REPORT OF THE TWENTIETH MEETING OF THE METHODOLOGIES PANEL

UNFCCC Headquarters, Bonn, Germany 4 - 7 April 2006

I. 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. Rajesh Kumar Sethi, opened the meeting. On behalf of the panel the Chair thanked the outgoing Chair, Mr. Jean-Jacques Becker, and outgoing Vice-Chair, Mr. José Domingos Miguez, for their outstanding work and dedication and welcomed Mr. Jean Jacques Becker in continuation as the Meth Panel Vice-Chair.
- 2. The Chair adopted the agenda as proposed.

B. Consideration of proposed new methodologies

3. The Meth Panel considered the proposed new methodologies for following cases:

Cases	MP 20 ¹ Recom.
NM0038-rev: Methane Gas Capture and Electricity Production at Chisinau	A
Wastewater Treatment Plant, Moldova	
NM0080-rev: Natural gas based grid connected 1050 MW combined cycle	A
power generation project for Torrent Power Generation Limited at Akhakhol	
Gujarat	
NM0082-rev: Khon Kaen fuel ethanol project	A
NM0105-rev: Bus Rapid Transit System for Bogotá, Colombia: TransMilenio	Work in progress
Phase II to IV	
NM0107-rev: Waste Gas-based Cogeneration Project at Alexandria Carbon	Work in progress
Black Co., Egypt	
NM0108-rev: Biodiesel production and switching fossil fuels from petro-diesel	Work in progress
to biodiesel in transport sector - 30 TPD Biodiesel CDM Project in Andhra	
Pradesh, India	
NM0112-rev: Increased electricity generation from existing hydropower	A
stations through Decision Support System optimization in Azerbaijan	
NM0117-rev: Nanjing Chemical Industries Co Ltd (NCIC) Nitrous Oxide	C
Abatement Project	
NM0121: Bumbuna Hydroelectric Project	Preliminary
	recommendation
NM0123-rev: Substitution of raw material in cement processing	Work in progress
NM0124-rev: PFC emission reductions at ALUAR Aluminio Argentino	A
NM0130: The Nho Que Hydropower Project	Preliminary
	recommendation
NM0133: Grid-connected power generation project using biomass fuel from	
newly developed dedicated plantations, in Nakhon Ratchasima Province,	В
Thailand	

¹ Recommendations to the methodologies from the twentieth 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.

NM0134: Paramonga CDM Bagasse Boiler Project	В
NM0135: Reducing SF ₆ Emissions in High-Voltage Transmission/Distribution	Preliminary
Systems in Nigeria	recommendation
NM0136: Reduction of Transmission and Distribution Losses in Nigeria	C
NM0140: Mondi Richards Bay Biomass Project	В
NM0141: Displacing grid/off-grid steam and electricity generation with less carbon intensive fuels in Aba, Nigeria	Work in progress
NM0142: Palm Methyl Ester - Biodiesel Fuel (PME-BDF) production and use for transportation in Thailand	В
NM0143: Catalytic reduction of N ₂ O inside the ammonia burner of the nitric acid plant at Fertilizers & Chemicals Ltd., Israel	Work in progress
NM0144: Energy efficiency improvements carried out by an Energy Service Company (ESCO) in Ulaanbaatar, Mongolia to replace old boilers with new ones	Preliminary recommendation
NM0145: Reduction of Flaring and Use of Recovered Gas for Methanol Production	Preliminary recommendation
NM0146: Transalloys Manganese Alloy Smelter Energy Efficiency Project in South Africa	Preliminary recommendation
NM0147: Methane abatement through composting	Preliminary recommendation
NM0148: Fuel switch project for generation of cleaner power	C
NM0149: Coal to natural gas feedstock conversion for the large-scale	Preliminary
manufacture of Pure gas at Sasol facilities, South Africa	recommendation
NM0150: Ghana efficient lighting retrofit project	Preliminary recommendation
NM0151: CEG Gas Distribution Pipeline Replacement Project in Rio de Janeiro	Preliminary recommendation
NM0152: Celpa, Celtins and Cemat grid connection of isolated systems CDM Project	Preliminary recommendation
NM0153: Grid connected electricity generation plant of 220 MW capacity using Natural Gas (NG) as fuel and based on combined cycle technology of Reliance Energy Limited –Samalkot, Andhra Pradesh, INDIA	A (incorporated in NM0080-rev)
NM0154: Vikram Cement (VC): Energy efficiency improvement by upgradation of preheater in cement manufacturing	Preliminary recommendation
NM0155: Waste gas utilisation for steam and power generation at RIL Jamnagar refinery	Preliminary recommendation
Jannagai termety	recommendation

- 4. After considering the proposed new methodologies as well as desk reviews and public inputs received, the Meth Panel:
- (a) Agreed on the **final recommendations** on proposals **NM0038-rev**, **NM0080-rev**, **NM0082-rev**, **NM0112-rev**, **NM0117-rev**, **NM0124-rev**, **NM0133**, **NM0134**, **NM0136**, **NM0140**, **NM0142**, **NM0148**, and **NM0153** for the consideration of the Executive Board at its twenty-fourth meeting. Final recommendations will be made available in the UNFCCC CDM website: http://cdm.unfccc.int/methodologies/PAmethodologies/publicview.html. In particular, the Meth Panel:
 - (i) Recommended the approval of proposals NM0082-rev, NM0112-rev, and NM0124-rev. The reformatted versions of NM0082-rev, NM0112-rev, NM0124-rev are contained in annexes 1, 2 and 3, respectively of this report;
 - (ii) Recommended the **approval** and **consolidation** of **NM0038-rev** with AM0013 "Forced methane extraction from organic waste-water treatment plants for grid-connected electricity supply", as contained in annex 4 of this report. The Meth Panel also agreed to recommend to the Board to withdraw the approved methodology AM0013;
 - (iii) Recommended the **approval** of **NM0080-rev** and **NM0153**, which is to be incorporated into NM0080-rev, as contained in annex 5 of this report;
 - (iv) Recommended the **approval** of the consolidated baseline and monitoring methodology "Consolidated methodology for greenhouse gas mitigation from manure management systems", which is based on approved methodologies AM0006 and AM0016, as contained in annex 6 of this report. The Meth Panel also agreed to withdraw approved methodologies AM0006 and AM0016;
 - (v) Recommended the **revision** of proposals **NM0133**, **NM0134**, **NM0140** and **NM0142**;
 - (vi) Recommended **not to approve** proposals **NM0117-rev**, **NM0136** and **NM0148**;
- (b) Agreed on the **preliminary** recommendations of proposals **NM0121**, **NM0130**, **NM0135**, **NM0144**, **NM0145**, **NM0146**, **NM0147**, **NM0149**, **NM0150**, **NM0151**, **NM0152**, **NM0154** and **NM0155**. In accordance with the procedures for submission and consideration of a proposed new methodology, project participants will have the opportunity to provide technical clarifications to these preliminary recommendations². Preliminary recommendations for which project participants have not provided any clarifications within the 4 week consultation period will be made available as final recommendations on the UNFCCC CDM web site http://cdm.unfccc.int/methodologies/PAmethodologies/publicview.html and will be considered by the Board.

² The technical clarifications from project participants, should be submitted in the current versions of CDM-NMB and CDM-NMM forms (please refer to paragraph 30).

Work in progress

5. The Meth Panel agreed to continue considering the proposals NM0105-rev, NM0107-rev, NM0108-rev, NM0123-rev, NM0141 and NM0143 to address issues in the methodologies with a view to prepare a recommendation for possible approval of these cases at its twenty-first meeting. The Meth Panel also agreed to take into account the expert inputs on survey for transport sector in its work on the proposed methodology NM0105-rev and agreed to work on a consolidated methodology for the production and use of biofuels for transport.

C. Clarifications and requests for revisions of approved methodologies

6. The Meth Panel considered the following requests for clarifications and request 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/methodologies/Clarifications and http://cdm.unfccc.int/methodologies/Revisions respectively. The requests that led to a recommendation by the Meth Panel to revise an approved methodology are reflected in the section D. below.

Requests for clarifications of approved methodologies:

- (a) ACM0006: Amendment to Draft ACM0006/Version 02 (TÜV Rhein);
- (b) ACM0006: Scenario 14: Clarification on equation to determine net quantity of increased electricity generation (DNV-CUK);
 - (c) AM0008: Applicability condition on Natural gas from LNG (DNV-CUK);
- (d) ACM0001: Clarification on requirement for monitoring of LFG flows (DNV-CUK);
- (e) ACM0001: Requirement for separate monitoring of LFG temperature and pressure (DNV-CUK);

Request for revisions of approved methodologies:

- (f) ACM0006: New scenario 16 (fossil fuel displacement and power capacity expansion) and scenario 17 (partial or complete fuel switch) for projects in existing power plant already co-firing biomass and fossil fuels (DNV-CUK);
- (g) ACM0005: Amendment of the three options for selecting the benchmark for baseline emissions (DNV-CUK);
- (h) ACM0006: Request for amendment to include biomass residues fuel switch projects that generate heat but do not produce electricity (DNV-CUK);

D. Revisions of approved methodologies

ACM0009: Revision taking into account expert work on upstream emissions

7. At its last meeting the Meth Panel, while recommending the approved methodology ACM0009 "Consolidated baseline methodology for industrial fuel switching from coal or

petroleum fuels to natural gas" recognized that additional expertise is required to analyze leakage due to upstream emissions from fossil fuel use, in order to improve the treatment of this emission source in all relevant methodologies.

- 8. In order to broaden the applicability of ACM0009 to include natural gas generated from LNG, the Meth Panel recommends the revision of the approved methodology ACM0009, as contained in annex 7 to this report.
- 9. The Meth Panel also recommended the withdrawal of AM0008, as it was consolidated into ACM0009 and has broader applicability conditions than AM0008. Moreover, in the process of consolidation a number of methodological problems were identified in AM0008, including the lack of guidance on how to calculate upstream emissions and how to apply the methodology in cases where multiple fuels are used.

AM0012: Revision to include FOD model

10. The Board, at its twenty third meeting, requested the Meth Panel to revise AM0012 and incorporate the First-order-Decay (FOD) model for estimating the avoided methane emissions. As the revised version of AM0025 now accommodates all types of project activities to which AM0012 are applicable the Meth Panel recommended however, that the approved methodologies AM0012 and AM0025 be consolidated taking into account the above change.

ACM0001: Revision of fixing parameters ex-ante for crediting period; Clarification on monitoring of the temperature

- 11. The Meth Panel agreed to recommend a revision of the approved methodology ACM0001 in order to incorporate (i) the guidance on the revision of baseline at renewal of crediting period provided by the Board at its twenty-third meeting, (ii) to enable accounting for project emissions from use of energy /electricity use for the project activity and (iii) reflects the revision of the monitoring requirements for temperature and pressure of landfill gas (LFG). The revised version is contained in annex 8 to this report.
- 12. The Meth Panel agreed not to accept the request for revision for monitoring LFG at three points, as opposed to the four points prescribed in the approved methodology.

ACM0002, AM0019, and AM0026: Incorporation of EB guidance on emissions from reservoirs

- 13. In accordance with the guidance provided by the Board at its twenty-third meeting, the Meth Panel agreed to recommend a revision of the approved methodologies ACM0002, AM0019 and AM0026, as contained in annexes 9, 10 and 11 respectively to this report. The applicability conditions in the methodologies were revised, enabling the use of these methodologies for new reservoir based hydro-electric power plant projects. These revisions also address related issues in other relevant sections of the methodology.
- 14. The Meth Panel recommended to highlight that the availability of the above approved methodologies does not prevent the project participants from submitting new methodologies for reservoir based hydro-electricity generation projects.

ACM0002: Combined margin weights for wind and solar project activities

15. The Meth Panel considered a request from project participants to use 75% and 25% as respective operating margin (OM) and build margin (BM) weights for ACM0002 in the case of an intermittent resource. The Meth Panel recommends that ACM0002 be revised so that this

weighting becomes the default for intermittent resources where generation is relatively unpredictable and non-despatchable. Specifically, this weighting would apply to wind and solar projects.

16. Further, the Meth Panel recommended as part of the above revision, that the guidance on OM/BM weights (Annex 2, EB22) be incorporated into the revised ACM0002 and a minor clarification be provided to establish whether the OM should be calculated as the generation-weighted average of the most recent three years' of data. The methodology also now clarifies that choice among ex ante and ex post data vintages (as they currently exist in the methodology) should be specified in the PDD, and cannot be changed during the crediting period. The revised version of the approved methodologies ACM0002 is provided in annex 9 to this report.

ACM0003: Revision of moisture penalty calculations

17. The Meth Panel agreed to recommend a revision of the approved methodology ACM0003, in order to simplify the procedure to estimate moisture penalty and clarify the data requirements and related monitoring requirements, as contained in annex 12 to this report.

Request for revisions and clarification to ACM0006

18. In response to a request for a revision the Meth Panel agreed to recommend a revision of the approved methodology ACM0006, as contained in annex 13 to this report.

ACM0005: Amendment of the three options for selecting the benchmark for baseline emissions

19. In response to the request for revision the Meth Panel agreed to recommend a revision of the approved methodology ACM0005, as contained in annex 14 to this report. The revision reflects the changes in options for setting the benchmark percentage of baseline clinker use.

AM0001: Boards guidance on interpretation of lower of the two meter readings for monitoring HFC23 production.

20. In consideration of the guidance by the Board at its twenty-third meeting, the Meth Panel agreed to recommend a revision of the approved methodology AM0001 in order to clarify interpretation of recording meter readings of HFC-23 gas flow, as contained in annex 15 to this report.

E. Monitoring information requirements

- 21. The Meth Panel further worked on the development of information on monitoring to be included in CDM-PDD and CDM-NMM with respect to standards for measurement, information on calibration procedures and procedures to address situations when measuring instruments are non-functional. The Meth Panel agreed to prepare a proposal for guidance on the above issues at its next meeting.
- 22. The Meth Panel also considered the report on zero check in comparison with calibration of flowmeter measurement instruments, as requested by the Board at its twenty third meeting. The Meth Panel agreed to recommend that a zero check cannot be considered as a substitute for calibration of the measurement instrument.
- 23. Regarding the approved methodology AM0001, and in particular the measurement of HFC-23 flow, the Meth Panel agreed to recommend that the calibration be conducted on a six month and the zero check on a weekly basis. If the zero check indicates that instrument is not

stable, an immediate calibration should be undertaken. Furthermore, the calibration should be conducted by an officially accredited entity. This modification, upon approval should also be reflected as a revision to the approved methodology.

F. Upstream emissions

24. The Meth Panel identified that in some cases upstream emissions can result in leakages as well as double counting. The Meth Panel agreed that further expertise is required in order to make a recommendation to the Board.

G. Double counting

- 25. The Meth Panel considered the expert input on the responses to a call for public inputs on double counting launched by the Board. On the basis of these inputs the Meth Panel in its deliberations on ways to address the issue of double counting agreed to recommend that in the case of blended biofuel methodologies, the emissions reductions from the use of biofuels shall be credited to producers of biofuel, as long as it is demonstrated and ensured that the biofuel is actually consumed by end consumers.
- 26. The panel also agreed to recommend that if a consumer of biofuel for transport project activities would be a project proponent, then the consumer would have to identify the producer for the biofuel and ensure that the producer does not claim certified emission reduction for the same biofuel consumed.

H. <u>Technical guidelines for the development of new</u> baseline and monitoring methodologies

- 27. The Meth Panel recommended the approval of the draft "technical guidelines" for the development of new baseline and monitoring methodologies, as a separate document, as contained in annex 16. These guidelines should replace the current guidelines for completing the CDM-NMB and CDM-NMM, contained within the guidelines for completing CDM-PDD, CDM-NMB and CDM-NMM version 4.
- 28. The "technical guidelines" combine all guidance provided by the Board on methodological issues in one single document with the aim of facilitating the development of new methodologies along with methodological guidance by the EB. They are based on the guidelines for completing the CDM-NMB and CDM-NMM and all clarifications on methodological issues provided by the Board. The guidelines include guidance on how to use the proposed new format for new baseline and monitoring methodologies (CDM-NM). The Meth Panel also agreed to continue its work on the "catalogue of methodological components", with a view to providing a proposal at its next meeting.

I. Revisions of forms

- 29. The Meth Panel recommended a new combined form for the proposed new baseline and monitoring methodologies, as contained in annex 17, which is consistent with the current form for A/R methodologies (CDM-AR-NM).
- 30. In the recommended form the approach towards monitoring has been revised. The monitoring procedures shall be described in one single section, whereas the compilation of data needed is no longer differentiated according to baseline emissions, project emissions and leakage.

In addition, a new table format is used to describe the data collection procedure for each data element.

31. The Meth Panel agreed to recommend revising the desk review (F-CDM-NMex), recommendation forms (F-CDM-NMmp) and possibly the CDM-PDD form and its guidelines, in order to reflect the structure of new baseline and monitoring form at its twenty first meeting.

J. Selection of baseline scenario and additionality tool

- 32. As requested by the Board at its twenty-third meeting, the Meth Panel considered the inputs received as a response to the call for input on the "baseline selection tool" and "additionality tool" launched by the Board. The Meth Panel noted that in view of limited time available for considering these inputs, it shall further consider these inputs before providing its recommendation to the Board.
- 33. In this regard, the Meth Panel agreed to consider the following items at its next meeting, with a view to making a recommendation to the Board at its twenty fifth meeting:
- (a) Identification of possible changes to improve the tool for the demonstration & assessment of additionality and the draft baseline scenario selection tool;
- (b) Assessment on possible ways to combine the additionality tool with a draft baseline scenario selection tool;
- (c) Identification, and where possible development of alternative approaches to assess additionality, or to choose the baseline scenario;
- (d) To achieve this, the Meth Panel recommends the cooperation of the DOEs and EB-RIT team members.

K. Use of IPCC carbon emission values for fuels

34. As requested by the Board at its twenty-third meeting, the panel considered the issue of the use of IPCC carbon emission values for fuels in situations where country/region specific values are available from other published sources. The Meth Panel agreed to continue working on the issue with a view to recommend guidance on the issue at its twenty first meeting.

L. Definition of CDM project activities under a programmes of activities

35. The Meth Panel took note that new methodologies have been submitted for project activities that are implemented under a programme of activities. The Meth Panel agreed to request the Board to clarify, whether it should work on a definitions of terms for CDM project activities under a programmes of activities in order to ensure consistency with the guidance of COP/MOP1 on CDM project activities under a programmes of activities.

M. Roster of experts

36. The Meth Panel noted the satisfactory completion of the desk reviews undertaken for proposed new methodologies considered at the meeting as well as the desk reviews considered for submissions submitted at round 14.

N. <u>Schedule of meetings and</u> rounds of submissions of proposed new methodologies

- 37. The Meth Panel confirmed that its twenty-first meeting will be held on 6 9 June 2006.
- 38. The Meth Panel noted that the deadline for the next round of submissions of proposed new methodologies is to be on 9 May 2006. The Meth Panel reminded project participants that baseline and monitoring methodologies can be submitted at any time.

Annexes to the report of Meth 20:

- Annex 1: Draft reformatted baseline and monitoring methodology based on NM0082-rev
- Annex 2: Draft reformatted baseline and monitoring methodology based on NM0112-rev
- Annex 3: Draft reformatted baseline and monitoring methodology based on NM0124-rev
- Annex 4: Draft consolidated "Avoided methane emissions from organic waste-water treatment", based on the approved methodology AM0013 and NM0038 "Methane Gas Capture and Electricity Production at Chisinau Wastewater Treatment Plant, Moldova"
- Annex 5: Draft reformatted baseline and monitoring methodology based on NM0080-rev and NM0153.
- Annex 6: Draft consolidated methodology for greenhouse gas mitigation form manure management systems, based on approved methodologies AM0006 and AM0016.
- Annex 7: Draft revision to ACM0009
- Annex 8: Draft revision to ACM0001
- Annex 9: Draft revision to ACM0002
- Annex 10: Draft revision to AM0019
- Annex 11: Draft revision to AM0026
- Annex 12: Draft revision to ACM0003
- Annex 13: Draft revision to ACM0006
- Annex 14: Draft revision to ACM0005
- Annex 15: Draft revision to AM0001
- Annex 16: Technical guidelines for the development of new baseline and monitoring methodologies
- Annex 17: New combined form for the proposed new baseline and monitoring methodologies

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