REPORT OF THE THIRTEENTH MEETING OF THE METHODOLOGIES PANEL

UNFCCC Headquarters, Bonn, Germany 8-10 November 2004

I. RECOMMENDATIONS BY THE METHODOLOGIES PANEL TO THE EXECUTIVE BOARD

A. <u>Consideration of proposed new methodologies</u>

1. The Methodologies Panel (Meth Panel) considered the following proposed new methodologies:

NM0017-rev: Steam System Efficiency Improvements in Refineries in Fushun, China
NM0020-rev: La Vuelta and La Herradura Hydroelectric Project
NM0037-rev: Energy efficiency project by modification of CO ₂ removal system of Ammonia Plant to
reduce steam consumption
NM0038: Methane Gas Capture and Electricity Production at Chisinau Wastewater Treatment Plant,
Moldova
NM0040: Replacement of Fossil Fuel by Palm Kernel Shell Biomass in the production of Portland
Cement
NM0045-rev: Birla Corporation Limited: CDM project for "Optimal Utilization of Clinker and
Conversion Factor Improvement
NM0050: Ratchasima Small Power Producer (SPP) Expansion Project
NM0051: PCH Passo do Meio
NM0053: Lihir Geothermal Power Project
NM0054: Sibimbe Hydroelectric Project
NM0057: PFC Emission reductions through installation of point break feeders (PBF) in horizontal stud
Soderberg (HSS) cells in aluminium plants.
NM0058: Energy Efficiency Improvements-Hou Ma District Heating Shanxi Province, China.
NM0059: Optimization and Co-Generation of Energy from Steel Making Process - energy copgeneration
from steel making gas recovery .
NM0060: Dan Chang Bio-Energy Cogeneration project (DCBC).
NM0061: N ₂ O Emission Reduction in Onsan, South Korea.
NM0062: APCL Electricity Generation Project With Cleaner fuel.
NM0063: Organic Green Waste Composting
NM0064: Optimization and Co-Generation of Energy from Steel Making Process - electric energy consumption reduction in steel making process

2. After considering the proposed new methodologies as well as desk reviews, public inputs received, the Meth Panel:

(a) Agreed on the final recommendations on proposals (NM0017-rev, NM0020-rev, NM0037-rev, NM0038, NM0050, NM0051, NM0053, NM0058, NM0059, NM0060, NM0063 and NM0064) for the consideration of the Executive Board at its seventeenth meeting. Final recommendations will be made available in the UNFCCC CDM web site: <u>http://cdm.unfccc.int/methodologies/process</u>. In particular the Meth Panel:

- (i) Recommended the approval of proposals NM0017-rev, NM0037-rev, NM0038 and NM0053;
- (ii) Recommended the revision of proposal NM0020-rev and NM0050;

(iii) Recommend not to approve NM0051, NM0058, NM0059, NM0060, NM0063 and NM0064.

(b) Agreed on the preliminary recommendations on proposals NM0040, NM0045-rev, NM0057 and NM0061. In accordance with the procedures for submission and consideration of a proposed new methodology, project participants would have the opportunity to provide technical clarifications on these preliminary recommendations. Preliminary recommendations for which project participants do not provide any clarification within the ten-day consultation period will be made available in the UNFCCC CDM web site: <u>http://cdm.unfccc.int/methodologies/process</u>.

3. The Meth Panel decided to further consider the proposals NM0054 and NM0062 at its next meeting due to turnover of a Panel Member.

B. <u>"Indicative simplified baseline and monitoring methodologies for selected small-scale CDM</u> project activity categories"

4. The Meth Panel agreed to appoint Mr. Felix Dayo and Mr. Daniel Perczyk as representatives of the Meth Panel in the working group to assist the Executive Board in reviewing proposed methodologies and project categories for small-scale CDM project activities (SSC WG).

5. The Meth Panel took note that the working group on afforestation and reforestation project activities (AR WG) shall consider at its next meeting the issue of use of biomass from non-sustainable sources as applicable category of small-scale project activity/CDM project activities and report back to the Meth Panel.

C. <u>Use of the tool to assess and determine additionality</u>

6. The additionality tool serves largely to establish whether or not the project is part of the baseline scenario. It does not necessarily, however, provide a complete tool for establishing what the most likely baseline scenario is. For example, the project could be established as additional by showing the presence of significant barriers or that it is not economically attractive relative to a benchmark (and other steps). The next methodological step, after application of the additionality tool, should then be to establish, from a number of plausible alternative scenarios, which is the most likely baseline. These alternatives may be defined, for instance, in Step 1 of the additionality tool. As a result, methodologies using the additionality tool should be careful to complement the use of the tool with a complete baseline scenario assessment approach.

D. <u>Revision of AM0001</u>

7. Due to considerations described below for new HCFC22 capacity, AM0001 should be modified to apply only to existing HCFC22 production capacity. Any increase in HCFC22 production capacity at an existing production site should also be treated as a new capacity.

8. Existing production sites are defined as HCFC22 production facilities with at least 3 years of operating history by end of 2003. (The purpose here is to ensure that historical data are largely unaffected by any CDM-related incentives to increase the baseline.)

9. Existing production capacity at these facilities (in tonnes HCFC22) is defined as the maximum (annual) production during the last 3 years, including CFC production at swing plants adjusted appropriately to account for the different production rates of HCFC22 and CFCs.

10. For existing production capacity, HFC23 incineration projects can use AM0001, subject to the following modifications:

(a) The historical annual emission rate (HFC23/HCFC22) should be estimated for the three most recent years of operation up to 2003. Use direct measurement of HFC23 release where data available. Otherwise use mass balance or other methods based on actual data.

(b) Quantify uncertainty in emission rate estimates, and use conservative emission rate estimates when calculating expected emission reductions.

(c) The baseline emission rate (w in AM0001) should be the lowest of the three annual values, not to exceed [2%, the global average emission rate for HFC23 relative to HCFC produced, which is also the low end of the default emission rate in the IPCC GPG] [3%, 4 % IPCC default rate considering uncertainty] (instead of 4% in current AM0001).

(d) If actual estimates are unavailable, then the default value of the lowest available best practices can be used for w (currently reported as 1.37%).

11. The Meth Panel believes the CDM may not be the best instrument to support HFC23 destruction from new HCFC22 production capacity. The Meth Panel believes that the Global Environment Facility or another instrument, by paying the incremental cost of HFC 23 destruction, could avoid a host of problematic concerns, including the potential acceleration of a shift in HCFC22 production from Annex 1 to non-Annex 1 Parties (with the possibility of no net GHG benefit), downward pressure on HCFC22 prices and the possibility of increased HCFC22 use (and its uncertain impacts on overall GHG emissions), the possibility of producing HCFC22 predominantly for CERs, or perverse incentives to "maximize" (not optimize) HFC23 production ratios.

12. If new methodologies are submitted for new HFC23 incineration projects they should address the following:

(a) *NAI-AI Market shift:* Methodologies for new HCFC22 capacity should address the potential for an acceleration in the shift in production from Annex 1 to non-Annex 1 Parties, due to strong downward pressure on HCFC22 prices from new non-Annex 1 production facilities with low net costs of production (due to the CERs from HFC23 incineration). This suggests that the baseline may be, in part, Annex 1 production. Displacing Annex 1 HCFC22 production with non-Annex 1 HCFC22 production would not necessarily yield any net greenhouse emission reductions. To the extent that Annex 1 HFC23 emissions may decline, as a result, fewer emissions reductions in other sectors will be required to meet Annex 1 emission targets. Methodologies will need to address this issue. It may be possible to do so by providing the tools to quantify the extent to which new production meets growing non-Annex 1 HCFC22 demands versus displacing existing Annex 1 HCFC22 production. Alternatively, a default discount factor could be developed based on a well-reasoned approach.

(b) *Possibility of increased HCFC22 use, changes in refrigerant choice:* As a result of possible downward pressure on HCFC22 prices, there may be changes in the production, use, and emissions of Kyoto and non-Kyoto greenhouse gases, including Montreal Protocol gases. The direction and magnitude of these impacts is unclear given many market complexities, such as the wide mix and evolution of refrigerants and cooling technologies, and manufacturing practices. Significant technical input would be required to clarify the overall impact of methodologies for HFC23 incineration activities in new HCFC22 capacity on GHG emissions. In addition, the Board and/or COP/MOP may need to consider whether and how to address non-Kyoto greenhouse gases and interactions with the Montreal Protocol.

(c) *Producing HCFC22 largely to gain credits:* Effective provisions should be made to ensure that HCFC22 is not largely produced to gain credits for HFC23 incineration. For example,

illustrative calculations suggest that at a CER price of \$10/tCO2equ, a levelized cost of HFC23 incineration of \$1/tCO2equ, a GWP of 11,700 for HFC23, and a baseline HFC23 emission rate of 2%, the value of CERs would be about \$2100 for every ton of HCFC22 produced. Current prices of HCFC22 range between \$1100 and \$2400 per ton. In addition, the Board and/or COP/MOP may need to consider whether and how to address non-Kyoto greenhouse gases and interactions with the Montreal Protocol.

(d) *Disincentives to optimize HCFC22 production processes:* HCFC22 producers have several options to optimize production processes to minimize HFC23/HCFC22 production ratios. Methodologies for new production capacity should avoid any disincentives for this optimization, and moreover, should avoid any incentives to generate more HFC23 than they would have in the absence of the CDM.

E. Proposal for revision of approved methodologies

13. *ACM0002:* Following the argument of section C (Use of the tool to assess and determine additionality) above, in the case of ACM0002, the only baseline scenario currently offered is that electricity would otherwise be provided from a mix of current and new grid-based electricity generation sources. Consequently in the section on baseline the following text should be added: "Which of the plausible alternatives scenarios, as listed in Step 1 of the additionality text, is the most likely baseline scenario? Please provide thorough explanation to justify your choice, based on the factors (investment or other barriers) described in the additionality methodology. (If the only plausible baseline scenario is electricity from other grid sources, then this step can be skipped.)"

14. The Meth Panel commends the developers of NM0051 for coming up with a straightforward methodology for estimating the operating margin in hydro-dominated grids, and recommends that this methodology be included as an option in the consolidated electricity methodology (ACM0002).

F. Inconsistencies in the treatment of hydro power across approved methodologies

15. Currently the applicability conditions of different methodologies regarding the treatment of hydro power differ. For instance while methodology AM0005 "Baseline and monitoring methodologies for small grid-connected zero-emissions renewable electricity generation" is applicable to any hydro power plant, methodology ACM0002 "applies only to run-of-river hydro power plants and hydro power projects with existing reservoirs where the volume of the reservoir is unchanged".

G. <u>Clarification on AM0016:</u>

16. In order to make the reference to IPCC clear the text in formula 2 of the the approved methodology AM0016 should further clarify that:

* ash content of the manure is relative to the dry matter of the manure and not to the total matter (including moisture) – is indicated in the IPCC,

* the figure of 18.45 MJ/kg for the feed should read 18.45 MJ/kg DM.

H. Process for pre-screening proposed new methodologies

17. The Meth Panel agreed on revised criteria, as contained in annex 1 to this report, to be used in the screening process to assess proposed new methodologies in accordance with paragraph 6 of the procedures for submission and consideration of proposed new methodologies (version 06).

18. Taking into consideration the outcomes from the "Second Joint Workshop of the CDM Executive Board and its Panels and Experts", the Meth Panel recommends that the Board set up a process to pre-screen methodologies. An effective pre-screening process would:

(a) Improve the quality of methods reviewed by the Meth Panel and review experts (the Meth Panel notes that several recently-submitted methodologies do not reflect recent guidance by the Board, and so require substantial revision);

- (b) Speed up the current assessment process, which can currently take many months;
- (c) Reduce the cost to the Board of reviewing methodologies.

19. This process could be achieved by modifying the current pre-assessment procedures to allow the quality check to be done with the project participants, prior to full review by the Meth Panel and experts. A quality check would mean that a proposed new methodology could be returned to project participants, revised and re-submitted to the Board in the same round.

20. Currently the Meth panel does the first quality check of methodologies. The Meth Panel believes however that an initial quality check should be undertaken by DOEs before forwarding to the Board and its Meth Panel for review. This would significantly increase the efficiency of the Meth Panel work.

I. <u>Renewal of crediting period</u>

21. In response to the request by the Board, the Meth Panel started considering the procedures and documentation which need to be used for the renewal of a crediting period with a view to prepare a recommendation at its fourteenth meeting.

J. Deadline for next round of submissions of proposed new methodologies

22. The Meth Panel recommends to the Board that the deadline for the next round of submissions is set for 15 March 2005.
