_data/ar4/wg1/en/ch2s2-10-2.html
[2] Forster, p., et al. (2007), Changes in Atmospheric Constituents and in Radiative forcing, in Climate Change 2007: the Physical Science Basis. Contribution of Working group to the Fourth Assessment Report of the IPCC, pp. 129–234, Cambridge Univ. Press.
[3] To date, HFC-23 abatement projects have generated in excess of 350 million CERs (UNEP Risoe CDM/JI Pipeline Analysis and Database, January 1st 2012)
[4] IPCC/TEAP (2005) Special report on safeguarding the ozone Layer and the Global Climate System: Issues Related to Hydrofluorocarbons and Perfluorocarbons, also TEAP (2009) "Task Force Decision xx/8 Report" data derived from Annex 5 table a5-5), ibid., and TEAP Decision xx/7 Interim Report.
[5] Executive Committee of the MLF. Further Elaboration and Analysis of Issues Pertaining to the Phase-out of HCFC Production Sector. Unep/ozL. pro/exCom/57/61 27 February 2009.
[6] Velders, et al., Proceedings National Academy of Sciences, 104, 4814, 2007; and, total MLF allocations, ref: http:// www.multilateralfund.org
[7] Report of the 65th Meeting of the CDM Executive Board, 21-25 November 2011, Durban, South Africa

the new methodology only applies to projects on renewal of their crediting period. An additional 187 million credits could therefore be issued under the existing, fundamentally flawed, methodology.[8]

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The concept of additionality is fundamental to the environmental integrity of the CDM, all the more so as one tonne of CO2-equivalent reduction from a CDM project enables the emission of one tonne of CO2-equivalent elsewhere. According to the UNFCCC Secretariat, emission reductions under the CDM must be "real, measurable, verifiable and additional to what would have taken place without the project".[9] Because it requires second-guessing future developments, additionality is a notion which is inherently impossible to prove and one which is therefore open to manipulation. For instance, it is frequently argued that HFC-23 abatement projects are among the most additional projects in the CDM, given that there is no alternative initiative in place to destroy HFC-23 emissions. However, based on its long-standing involvement in the Montreal Protocol negotiations, EIA disagrees with this interpretation.

Indeed, it is clear that the considerable revenues accrued by Indian and Chinese HFC-23 projects under the CDM have led these countries to obstruct action on HFC-23 emissions under the Montreal Protocol.[10] Were it not for the prospect of these windfall profits from the CDM, it is possible that Parties would have struck a deal to comprehensively address HFC-23 emissions through an alternative, non-market mechanism under the aegis of the Montreal Protocol. Therefore EIA rejects the asumption that HFC-23 abatement projects are additional. What is more, these projects make no discernible contribution to sustainable development, which alongside additionality is often described as the "second pillar" of the Clean Development Mechanism.

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There are a number of options to ensure HCFC-22 plants continue to capture and destroy HFC-23. These could additionally address the large quantities of HFC-23 being vented into the atmosphere by non-CDM facilities in host countries.[11]

Beyond the non-CDM HCFC-22 plants and production lines in China, virtually all other non-CDM HCFC-22 facilities in the world voluntarily absorb the costs for destroying HFC-23. There is no reason why China and other nations should not implement this standard international industry practice by requiring producers to assume responsibility for HFC-23 destruction. This is certainly reasonable given the vast sums already paid through the CDM and the minimal cost of preventing HFC-23 emissions.

With the exception of Japan, all Kyoto Parties have made it clear that HFC-23 offsets have no place in the future of international carbon markets. With such minimal interest in the development of new

[8] Calculated according to the information provided by IGES CDM Database, November 2011.
[9] http://cdm.unfccc.int/faq/index.html
[10] See, *China's greenhouse gas vent threat in bid to extort billions*, November 8th 2011 http://www.eia-international.org/china-threat-to-vent-super-greenhouse-gases-in-bid-to-extort-billions
[11] In addition to the problems arising from CDM crediting, HFC-23 emissions from non-CDM facilities in China and elsewhere have caused atmospheric concentrations of HFC-23 to more than double since the 1990s. Around 127 million tonnes CO2e (25% of all HFC emissions) are being emitted each year in the form of HFC-23 waste gas, with the vast majority originating from Chinese HCFC-22 plants and production lines not covered by the CDM. (Montzka,et al. (2010), *Recent increases in global HFC- 23 emissions*, Geophys,. Research Lett., 37, L02808, doi:10.1029/2009gL041195; Miller et al. 2010, HFC-23 (CHF3) emission trend response to HCFC-22 (CHICIF2) production and recent HFC-23 emission abatement measures. Atmos. Chem. Phys., 10, 787507890, 2010).

CDM HFC-23 projects or renewal of existing projects, current and ongoing HFC-23 emissions must be addressed outside the CDM. Voluntary capture and destruction by producers, supplemented if need be by incremental funding through the Montreal Protocol, offers a cost-effective solution. HFC-23 is a by-product of an ozone depleting substance being phased out and under direct regulatory control of the Montreal Protocol, and it should therefore be the responsibility of Parties to the Montreal Protocol to address and resolve this issue without delay.