REPORT OF THE THIRTIETH MEETING OF
THE METHODOLOGIES PANEL

UNFCCC Headquarters, Bonn, Germany
12 - 16 November 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.

3. The Meth Panel expressed its deep appreciation of the contributions of the outgoing member Mr. Christophe de Gouvello, who has been a member of the panel since inception, for his dedication and immense contribution to its work. The panel also expressed its deep appreciation of the contributions of the outgoing member Mr. Vijay Kumar Mediratta for his dedication and contribution to its work over the last one and half years. The Meth Panel also welcomed the new member Ms. Ciska Terblanche, who was appointed by the Board at its thirty-fourth meeting.

B. Consideration of proposed new methodologies

4. 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.

5. 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.

6. 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.

7. The Meth Panel agreed on the following recommendations:

Cases	MP 30[1] recommendation
NM0197-rev: India – Accelerated Chiller Replacement Program, as contained in annex 1.	**A**
NM0202-rev: AzDRES Power Plant Energy Efficiency and change in fuel mix, as contained in annex 2.	**A**

[1] Recommendations to the proposed new methodologies from the thirtieth meeting of the Meth Panel, where A (recommended for approval), Preliminary Recommendation (technical clarification requested by panel) and C (recommended for non-approval) are final recommendations to the Board.

Cases	MP 30[1] recommendation
NM0203-rev: Energy efficiency improvements of Pucheng Power Plant through retrofitting turbines in China, as contained in annex 3.	**A**
NM0212: SF_6 Switch at Dead Sea Magnesium, as contained in annex 4.	**A (integrated with NM0222, see paragraph 8)**
NM0216: Improved electrical energy efficiency by open slag bath operations in ferroalloy production (Highveld Vanadium-Iron Smelter Energy Efficiency Project*).*	**C**
NM0222: Conversion of SF_6 to the Alternative Cover Gas SO_2 in Magnesium Production in China, as contained in annex 4.	**A** (integrated with NM0212, see paragraph 8,9 and 10)
NM0225: "Replacement of OPC with cementitious material in the production of concrete at Ready Mix Concrete (RMC) plants."	**C**
NM0227: Recovery of vented gas at the «Guneshli» oil field in Azerbaijan, as contained in annex 5.	**A** (included in AM0009, see paragraph 12)
NM0228: AGRENCO Biodiesel Project in Alto Araguaia, as contained in annex 6.	**A** (integrated with AM0047, see paragraph 23)
NM0229: Metrobus Insurgentes, Mexico City	**C**
NM0230: Recovery and Utilization of CO_2 from Refinery Tail Gas, as contained in annex 7.	**A**
NM0231: Waste heat utilization for charge pre-heating in sponge iron manufacturing process at HKMPL, India, as contained in annex 8.	**A**
NM0232: Use of coke oven gas for production of dimethyl ether in Luliang Fenyang City, Shanxi Province, China.	**C**
NM0233: Palm Methyl Ester – Biodiesel Fuel (PME-BDF) production and use for transportation in Thailand, as contained in annex 6.	**A** (integrated with AM0047, see paragraph 23)
NM0234: Kyrgyz Republic natural gas transmission line modernization project	**C**
NM0235: Manufacturing of energy efficient domestic refrigerators	**Preliminary Recommendation**
NM0236: Methodology for mine methane capture and destruction in underground, hard rock, precious and base metal mines, as contained in annex 9.	**A**
NM0237: EDSA Bus Dispatch System, Manila, Philippines	**C**
NM0238: Point of use Abatement Device to Reduce SF_6 Emissions in LCD Manufacturing Operations	**Preliminary Recommendation**
NM0239: Environmental passive mitigation through the management of the swine manure by a Regional Sanitation Plant in the Santa Catarina State, Brazil	**Preliminary Recommendation**

Cases	MP 30[1] recommendation
NM0240: Second Interconnection Colombia - Ecuador 230 kV	**C**
NM0241: Pak American Gas Cogeneration project	**Preliminary Recommendation**
NM0242: Methane Leak Reduction From Natural Gas Pipelines in Georgia	**Preliminary Recommendation**
NM0243: Installation of amorphous transformers in Shandong power distribtion grid	**Preliminary Recommendation**

8. The panel requested the Board to note that for the draft recommended methodology "Replacement of SF_6 with alternate cover gas in the magnesium industry", which is based on case NM0222 for project activities that substitute SF_6 as a cover gas in the production of magnesium, the panel has provided a conservative default destruction factor for SF_6 for estimating the baseline emissions of SF_6. The SF_6 cover gas is partially destroyed in the process of its use. The IPCC 2006 guidelines and existing literature indicate that the destruction can range from 10 - 34%, with indications of destruction up to 47%. The project participants also provided a proposal for undertaking measurements on-site to estimate the destruction factor, but due to changing the inflow concentration of $SF_{6\,a}$ high variability of the destruction factor, as shown by experimental data that can be attributed to changing the inflow concentration of SF_6, there is the possibility to may result in an overestimation of the baseline emissions. The flow and concentration of the SF_6 is difficult to control in the experiment proposed by project participants.

9. The panel also requested the Board for guidance on whether the draft recommended methodology "Replacement of SF_6 with alternate cover gas in the magnesium industry" should be applicable to project activities that use NOVEC-612 as a cover gas to replace the use of SF_6. The panel in considering the case NM0222 and noted that NOVEC-612, which is proposed as one of alternative cover gases for replacement of SF_6, does not have an officially accepted GWP value, but is 1 as per the literature. Whereas, the weighted average GWP of gases generated, based on officially accepted values of their GWP, from the destruction of NOVEC-612 is of the order of 3000. The panel therefore recommended that NOVEC-612 be allowed as a possible alternative to SF_6 as a cover gas, with a GWP of 1.

10. Furthermore, the panel requested the Board for guidance on whether the draft recommended methodology "Replacement of SF_6 with alternate cover gas in the magnesium industry" based on case NM0222, should be applicable to project activities that use "dilute SO_2" as a cover gas in magnesium productionIn considering the case NM0222, the panel observed that project activities that use SO_2 may have health impacts due to exposure, if not properly managed. SO_2 was used as a cover gas in the magnesium industry, prior to the use of SF_6 and the current technology is more sophisticated and safer than the older SO_2 technology. To ensure environmental integrity, the panel has introduced the requirement that the project activity meets national/international emission norms for SOx concentration in the flue gas of the manufacturing facility where the project activity is implemented. Although this requirement was introduced, the measure can be only implemented if there is an exhaust system. The panel noted that magnesium die casting units do not have exhaust systems which is necessary to check if the SOx concentration requirement is met by the project activity. Therefore, the panel was of the view that from an environmental perspective such project activities should not be considered eligible as

CDM project activities and recommended to the Board that the draft methodology should be limited to cover gases other than "dilute SO_2".

11. The panel recommended to the Board to approve case NM0231 with one of the following two options: (i) to make the draft approved methodology applicable to green field project activities; or (ii) to limit the applicability of the draft approved methodology to project activities implemented in an existing facility.

C. Clarifications and requests for revisions of approved methodologies

12. The Meth Panel recommends the Board to note the following requests for clarifications and approve the following 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 30 recommendation.
AM_CLA_0057	**ACM0001**	Ex post monitoring of the adjustment factor for landfill projects	**Clarified (methodology revised)**
AM_CLA_058	**ACM0011**	Clarification on applicability condition: change in capacity	**Clarified**
AM_CLA_0059	**ACM0003**	Applicability of ACM0003 to projects in which alternative fuels are used in the cement pre-calciner	**Clarified (methodology revised)**
AM_CLA_0060	**AM0030**	AM0030 should refer explicitly to 2006 IPCC Guidelines	**Clarified (methodology revised)**
AM_CLA_0061	**ACM0002**	Applicability of ACM0002 to hydropower plants increasing electricity production through the diversion of water from further creeks into the reservoir without expansion of the installed power capacity	**Clarified (methodology revised)**
AM_CLA_0062	**ACM0002**	Monitoring of non-condensable gases	**Clarified (methodology revised)**

Revision number	Approved Methodology	Title of the request for revision	MP 30 recommendation
AM_REV_0063	**AM0025**	Improving sustainability of waste processing projects by rationalising the crediting pattern	**Not to revise**
AM_REV_0064	**AM0057**	Revision to allow application of the methodology to project activities which use agricultural residues in the production of bio-oil	**Revise**
AM_REV_0065	**ACM0006**	Propose a new scenario (scenario 21) for a project with a new biomass residue fired cogeneration plant that provides electricity and heat to the users at the project site	**Not to revise**
AM_REV_0066	**AM0025**	Addition of an alternative baseline scenario - disposal of the waste at a landfill after incineration without electricity generation	**Not to revise**
AM_REV_0067	**AM0028**	Catalytic N_2O destruction in the tail gas of existing Nitric Acid or Caprolactam Production Plants and newly built Nitric Acid Plants	**Not to revise**
AM_REV_0068	**AM0036-v.02**	AM0036-v.02 Revision proposal to extend its application to projects with plant expansion (production output increase)	**Not to revise**
AM_REV_0069	**AM0014**	Natural gas-based package cogeneration	**Not to revise**
AM_REV_0070	**AM0047**	Production of biodiesel from waste oils and/or waste fats from biogenic origin and/or biodiesel from oil seeds grown on unutilised or marginal lands which had uneconomical agricultural productivity (if any)	**Revise**

D. **Revision of approved methodologies and methodological tools**

13. **AM0009:** The panel recommended to the Board for approval the draft revision of the approved methodology, incorporating case NM0227, with one of the following two options for allowing projects that currently vent associate gas: (i) Baseline emissions are considered as emissions from venting; or (ii) baseline emissions whether vented or flared are all considered as emissions from flaring as a conservative baseline over the whole crediting period. The panel, in discussing the case NM0227, which is presented for project activities that capture and utilize associated gas for energy purposes that in the absence of the project activity would have been vented, noted that in a number of countries, both in developing and developed world, associated gas is vented to varying degrees. The panel is of the view that in case of venting, the uncertainty in baseline identification are relatively high and, therefore, recommended that venting as the baseline scenario should not be included. The draft revised approved methodology is contained in annex 5.

14. **AM0021**: The panel recommended to the Board the approval of the revision of the approved methodology, in response to the request by the Board, to align approved methodologies with the present format of approved methodologies. The methodology was revised to improve the clarity and ease of application including: (i) clear procedures for the identification of the baseline scenario; (ii) clearer procedures for estimating the baseline N_2O emission using equations; (iii) a requirement to measure the N_2O emissions before the destruction unit to estimate the baseline N_2O emissions; and (iv) further clarity in the monitoring requirements. The draft revised approved methodology is contained in annex 10.

15. **AM0030**: The panel recommended to the Board the approval of the revision of the approved methodology in response to the request for clarification AM_CLA_0060. The draft revision updates the procedures to estimate baseline emission factors for PFC emissions, based on the 2006 IPCC guidelines. The draft revised approved methodology is contained in annex 11.

16. **AM0057**: The panel recommended to the Board the approval of the revision of the approved methodology AM0057 in response to the request for revision AM_REV_0064. The draft revision expands the applicability to project activities that consume agricultural residues, which in the absence of the project activity would have been left to decompose anaerobically, as a raw material in bio-oil production. Emission reductions are only claimed for the avoidance of methane emissions by using the agricultural residues. The draft revised approved methodology is contained in annex 12.

17. **ACM0001:** The Meth Panel recommended to the Board the approval of a revision of the approved consolidated methodology ACM0001 in response to the request for clarification AM_CLA_0057. The draft revision clarifies the procedure to calculate the Adjustment Factor, where in the baseline the landfill gas was captured and destroyed/used. Furthermore, it clarifies how to apply the "Tool to determine methane emissions avoided from dumping waste at a solid waste disposal site" for estimating ex-ante landfill gas emissions over the crediting period. The draft revised approved methodology is contained in annex 13.

18. **ACM0002:** The Meth Panel recommended to the Board the approval of a revision of the approved consolidated methodology ACM0002 in response to the request for clarification

AM_CLA_0061, AM_CLA_0062 and as requested by the Board. The draft revision clarifies the following: (i) that the methodology is applicable to project activities that increase the electricity generation through additional electricity generation equipment; (ii) removal of monitoring requirements for non-condensable gases in geothermal projects as these emissions are not accounted for; (iii) if the run-of-river hydro project have a reservoir then the applicability conditions regarding reservoirs apply; (iv) clarification on how to calculate the power density; (v) reference to the "Tool to calculate project or leakage CO_2 emissions from fossil fuel combustion"; and (vi) reference to the "Tool to estimate the emission factor for an electricity system". The draft revised approved methodology is contained in annex 14.

19. **ACM0003:** The Meth Panel recommended to the Board the approval of a revision of the approved consolidated methodology ACM0003 in response to the request for clarification AM_CLA_0059. The draft revisions clarifies that the approved consolidated methodology is applicable to fuel switch in any part of the clinker production facility where combustion takes place by clearly defining the clinker production area. The draft revised approved methodology is contained in annex 15.

20. **Additionality tool**: The Meth Panel recommended to the Board the approval of a revision of the "tool for assessment and demonstration of additionality", as contained in annex 16. The panel, in response to the request for clarification considered by it at its twenty-ninth meeting, identified several inconsistencies in the tool and revised the tool to improve the following:

(i) Clarity in the conditions under which different approaches, provided in Step 2: Investment analysis, shall be used; and

(ii) Clarity in the appropriate choice of the benchmark for the assessment of additionality when using benchmark analysis.

E. **Requests from the Board to the Panel**

21. The Board at its thirty-fifth meeting requested the Meth Panel to clarify the reasons for the applicability condition in scenario 14 of approved consolidated methodology ACM0006 that the thermal firing capacity of the boiler should not be increased. The panel recommended to the Board to clarify that the applicability condition in scenario 14 of approved consolidated methodology ACM0006 "thermal firing capacity of the boiler should not be increased", is added for the following reasons: (i) If the thermal firing capacity is increased, a capacity expansion takes place and the total power generation increase as a result of the project may be different from the level calculated using equation 16; (ii) a significant increase in thermal firing capacity allows using more biomass residues than historically used, which is not consistent with the baseline scenario where it is assumed that no additional levels of biomass residues are used; and (iii) in case of cogeneration plants, if the thermal firing capacity is increased, the project could generate more heat, thereby increasing the level of service provided. This situation is not reflected in the procedure for estimating emission reductions for scenario 14.

22. In the context of the Board's request to clarify under what conditions the approved consolidated methodology ACM0002 is applicable for run of river projects. The panel recommended to the Board to clarify that the applicability condition "Run-of-river hydro power

plants; hydro power projects with existing reservoirs where the volume of the reservoir is not increased" shall only comprise of situations that do not result in an increase of the area of the water reservoir whatsoever. Therefore, if the run-of-river hydro project results in an increase of the water reservoir area or has a reservoir then the applicability conditions regarding reservoirs shall apply and be checked.

23. The panel recommended to the Board to approve the revision of approved methodology AM0047 , incorporating case NM0228, with the revisions and simplification, as request by the Board at its thirty-fifth meeting (see paragraph 13, EB35 report). The panel analyzed the upstream emissions from the production of biofuels and petrodiesel and concluded that the emissions from cultivation of biomass for use as feedstock in biofuel production may in some situations be less than those for the production of petrodiesel, but for other situations and crops they may be larger. Taking this into account the panel has revised the methodology to reflect the conditions under which emissions from the change in biomass stocks, change in soil carbon and use of Nitrogen as a plant nutrient should be estimated. Furthermore, the panel also made the following provisions, which simplifies the use of the revised methodology: (i) if raw material for biodiesel production is from plantations which are registered as A/R CDM project activities, the emissions from cultivation of biomass need not be estimated, as they shall be accounted for in the registered A/R project activity in accordance with Board's guidance; (ii) if it can be demonstrated that the country has no potential for deforestation then the shift of pre-project activity related emissions can be ignored; and (iii) the inclusion of a section on estimation of leakage from the production of petrodiesel. The revision also incorporates case NM0233.

24. The panel requested the Board to note that it agreed to start work on developing default emission factors for the cultivation of biomass to simplify the use of the approved methodology for biofuel production (AM0047), where the raw material production is within the project boundary.

25. The panel informed the Board to note that it considered the request by the Board to revise the approved methodologies AM0018 and AM0001, as requested by the Board at its thirty-fifth meeting, and shall provide a revision for consideration at Board's thirty-eighth meeting.

26. The panel requested the Board to note that, due to time constraints and the large number of proposed new methodologies the panel could not consider the Board's request regarding pro and cons for project activities that: (i) reduce the consumption of a raw material, which is produced outside the project boundary; and (ii) where one cannot ensure that the raw material use, which is avoided by the project activity, will not be produced (outside the project boundary). The panel will consider the issue at its thirty-first meeting, with a view to providing a recommendation to the Board.

F. **Consolidated methodologies**

27. **Consolidated methodology for methane capture from industrial waste manage and flare/use:** The panel recommended to the Board the approval of the draft consolidated methodology based on the approved methodology AM0013 "**Avoided methane emissions from organic waste-water treatment"** and AM0022 "**Avoided Wastewater and On-site Energy Use**

Emissions in the Industrial Sector", as requested by the Board at its thirty-second meeting, which is for project activities that capture/avoid methane from industrial/waste water treatment and flare/use it. The draft consolidation, as contained in annex 17, includes all the applicability conditions of the underlying approved methodologies and:

(i) The inclusion of the "Tool to calculate project or leakage CO_2 emissions from fossil fuel combustion"; and
(ii) The "Tool to calculate project emissions from electricity consumption".

28. The panel also recommended to the Board to withdraw the approved methodologies, AM0013 and AM0022.

29. **Consolidated baseline and monitoring methodology for project activities using alternative raw materials that do not contain carbonates for clinker manufacturing in cement kilns:** The panel recommended to the Board the approval of the draft consolidated methodology based on the approved methodologies AM0033 "**Use of non-carbonated calcium sources in the raw mix for cement processing**" and AM0040 "**Baseline and monitoring methodology for project activities using alternative raw materials that contain carbonates in clinker manufacturing in cement kilns**", as requested by the Board at its thirty-second meeting, which is for project activities that substitute non-carbonic raw materials in clinker production. The approved methodology AM0033 uses loss of ignition (LOI) method to estimate the CO_2 emissions from the use of carbonate material in the production of clinker. This method has not been included in the draft consolidation, as the panel concluded that the reliability of the LOI method for calculating CO_2 emission is low. The draft consolidation includes the method provided in approved methodology AM0040, which is based on methods that are commonly used by cement manufacturers to assess the quality of raw materials and output. The draft consolidation, as contained in annex 18, includes a reference to the "Tool to calculate emission factor for electricity systems", "Combined tool for identification of baseline scenario and demonstration of additionality" and an expansion of applicability to green field projects.

30. The panel also recommended to the Board to withdraw the approved methodologies, AM0033 and AM0040.

G. Issues of general guidance

31. The panel requested the Board to provide additional guidance to paragraph 22 of the Board's thirty-fifth meeting report, whether sampling can be considered as a monitoring method in accordance with the guidance.

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

32. The Meth Panel confirmed that its thirty-first meeting will be held from 4 to 8 February 2008.

33. The Meth Panel reminded project participants that the deadline for the twenty - second round of submissions of proposed new methodologies is 13 February 2008. The Meth Panel also

reminded project participants that baseline and monitoring methodologies can be submitted at any time prior to this deadline, which is highly encouraged, as it facilitates speedy consideration.

34. The Meth Panel also reminded the project participants that the deadline for consideration of request for revision and request for clarification at the thirty first meeting to be held from 4 to 8 February 2008 shall be 24 December 2008, 17:00 GMT.

I. **Roster of experts**

35. The Meth Panel noted the satisfactory completion of the desk reviews undertaken for the proposed new methodologies considered at the meeting.

External Annexes to the thirtieth meeting of the Meth Panel

Annex 1 - Draft reformatted baseline and monitoring methodology based on NM0197-rev

Annex 2 - Draft reformatted baseline and monitoring methodology based on NM0202-rev

Annex 3 - Draft reformatted baseline and monitoring methodology based on NM0203-rev

Annex 4 - Draft reformatted baseline and monitoring methodology based on NM0212 and NM0222

Annex 5 - Draft revision of AM0009 to incorporate NM0227

Annex 6 - Draft revision of AM0047 to incorporate NM0228 and NM0233

Annex 7 - Draft reformatted baseline and monitoring methodology based on NM0230

Annex 8 - Draft reformatted baseline and monitoring methodology based on NM0231

Annex 9 - Draft reformatted baseline and monitoring methodology based on NM0236

Annex 10 - Draft revision to AM0021

Annex 11 - Draft revision of AM0030

Annex 12 - Draft revision of AM0057

Annex 13 - Draft revision to ACM0001

Annex 14 - Draft revision to ACM0002

Annex 15 - Draft revision to ACM0003

Annex 16 - Draft revision of "Tool for assessment and demonstration of additionality"

Annex 17 - Draft consolidated methodology based on approved methodology AM0013 and AM0022

Annex 18 - Draft consolidated methodology based on approved methodology AM0033 and AM0040

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