

14 November 2011

To: Executive Board of the Clean Development Mechanism (by electronic submission)
P.O. Box 260124
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Germany

Re Public call for inputs on EB 65 Agenda: Meth Panel 53 Report Revision of AM0001

1 Background

1.1 Quimobásicos S.A. de C.V. is a project participant for CDM Project 0151, which applies AM0001. Quimobásicos submits this letter to the EB in accordance with the 'Modalities and Procedures for Direct Communication with Stakeholders' (EB 62, Annex 15), to provide comments on recommendations made at Meth Panel meeting 53 (proposed draft revised methodology for AM0001 (EB 65 AM0001/Version 06.0.0)), for consideration at EB 65.

2 Continued HFC-23 abatement a climate imperative

2.1 To date, the CDM has incentivized HCFC-22 producers to abate large volumes of greenhouse gas emissions that would have otherwise been released into the atmosphere.

2.2 In revising AM0001, Quimobásicos urges the EB to adopt a revision that **continues to incentivise HFC-23 destruction** under the CDM and supports the EB in seeking to maximise emissions reductions made by such projects, provided that this is made commercially viable.

2.3 Quimobásicos is of the view that the currently proposed revision to AM0001 fails to provide a commercially viable incentive for project participants to continue to abate HFC-23 and therefore HFC-23 will simply be vented into the atmosphere.

2.4 If the EB is minded to adopt an amendment to AM0001, Quimobásicos urges the EB to delay such amendment until an alternate option to incentivize HCFC-22 plant operators to abate HFC-23 is in place. The risk of significant volumes of HFC-23 being released into the atmosphere is too great, to simply proceed under the existing proposed revision to AM0001.



3 The Proposed level of w is arbitrary and not scientifically supported

- 3.1 Quimobásicos supports the introduction into AM0001 of a default maximum w that strengthens the incentive to limit the waste HFC-23 produced by a CDM project.
- 3.2 In the Information Note (MP 49 Annex 13) on page 5, the Meth Panel notes in relation to a waste generation rate of 1.0% that "this value corresponds approximately to the lowest reported and verified waste generation rates achieved by plants in developing countries". However, the relevant footnote (footnote 1) notes that "A value of 1.06% was achieved by a CDM plant over the period of **6 months** (from November 2008 to April 2009, ranging on a monthly basis between 0.88% and 1.47%). It is not reported whether the plant operated under normal conditions during that period; if the period incorporated a maintenance period, during which time the plant is shut down and then operates at low levels while plant operation is normalised. Such isolated statistics provide a poor indicator of an average w.
- 3.3 A report commissioned by the UNFCCC Secretariat by Marbury consultants stated that the world's largest facility run by Dupont has a w of 1.4%, even after extensive optimisation. The same report indicated that the default emissions factor for old plants is 4% and for newer facilities, 3%. It is illogical to set w at less than 1.4% for plants that already exist, the report argues, as potential reductions of HFC-23 generated will not be possible by all HCFC-22 manufacturers depending on individual plant design. The technology required for optimisation to achieve a w of 1.4% may not be readily available and/or adaptable to such old facilities. Indeed all 19 CDM plants are old plants and it is unlikely they will all have access to the technology which the world's largest facility (Dupont) (generating more than 10 times the annual volume of HCFC-22 as Quimobásicos) may access.
- 3.4 In the current proposed revision, w is unrelated to the observed actual operations and will be artificially set at 1 or 1.2% that is below the **operational averages** of most, if not all, projects. In addition, the positioning of the maximum default w appears to have been used to unscientifically and arbitrarily resolve other issues identified with the current version of the methodology (such as export issues) that are not directly and measurably related to the default w.
- 3.5 While it may make sense to dictate a w of 3% for new plants, it does not make sense to set w at an aspirational level of 1% for all plants, as this is both arbitrary and unachievable for plants which already exist. In the absence of an achievable w, existing plant owners will not be incentivised to continue to destroy HFC-23.

- 3.6 Quimobásicos, requests the EB to consider thoroughly the different processes by which plants may operate under AM0001 and to tailor the requirements of the revised methodology to both high and low pressure plants, old plants and smaller plants, selecting a level of default w that is based on historic benchmarking and a w that is technically capable being achieved for the relevant technology.
- 4 Why incentivising HFC-23 destruction through the CDM continues to be a significant mitigation opportunity**
- 4.1 HCFC-22 is produced for sale, for two uses: (1) as a refrigerant gas (**Emissive**) and (2) as a feedstock for manufacturing polymers such as Teflon (**Non-Emissive**), which is used to make a growing number of domestic and manufacturing products. The first, more publicized use of HCFC-22 for Emissive purposes, is being phased out under the Montreal Protocol due to the ozone-depleting properties of HCFC-22.
- 4.2 Manufacturing of products using HCFC-22 as a feedstock will continue indefinitely, as the process does not involve the release of HCFC-22 into the atmosphere. Global demand for Non-Emissive HCFC-22 is expected to increase or at least continue at its current rate of production.
- 4.3 While the process of using HCFC-22 for Non-Emissive purposes does not result in the emission of HCFC-22 into the atmosphere, its manufacture still generates waste HFC-23 which, if not eligible for CDM, is likely to be vented.
- 4.4 **Amendments to AM0001 that result in it failing to incentivise the destruction of HFC-23 from Non-Emissive HCFC-22 production would represent a missed opportunity to realise significant mitigation action.**
- 5 The case for the appropriate level of Economic Incentives for decomposition of HFC-23 has not been made**
- 5.1 Quimobásicos notes the economic justification provided by Meth Panel for its approach to setting default w.
- 5.2 Calculation of CER revenues appears to be based on flawed pricing assumptions. Today's HFC-23 CER price (Blended eligible CER price) is a poor indicator of the price for HFC-23 CERs generated after January 2013 which will be ineligible from then onwards for compliance and trading purposes in the EU ETS and will sell at a significant discount to the CER market price and even to the AAU price for which although there is no liquid market, prices have typically been at a significant discount to the CER and EUA price, which may be as little as €3 or less. The current CER Dec13 contract trades at a €0.90 premium to the Dec 12 contract (no guarantee of

post-2012 eligibility), as market participants place a high value on EU ETS eligibility of CERs and therefore the economic value of the soon to be EU ETS ineligible HFC-23 CERs is likely to be significantly lower than the Meth Panel's calculations.

- 5.3 Conclusions of the Meth Panel regarding whether a plant owner would consider an abatement option economically attractive are also based on undisclosed levels of returns, which may not match market practices.
- 5.4 As the price of CERs is one of the key drivers motivating plant owners to abate, Quimobásicos requests further detail on the basis of the Meth Panel's calculations and urges the EB to base its final methodological calculations on actual likely economic scenarios, rather than the meth panel's current assumptions.

6 Project Boundary/Voluntary HFC-23 destruction from ineligible lines

- 6.1 Quimobásicos welcomes the efforts of the Meth Panel to provide an incentive for plant owners to destroy HFC-23 generated by non-eligible HCFC-22 lines by allowing them to claim a 1.2% w in respect of eligible HCFC-22 lines.
- 6.2 However, as per the above, Quimobásicos contends that even a w of 1.2% is not generally achievable. Even if a w of 1.2% were achievable (which it is not), the capital outlay for implementing HFC-23 abatement technology is not sufficiently covered by the incremental increase in w of 0.2% in the CDM eligible line only and therefore represents a missed opportunity to incentivise plant operators to abate HFC-23 on CDM non-eligible lines.

7 HCFC-22: two production process technologies; HFC-23 destruction: two methods

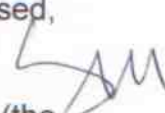
- 7.1 HCFC-22 can be produced using **low pressure** process technology (reaction chamber at twice atmospheric pressure) or **high pressure** process technology (reaction chamber compressed nearly 10 times atmospheric pressure). The higher pressure has the effect of increasing the reaction efficiency. To convert a low pressure operation to high pressure is not simply a matter of operating existing machinery at a higher pressure. The high pressure technology requires a wholly different configuration and brings with it material increase of major accident risk, due to the highly pressurised process. There is a prohibitively high capital expenditure required to completely refit a plant to safely carry out the high-pressure reactions.
- 7.2 On low pressure production lines, it is not actually possible to achieve a 1% w. The major accident risk associated with a high pressure process makes it unsuitable for many locations due to the risk to nearby infrastructure and development. Indeed a

switch to high pressure production lines would not, therefore, be permitted at the Quimobásicos site because this would be a safety concern for the sizeable surrounding residential population.

7.3 As a result, if the EB adopts a maximum default w that cannot be achieved by low pressure processes (which are likely used in most if not all existing CDM plants), such projects are faced with the decision of either compromising safety standards or ceasing to operate as CDM projects.

7.4 Destroying HFC-23 that has been produced as part of the HCFC-22 reaction can be achieved through one of the following methods:

(i) thermal oxidation, which has a destruction efficiency of 99% (meaning that of the HFC-23 produced and then oxidised, 99% is destroyed, so after thermal oxidation, a residual 1% of the HFC-23 produced still escapes into the atmosphere); or

(ii) through plasma arc technology, which has a destruction efficiency of 99.999999% (meaning that of the HFC-23 produced and decomposed, 0.000001% of the HFC-23 produced still escapes into atmosphere). 

7.5 The EB should ensure, when revising AM0001 that it distinguishes between w (the ratio of HFC-23 generated per unit of HCFC-22) and the rate of release of residual HFC-23 following a decomposition process. While a realistic residual HFC-23 release rate is 1% or less, w is generally reported to be between **4% and 3%** on developing country production lines. More generally, we are concerned that the EB and Meth Panel may have relied on data relating to release of residual HFC-23 for the purpose of justifying a w of 1%.

7.6 There appeared to be instances where references to 1% in IPCC/TEAP and other reports are being assumed by the Meth Panel/EB to refer to w , when in fact they refer to the final amount of HFC-23 produced that is emitted to atmosphere after thermal oxidation. This is significant because this confusion adds to the erroneous perception that a waste generation rate of 1% is realistic.

8 Use of average annual HCFC-22

8.1 Quimobásicos questions whether the meth panel's suggested amendment to use an average annual HCFC-22 production as a baseline achieves the aim of incentivising HFC-23 destruction.

8.2 The rationale in the current methodology AM001 v 5.2 of capping the baseline HCFC-22 production at a historic maximum HCFC-22 level is another arbitrary reduction in the recognised emission reductions from the plant that does not reflect actual performance.

9 Export adjustments ambiguity

9.1 The Revised methodology for consideration at EB 65 mentions "annual adjustments for exports ... applied to a report period" (p 10) but does not explain how this adjustment should be calculated; 'exports' is not a listed parameter in the calculation of HCFC-22 production as is the case in other methodologies such as AM0037 which take exports into account in the baseline calculation.

9.2 In particular, we do not understand why as a developing manufacturer exporting to a developing country, we should be penalised for satisfying developed country demand for such products.

9.3 It is also assumed, that the conservative w of 1 or 1.2% already over-compensates for any potential impact of exports, although it is insufficiently clear how 'w' actually takes this into account in a measurable or accurate way.

9.4 Quimobásicos recommends the Executive board in its final consideration of the amends to the Methodology to delete all references to adjustment for exports to avoid confusion and ensure a fair calculation of HCFC-22 production.

10 Conclusion

10.1 As a result of the above points, Quimobásicos, therefore, requests that the **EB scrutinise in greater depth the arguments and data supporting any particular maximum default waste generation rate**, the economic analysis supporting the proposed level of w given recent market developments for each process, type, plant design and age of a production line, before finalising the revision of the methodology. Indeed, Quimobásicos recommends to the EB to consider a **targeted and limited stakeholder consultation on the technical aspects** of the proposed revision.

10.2 Quimobásicos would welcome the opportunity to discuss these technical matters with the EB, MP or Secretariat to support the technical aspects of the revision of AM0001.

Yours sincerely,

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A handwritten signature in black ink, appearing to be "Selozano", written over the contact information.