REPORT OF THE TWENTY-EIGHTH MEETING OF THE METHODOLOGIES PANEL

UNFCCC Headquarters, Bonn, Germany

9 - 13 July 2007

RECOMMENDATIONS BY THE METHODOLOGIES PANEL TO THE EXECUTIVE BOARD

A. Opening of the meeting and adoption of agenda

1. The Chair of the Methodologies Panel (Meth Panel), Mr. Akihiro Kuroki opened the meeting.

2. The agenda was adopted as proposed.

B. Consideration of proposed new methodologies

3. The Meth Panel considered the proposed new methodologies for the cases mentioned in the table below, as well as desk reviews and public inputs received, where applicable.

4. The final recommendations, proposed by the Meth Panel for the consideration by the Executive Board, are made available on the UNFCCC CDM website at http://cdm.unfccc.int/goto/MPpropmeth.

5. In accordance with the procedures for submission and consideration of a proposed new methodology, project participants may submit, via the DOE, technical clarifications to preliminary recommendations. Preliminary recommendations for which project participants have not provided any clarifications within the (4) week consultation period shall be considered as final recommendations, and will be forwarded to the Executive Board for consideration and made available on the UNFCCC CDM website.

6. The Meth Panel agreed on the following recommendations:

Cases	MP 28[1] recommendation
NM0181-rev: Introduction of a new primary district heating system - Houma District Heating project, Shanxi Province, P.R.C.	**Preliminary recommendation**
NM0192-rev: Recovery and utilization of flare waste gases at the Industrial Complex of La Plata Project, as contained in annex 1	**A**
NM0194-rev: Green House Gas (GHG) emission reduction by manufacturing of natural surfactant Alpha Olefin Sulphonate - AOS	**C**
NM0197-rev: India – Accelerated Chiller Replacement Program	**Work in Progress**[2] (see paragraph 7)

[1] Recommendations to the proposed new methodologies from the twenty-eighth meeting of the Meth Panel, where A (recommended for approval), B (recommended for revision) and C (recommended for non-approval) are final recommendations to the Board.

Cases	MP 28[1] recommendation
NM0202-rev: AzDRES Power Plant Energy Efficiency and change in fuel mix	**Work in Progress**
NM0209: Reduction in GHGs emission from primary aluminium smelter at Hindalco, Hirakud India	**B**
NM0211: Boiler replacement project at the Clinical Centre in Skopje, Macedonia, as contained in annex 2	**A**
NM0212: SF_6 Switch at Dead Sea Magnesium	**Preliminary recommendation**
NM0215: Huaneng Yuhuan Ultra-supercritical Coal-fired Power Project, as contained in annex 11	**A** (consolidated with NM0217, see paragraph 15 and 16)
NM0216: Improved electrical energy efficiency by open slag bath operations in ferroalloy production (Highveld Vanadium-Iron Smelter Energy Efficiency Project).	**B**
NM0217: North Karanpura greenfield supercritical coal-fired power project, India, as contained in annex 11	**A** (consolidated with NM0215, see paragraph 15 and 16)
NM0220: Avoided emissions from biomass wastes through use as feed stock in pulp and paper production, Kunak,Sabah, as contained in annex 3	**A**
NM0222: Conversion of SF_6 to the Alternative Cover Gas SO_2 in Magnesium Production in China	**Preliminary recommendation**

7. The panel discussed the case NM0197-rev (India - Accelerated Chiller Replacement Program) and agreed to the following, before concluding its recommendation:

(i) obtain expert advice on the procedures to establish the baseline power-output function for chillers that would have been used in the absence of the project activity. The panel noted that the current proposal prepared by the project proponents may not fully reflect the impact of ambient conditions, in establishing the power-output function. The panel had proposed a procedure that, it is of the view, captures the above mentioned aspect, in its previous recommendation, but this was not reflected in the revised submission.

(ii) seek guidance from the Board on the principle that should be applied to the consideration of refrigerant gases covered under the Montreal protocol, which are also greenhouse

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[2] Work in progress implies that the deliberations on these methodologies could not be concluded at the twenty-eighth meeting of the Meth Panel. These cases will be further considered before providing a recommendation to the Board.

gases, for the purposes of calculating baseline, project and leakage emissions (see paragraph 18 in the general guidance section below).

C. Clarifications and requests for revisions of approved methodologies

The Meth Panel considered the following requests for clarifications and requests for revisions related to the application of approved baseline and monitoring methodologies. The requests submitted and the recommendations provided by the Meth Panel are made publicly available on the UNFCCC CDM web site at http://cdm.unfccc.int/goto/MPclar and http://cdm.unfccc.int/goto/MPrev, respectively. The requests for revisions that resulted in a recommendation by the Meth Panel to revise an approved methodology are reflected in section D below.

Clarification number	Approved Methodology	Title of the request for clarification	MP 28 recommendation.
AM_CLA_0047	Tool to determine project emissions from flaring gases containing methane	"Temperature of the exhaust gases at the sampling point inside the flare"	**Clarified**
AM_CLA_0048	AM0036 ver. 01.1	"Applicability to projects with production and power capacity expansions in the project boundary but independent of the CDM project, i.e., not as a result of the CDM project"	**Clarified**
AM_CLA_0049	ACM0002 ver. 05	"Calculation of power density"	**Clarified**

Revision number	Approved Methodology	Title of the request for revision	MP 28 recommendation.
AM_REV_0049	AM0047 ver. 01	"Amendment to include Production of bio-diesel based on waste oils and fats based on biogenic origin other than waste cooling oil"	**Revise**
AM_REV_0050	AM0037 ver. 01.1	"Flare reduction and gas utilization at oil and gas processing facilities"	**Not to revise**
AM_REV_0051	AM0014 ver. 03	"To include the project that displaces fossil fuel based systems in the baseline generating electricity/ power other than the grid power"	**Revise**
AM_REV_0052	AM0036 ver. 01.1	"Replacement of coal with EFBs (Empty Fruit Bunches) and other available biomass like palm shell etc.	**Not to revise**

		in power boilers at Riau Andalan Pulp and Paper"	
AM_REV_0053	AM0033 ver. 03	"Cement production lines involving switching a part or all of the raw material used for clinker production to calcium carbide residue, a non-carbonated calcium source"	**Revise**
AM_REV_0054	ACM0003 ver. 04	"Extended applicability of methodology ACM0003 to include partial substitution of fossil fuels with less carbon intensive fossil fuels in cement manufacture"	**Revise**

D. Revision of approved methodologies

8. **AM0014:** The Meth Panel recommended a revision of the approved methodology AM0014 in response to request for revision AM_REV_0051, as contained in annex 4. The draft revised methodology expands the applicability to project activities that displaces electricity and heat generated from more carbon intensive fossil fuel based separate energy generation systems in the baseline with natural gas based cogeneration. Presently the approved methodology is only applicable where the electricity in the baseline was purchased from the grid. The panel also clarified that the methodology is applicable only if the baseline is heat and electricity generated from separate energy generation system and not cogeneration.

9. **AM0033:** The Meth Panel recommended a revision of the approved methodology AM0033 in response to request for revision AM_REV_0053, as contained in annex 5. The draft revised methodology expands the applicability to project activities that switch part or all of the raw material used for clinker production to calcium carbide residue (CCR), a non-carbonated calcium source.

10. **AM0047:** The Meth Panel recommended a revision of the approved methodology AM0047 in response to request for revision AM_REV_0049, as contained in annex 6. The draft revised methodology expands the applicability to project activities that use surplus fats from biogenic origin, such as animal fat residues, to produce biofuels.

11. **AM0025**: The panel recommended a revision of the approved methodology to correct an oversight. The avoidance of methane from anaerobic decay of biomass should only be credited for that fraction of biomass, which is identified as being surplus and thus would have been dumped causing methane emissions. The draft revised approved methodology is contained in annex 7.

12. **AM0036**: The panel recommended a revision of the approved methodology to correct an oversight. The avoidance of methane from anaerobic decay of biomass should only be credited for that fraction of biomass, which is identified as being surplus and thus would have been dumped causing methane emissions. The draft revised approved methodology is contained in annex 8.

13. **ACM0003:** The Meth Panel recommended a revision of the approved consolidated methodology ACM0003, as contained in annex 9. The draft revision is aimed at:

(i) Broadening of the applicability, in response to request for revision AM_REV_0054, to project activities that use less carbon intensive fossil fuels in cement production than that used in the baseline. The methodology is applicable to project activities that switch to the use of natural gas (low carbon intensive fuel), where significant investment is required to undertake the fuel switch.

(ii) Broadening of the applicability to project activities that use renewable biomass from dedicated plantations as an alternative fuel ;

(iii) Improvement in the clarity and consistency, in particular with respect to the monitoring of the applicability conditions, consistent with ACM0006, AM0036 and other approved methodologies;

(iv) The use of approved tools to make it consistent with recently approved methodologies;

(v) Simplifying the methodology by neglecting very minor emission sources; and

(vi) Modifying the equation for baseline methane emissions from avoided dumping of biomass residue to reflect the situation where only a part of the biomass residue available is in surplus and, therefore, would result in dumping leading to methane emissions.

14. **ACM0006:** The Meth Panel recommended a revision of the approved consolidated methodology ACM0006 in response to the request for revision AM_REV_0047, which was approved for revision by the Board at its thirty-second meeting. The scope of the methodology has been broadened by introducing a new scenario for project activities that install a new cogeneration facility using biomass. Further, the revision to the draft methodology includes a modification of the equation for baseline methane emissions from avoided dumping of biomass residue to reflect the situation where only a part of the biomass residue available is in surplus and therefore, would result in dumping leading to methane emissions. The revised version of the methodology is contained in annex 10.

E. Consolidated methodologies

15. The Meth Panel considered the issues raised by the Board (see paragraph 17(d) of the meeting report of the thirty-second meeting of the Board) on the draft "Consolidated baseline and monitoring methodology for new grid connected fossil fuel fired power plants using a less GHG intensive technology" based on the cases NM0215 and NM0217. The panel revised the draft (annex 11), to address the issues raised by the Board, as follows:

(i) The baseline scenario identification procedure was revised to incorporate a requirement that if the common practice in the region is different from the identified baseline power plant, the project participants shall explain why the identified baseline power plant is reasonable.

(ii) The benchmark efficiency shall be established based on a sample group covering the top 20% performing power plants that use the same fuel as that used in the project plant and the sample shall represent all technologies available in the region or country where the project activity is located. Further, the panel agreed that such a sample group should include relevant registered CDM projects as well. The power plant is defined in the methodology as a unit for generation of power.

(iii) Redefined the geographic area to allow for the option of defining a geographic area as electricity grid, to which the project power plant will be connected, as the default for the construction of a sample group.

16. The panel also requested the Board to provide guidance on whether additionality, in the draft consolidated methodology based on NM0215 and NM0217, should be demonstrated through:

(i) investment analysis; or

(ii) all the options available in the Tool for the demonstration and assessment of additionality.

F. Recommendation on General guidance

17. The panel noted that in project activities that claim emission reductions from the consumption of materials that can be considered as a co-product of a production process and are traded on the market, the issue of upstream emissions may need to be addressed in a different manner than the way it is addressed in case of residues that are available in surplus and that would have been disposed of. In case of co-products that are traded on market the key issues are: (i) the possible source of upstream emission that may occur due to increased production of the inputs used to produce co-products, or due to displacement of other uses of the co-product due to its use in the project activity, (ii) and how the upstream emissions can be allocated among these co-products. The panel agreed to further discuss the issue with a view to recommend draft guidance.

18. In the context of proposed new methodology NM0197-rev (India – Accelerated Chiller Replacement Program), the panel identified that further guidance is required to account for gases covered under the Montreal protocol, which are also greenhouse gases, in project activities that use such gases, as is included in annex 12. The CDM Modalities and Procedures state that gases listed in Annex A of the Kyoto Protocol shall be taken into account as sources of GHG emissions in the baseline, but do not specify whether only Annex A gases should be considered for accounting emissions from the project activity and leakage. In cases where project activities substitute the use of non-Annex A GHG use in the baseline with GHGs, which also have implications for ozone depletion, then accounting for only Annex A gases in the project emissions may provide an incentive to use non-Annex A gases in the project activity, which may have an adverse impact on the environment. The panel, therefore, requests guidance from the Board on which of the following approaches should be used for methodologies in the context of above issue:

Option (a) Only greenhouse gases included in Annex A of the Kyoto Protocol, with GWPs specified in the IPCC Second Assessment Report, should be considered as project emissions or leakage emissions.

Option (b) Greenhouse gases, as defined in paragraph 1 of the Convention, but not included in Annex A of the Kyoto Protocol, should be considered as project emissions and leakage

emissions if a CDM project activity results in an increase of such emissions. In this regard the Board is also requested to clarify whether Global Warming Potentials (GWPs) from other sources could be used for these greenhouse gases (e.g. GWPs as provided in the Fourth Assessment Report by the IPCC).

Option (c) Greenhouse gas emissions from refrigerants are neglected in the project and baseline situation, as long as the total GWP of the refrigerant gases (including upstream refrigerant component) used in the project scenario is lower than those used in the baseline scenario.

Option (d) The applicability of the methodology is limited to project activities that do not use gases controlled under the Montreal Protocol. This implies that HFCs, CO_2 and non-GWP gases (e.g. hydrocarbons) may be used but that HCFCs may not be used in the project activity.

19. The Meth Panel noted in a number of approved methodologies that upstream emissions affected by the project activity are accounted for. Furthermore, the Board at its twenty-fifth meeting provided guidance that biomass energy projects should account for upstream emissions associated with the production of biomass. The panel, taking into account the guidance provided in paragraph 51 of the CDM Modalities and Procedures on leakage and guidance by the Board at its twenty-second meeting (see Annex 2 of the Board's twenty-second meeting report) to include in a conservative manner emissions sources in the calculation of leakage emissions that are larger in the project than in the baseline scenario, recommended the following draft guidance on the consideration of upstream emissions in the calculation of emission reductions from CDM project activities:

(i) Upstream emissions should be included in the emission reduction calculation if the following three criteria are met:

a. the implementation of the project activity affects the level of upstream emissions, defined as the increase in emissions associated with the project activity where a clear causality can be established;

b. the upstream emissions are significant vis-à-vis the total project activity emissions; and

c. the upstream emissions in the baseline scenario are significantly lower than in the project activity.

(ii) The Meth Panel also agreed to undertake the development of tools to estimate upstream emissions for standard situations (e.g. for project activities involving a fossil fuel switch as e.g. in ACM0009). The panel also requested the guidance be included in the "technical guidelines for completing CDM-NM", if approved by the Board.

20. The Meth Panel noted that in some submissions and requests for revision/clarification empty fruit bunches (EFB) from palm oil have been compared with food waste for the purpose of estimating methane emissions using the "tool to determine methane emissions avoided from dumping waste at a solid waste disposal site", if the EFBs were to be disposed of in a landfill. The panel agreed to highlight that the characteristics of the EFB are similar to wood in terms of cellulose, hemi-cellulose, and lignin content and, therefore, the parameters for the FOD model used should reflect the composition of the EFB.

21. The panel agreed to seek guidance from the Board regarding a case, which was submitted during the nineteenth round and is being pre-assessed by the panel. The submitted methodology is for a case where the entity implementing the programmes shall through the project activity create infrastructure (e.g. testing labs, creation of an enforcement agency) or capacity to enforce the policy or standard. The panel seeks guidance whether such activities are eligible under the CDM.

G. Interaction with DOEs

22. The Meth Panel held a teleconference call with representatives of DOEs SGS, TUEV SUED, TUEV Rhineland, and DNV on 11 July 2007, where discussions took place facilitating further cooperation between the DOEs and the Meth Panel. The Doe requested a number of clarification on the applicability of specific methodologies. The DOEs present were informed that the proper procedures should be used methodology specific clarifications. The panel felt that DOEs would like to have a confidential clarification procedure to enable them undertake their work.

H. Schedule of meetings and rounds of submissions of proposed new methodologies

23. The Meth Panel confirmed that its twenty-ninth meeting will be held from 24 to 28 September 2007.

24. The Meth Panel reminded project participants that the deadline for the twentieth round of submissions of proposed new methodologies is to be 3 September 2007. The Meth Panel also reminded project participants that baseline and monitoring methodologies can be submitted at any time prior to this deadline.

25. The Meth Panel also reminded the project participants that the deadline for consideration of request for revision and request for clarification at the twenty-ninth meeting to be held from 24 to 28 September 2007 shall be 10 August 2007, 17:00 GMT.

External Annexes to the twenty-eighth meeting of the Meth Panel

Annex 1 - Draft reformatted baseline and monitoring methodology based on NM0192-rev

Annex 2 - Draft reformatted baseline and monitoring methodology based on NM0211

Annex 3 - Draft reformatted baseline and monitoring methodology based on NM0220

Annex 4 - Draft revision of AM0014

Annex 5 - Draft revision of AM0033

Annex 6 - Draft revision to AM0047

Annex 7 - Draft revision of AM0025

Annex 8 - Draft revision of AM0036

Annex 9 - Draft revision to ACM0003

Annex 10 - Draft revision to ACM0006

Annex 11 - Revised draft "consolidated baseline and monitoring methodology for new grid connected fossil fuel fired power plants using a less GHG intensive technology" based on NM0215 and NM0217

Annex 12 - Analysis and guidance on consideration of greenhouse gases not included in Annex A of the Kyoto Protocol

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