

Industrial gases in CDM: fixing a hole?

by Oscar Reyes
Tuesday, 20 July 2010

The majority of Clean Development Mechanism (CDM) offset credits issued to date are bogus, according to new research on industrial gas destruction projects.

Since its inception, the CDM has enabled power companies in industrialised countries (mainly in the European Union) to avoid reducing their emissions through the purchase of "offsets" mostly generated by producers of potent industrial gases in the global South (mostly based in China, India and South Korea).

A UN panel has now found that the largest share of these credits, which originate from projects claiming to destroy the refrigerant gas HFC-23, are bogus.

In late June, the CDM Methodology Panel issued a report of HFC-23 projects which found that "There is a strong incentive to ... not improve the efficiency of the plant ... during any refurbishment because of the CDM benefits."

The report also found that "it is probable" that newer factories, which are ineligible for offset credits, produce fewer waste greenhouse gases than those registered under the CDM.

This corroborates a recent investigation by the NGOs CDM Watch and Environmental Investigations Agency, which found that factories emitting HFC-23 have ramped up their production to reap profits from selling CDM offsets.

HFC-23 is a by-product of the production of HCFC-22, which is used in refrigeration and air conditioning. Stanford University Professor Michael Wara has calculated that installing the simple technology to capture and destroy HFC-23 in the facilities covered by the CDM would cost \$100 million. These same projects are expected to generate \$4.7 billion CDM credits by 2012.

The counter-productive carbon market approach stands in direct contrast to the approach adopted by industrialised countries to phase out HCFC-22 production domestically. The US and EU, for example, have direct regulations to mandate the phasing out of these gases. This follows the voluntary elimination of HFC-23s by most installations in these regions.

As of June 2010, almost three quarters of the CDM offset credits issued were manufactured by large firms making minor technical adjustments to eliminate the refrigerant gas HFC-23 and nitrous oxide (N₂O, which is mainly produced as a by-product of synthetic fibre production).

Almost 85 per cent of the offset credits surrendered within the EU Emissions Trading System (EU ETS) came from these two gases in 2009. HFC-23 credits alone accounted for 59 per cent.

The issue of HFC production will now be considered by the CDM Executive Board (CDM EB), which meets in Bonn from 26 to 30 July.

However, it is likely that the EB will pass the decision to the next UN Climate Change Conference (COP16) in Cancun in December, where it will be considered in the context of negotiations on a post-2012 climate agreement.

The USA favours including HFCs under the Montreal Protocol (to regulate ozone-depleting gases) in the future. The EU, meanwhile, may consider adopting "equality standards" to restrict the use of HFC-23 and N₂O credits within its EU ETS. This position is being considered as a bargaining chip that might encourage support for its controversial proposals to expand carbon offsetting through the use of "sectoral crediting."

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Further reading

UN CDM Methodology Panel report on HFC projects

CDM Watch and Environmental Investigations Agency, HFC-23 offsets in the context of the EU Emissions Trading Scheme, July 2010

Rob Elsworth and Bryony Worthington, International Offsets and the EU 2009, July 2010

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Michael Wara, A Realistic Policy on International Carbon Offsets, April 2008