

**REPORT OF THE TWENTY - SECOND MEETING OF
THE METHODOLOGIES PANEL**

UNFCCC Headquarters, Bonn, Germany

4 - 8 September 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.
2. The Board thanked the outgoing members, Mr. Stanford Johanne Mwakasonda, Mr. Paata Janelidze, and Mr. Zhihong Wei, for their dedication and service to the work of the Meth Panel. The Meth Panel also welcomed the new members, Mr. Jan-Willem Martens, Mr. Massamba Thioye and Mr. Vijay Kumar Mediratta, who were selected by the Board at its twenty fifth meeting.
3. The agenda was adopted as proposed.

B. Consideration of proposed new methodologies

4. The Meth Panel considered the proposed new methodologies for the following cases 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:
<<http://cdm.unfccc.int/methodologies/PAmethodologies/publicview.html>>.
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 22¹ recommendation |
|--|---|
| NM0108-rev: Biodiesel production and switching fossil fuels from petrodiesel to biodiesel in transport sector - 30 TPD Biodiesel CDM Project in Andhra Pradesh, India | C |
| NM0110-rev: Mitigation of Methane Emissions in the Charcoal Production of Plantar, Brazil | Preliminary recommendation² |

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¹ Recommendations to the methodologies from the twenty second 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.

² See paragraph 6

| Cases | MP 22¹ recommendation |
|---|---|
| NM0121: Bumbuna Hydorelectric Project | B |
| NM0129-rev: Sunflower Methyl-Ester Biodiesel Project in Thailand | C |
| NM0133-rev: Grid-connected power generation project using biomass fuel from newly developed dedicated plantations, in Nakhon Ratchasima Province, Thailand | Work in progress³ |
| NM0134-rev: Paramonga CDM Bagasse Boiler Project | C |
| NM0135: Reducing SF ₆ Emission in High-Voltage Transmission/Distribution Systems in Nigeria as contained in annex 1 | A |
| NM0138-rev: American Israel Paper Mill (AIPM) Natural Gas Cogeneration | C |
| NM0140-rev: Mondi Richards Bay Biomass Project, as contained in annex 2 | A |
| NM0141-rev: Displacing grid/off-grid steam and electricity generation with less carbon intensive fuels in Aba, Nigeria | Work in progress |
| NM0142-rev: Palm Methyl Ester - Biodiesel Fuel (PME-BDF) | Preliminary recommendation |
| NM0144: Energy efficiency improvements carried out by an Energy Service Company (ESCO) in Ulaanbaatar, Mongolia to replace old boilers with new ones | B |
| NM0145: Reduction of Flaring and Use of Recovered Gas for Methanol Production, as contained in annex 3 | A |
| NM0146: Transalloys Manganese Alloy Smelter Energy Efficiency Project in South Africa, as contained in annex 4 | A |
| NM0147: Methane abatement through composting, as contained in annex 5 | A |
| NM0151: CEG Gas Distribution Pipeline Replacement Project in Rio de Janeiro | Work in progress |
| NM0152-rev: Celpa, Celtins, & Cemata grid connection of isolated systems | Preliminary recommendation |
| NM0155: Waste gas utilisation for steam and power generation at RIL Jamnagar refinery | B |
| NM0158: Mexico, Insurgentes Avenue Bus Rapid Transit Pilot Project | Work in progress⁴ |
| NM0159: Implementation of an Efficiency Testing, Consumer Labelling and Quality-Assurance Program for Air Conditioners in Ghana | B |
| NM0160: Shell Cogeneration Project | B |

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³ The deliberations on these methodologies could not be concluded at the twenty-second meeting of the Meth Panel. These cases will be further considered before providing a recommendation to the Board.

⁴ The Board, at its twenty fifth meeting, agreed not to accept the recommendation of the case NM0158 and further requested the Meth Panel to review the case taking into account a new independent expert reviewer. The methodology could not be considered as a desk review could not be provided in time for the twenty second meeting of the Meth Panel.

| Cases | MP 22¹ recommendation |
|---|---|
| NM0161: Mondi Gas Turbine Co-generation in Richards Bay, South Africa | Work in progress |
| NM0162: Reduction in GHGs emission from primary aluminium smelter at Hindalco, Hirakud India | C |
| NM0163: Use of calcined ashes and fluorite for clinker production in the Cement Plant of Huichapan, Mexico, as contained in annex 6 | A |
| NM0165: Feed switchover from Naphtha to Natural Gas (NG) at Phulpur plant of IFFCO | B |
| NM0166: JISL biomethanation of biodegradable waste for thermal applications | B |
| NM0169: Reducing GHG emission in PTA-3 of RIL-Hazira by efficient utilization of energy in the form of fuel, power and steam | C |
| NM0170: Installation of Carbon Dioxide Recovery (CDR) plant at Indian Farmers Fertiliser Cooperative Ltd (IFFCO), Phulpur Plant | Preliminary recommendation |
| NM0171: Use of Hydro Heavy Fuel Oil Technology (HHFOT) to improve energy efficiency at a power plant in Pakistan | Preliminary recommendation |
| NM0172: Methane Leak Reduction From Natural Gas Pipelines | Preliminary recommendation |
| NM0173: Switching of fuel from naphtha to natural gas at Essar Power Limited's 515 MW power plant in Hazira, Gujarat, India, for generation and supply of electricity to Gujarat Electricity Board Grid and to Essar Steel Limited | C |
| NM0174: MSW Incineration Project in Guanzhuang, Tianjin City, China | Preliminary recommendation |
| NM0175: Green House Gas (GHG) emissions reduction by use of 'Nimin- a natural nitrification inhibitor ' with Urea in agriculture soils | C |
| NM0176: Soluciones Nitrous Oxide Abatement Project | Preliminary recommendation |
| NM0177: Utilization of Coke Oven Gas for Cogeneration | C |
| NM0178: Aerobic thermal treatment of municipal solid waste (MSW) without incineration in Parobé | Preliminary recommendation |
| NM0179: Waste Heat Recovery based Steam and Power Generation | Preliminary recommendation |
| NM0180: BIOLUX Benji Biodiesel Beijing Project | Preliminary recommendation |
| NM0181: Introduction of a new primary district heating system - Houma District Heating project, Shanxi Province, P.R.C | Preliminary recommendation |
| NM0182: Improved Efficiency in Power System Generation through Advanced SCADA Control Systems and Related Energy Management Protocol in Azerbaijan | C |
| NM0183: Essar Oil Limited (EOL) – Avoidance of Green House Gas emissions by application of residuum oil supercritical extraction (ROSE) technology as solvent de-asphalting process in petroleum refinery | C |

8. The Meth Panel observed that the proposed methodologies NM0165 and NM0170 are proposed for project activities that are implemented within the same industrial facility. To ensure

that the methodologies take into account the effects of one project activity on the other, the Meth Panel agreed to recommend that the project participants submit to the secretariat, along with the response to clarifications, one common draft CDM-PDD covering the two project activities.

C. Clarifications and requests for revisions of approved methodologies

9. 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/methodologies/PAMethodologies/Clarifications> and <http://cdm.unfccc.int/methodologies/PAMethodologies/Revisions> 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 clarification | MP 21 recommendation. |
|-----------------------------|--|--|--|
| AM_CLA_0029 | ACM0004, ACM0008, AM0013, AM0024, AMS-III.H. | Eligibility of the DOE to submit the registration request and consistency in assigning “Methodology linked Sectoral Scope” | Not accepted |
| AM_CLA_0031 | ACM0001 | Applicability of the methodology for a project activity that aims to collect LPG and upgrade to CPLG | Not accepted |
| AM_REV_0014 | ACM0006 | New scenario 17: Partial or complete fuel switch from fossil fuels to biomass at an existing cogeneration plant without significantly changing heat and electricity production | Work in progress, to be finalized at MP23 |
| AM_REV_0015 | ACM0006 | “Proposal of new scenario for ACM0006 in order to cover energy efficiency projects resulting in fossil fuel displacement plus expansion of surplus power capacity” | Work in progress, to be finalized at MP23 |
| AM_REV_0016 | AM0001 | Inclusion of swing plants producing only CFC in the past and converted to produce HCFC 22 according to a previous agreement with an intergovernmental entity | Not accepted |
| AM_REV_0017 | AM0028 | Broadening the applicability to include caprolactam production process | Accepted (see para 13) |
| AM_REV_0018 | ACM0002 | Electricity generation projects resulting in emissions reductions in another non-Annex 1 country | Work in progress, to be finalized at MP23 |
| AM_REV_0019 | ACM0006 | Extend applicability to heat generation projects that switch from fossil fuel to biomass residues | Work in progress, to be finalized at MP23 |

| | | | |
|--------------------|--------|--|-----------------------------------|
| AM_REV_0020 | AM0009 | Expand the applicability to other possible uses for flared gas | Not accepted |
| AM_REV_0021 | AM0029 | Amendment of AM0029 | Not accepted (see para 17) |

D. Revision of approved methodologies

10. **AM0025:** The Board, at its twenty fourth meeting, requested the Meth Panel to revise the approved methodology AM0025 incorporating the scope of AM0012, which is applicable to project activities that use biomethanation technology to treat municipal solid waste, which in absence of project would have been disposed in the landfill, and is implemented in a country where a law exists for treating biodegradable waste but is not enforced. The revised version of the methodology is contained in annex 7.

- (a) The draft revised methodology is applicable to project activities that:
- (i) use anaerobic digestion to treat municipal solid waste, which in absence of the project activity would have been disposed in a landfill;
 - (ii) are implemented in country which have mandatory regulation to treat the biodegradable part of the municipal solid waste before disposing the waste in a landfill, but the regulation is not enforced;

(b) The draft revised methodology includes a reference to the draft Methodological Tool to determine methane emissions avoided from dumping waste at a solid waste disposal site in which the parameters used in the equation to estimate baseline methane emissions were updated in accordance with the 2006 IPCC Guidelines for National Greenhouse Gas Inventories (see paragraph 30).

(c) Furthermore, the Board, at its twenty fourth meeting, had agreed that after the revision of approved methodology AM0025, the approved methodology AM0012 shall be withdrawn.

11. **AM0027:** In response to the request by the Board to compare the consistency of the approved methodology AM0027 and the proposed draft small scale indicative methodology III.J, the Meth Panel agreed to propose the revision of AM0027, as contained in annex 8. The revision of the methodology restricts its applicability to project activities where the generation of CO₂ from fossil or mineral sources in the baseline is only for the purpose of producing CO₂ used for the production of inorganic compounds and there is no energy by-product of the CO₂ production from the fossil source and its consumption in the baseline. Project activities that do not meet this applicability condition need to follow the guidance by the Board on re-publication of CDM for public comments.

12. The Meth Panel also recommended that the SSC WG revise the draft small scale indicative methodology III.J accordingly.

13. **AM0028:** In response to a request for revision the Meth Panel agreed to propose the revision of the approved methodology AM0028 to expand its applicability to the destruction of N₂O produced in production of caprolactam, as contained in annex 9. Furthermore, the revision included the amendment of the monitoring of N₂O to use the standard EN1418, as in the approved methodology AM0034. The revision in the methodology are applicable to project activities that destroy of N₂O produced in production of caprolactam.

E. Consolidation of approved methodologies

14. **AM0006 and AM0016:** The Board, at its twenty fifth meeting, requested the Meth Panel to prepare a draft consolidated methodology based on approved methodology AM0006 and AM0016. It also requested the Meth Panel to take into account the public comments received, in response to a call for inputs launched by the Board at its twenty fourth meeting, and similarly the input by an expert on the approved methodologies AM0006 and AM0016, as agreed by the Board at its twenty-fourth meeting.

(a) The Meth Panel prepared a draft consolidated methodology as contained in annex 10 and further recommended the withdrawal of the approved methodologies AM0006 and AM0016.

(b) The two members involved in the preparation of the draft consolidated methodology are to receive a one-day fee each.

F. Response to deviations

15. The Meth Panel, at its twentieth meeting, considered the request for deviation of the applicability conditions of the approved methodology AM0013, where information was not available to prove that the retention time in the lagoon was at least one year. As during the twenty first meeting, due to lack of adequate information, the response could not be concluded.

16. The Meth Panel considered a further request for deviation concerning AM0013. Based on information provided by the project participant that the waste water was withdrawn from the anaerobic lagoon every few days for irrigation purposes, well before the design hydraulic retention time of 38 days, the Meth Panel recommended as a conservative estimate that 50% of the COD added to the anaerobic lagoon be considered as degraded anaerobically, i.e., the AD factor in the methodology should be assigned a value of 0.5.

G. Procedures for request for revision of methodology

17. In response to the request for revision of the approved methodology AM0029, requesting the inclusion of the name of project participant in the source section of the methodology, the Meth Panel clarified that the information provided in the 'source' section of an approved methodology is based on information included in the CDM-PDD section titled "**Date of completion of the application of the baseline study and monitoring methodology and the name of the responsible person(s)/entity(ies)**" of draft CDM-PDD as submitted by project participants when proposing a new methodology.

18. The Meth Panel agreed to request the Board to clarify that only the information provided in the above mentioned section of the CDM-PDD be included in the 'source' section of the approved methodology.

H. Draft baseline selection tool and additionality tool

19. As requested by the Board at its twenty-fourth meeting, the Meth Panel considered expert proposals on the merging of the latest version of the "Tool for the demonstration and assessment of additionality" (additionality tool) and the draft baseline decision tool (combined tool), taking into account improvements as provided in the public inputs and an analysis of the use of additionality tool in project activities, which have been registered or requested registration.

20. The Meth Panel continued its work in the developing a streamlined combined tool to account for all potential scenarios while maintaining simplicity and agreed to further work on the tool with the view to providing a final proposal to the Board at its twenty third meeting.

I. Double-counting

21. The Meth Panel considered the issue of double counting based on the discussions held at its twenty first meeting, addressed the issues raised by the Board at its twenty fourth meeting and agreed to recommend a proposal to avoid double counting in project activities using blended biofuel for energy use, as contained in annex 11.

J. Carbon dioxide capture and storage

22. The Board, at its twenty-fifth meeting, requested the Meth Panel to prepare a revised recommendation, based on review of the cases NM0167, NM0168 and SSC_038 taking into account the following:

(a) The experts review of the proposal on a carbon dioxide capture and ocean storage submission for small-scale project activities;

(b) A provision in the methodologies for adequate procedures for monitoring the actual volume of CO₂ in the reservoir to ensure that emission reductions are real and measurable;

(c) A provision to ensure project boundary not be limited to the injection site of captured CO₂, but includes the complete physical boundary of the reservoir to ensure monitoring of the seepage from the reservoir; and

(d) The affect of corrosivity of CO₂ on seepage from reservoir.

23. The Meth Panel prepared a revised recommendation in accordance with guidance by the Board, as contained in annex 12.

24. The four members involved in the preparation of the recommendation to the Board are to receive a one-day fee each.

K. Definition of terms for CDM project activities under a programme of activities

25. The Board, at its twenty-fifth meeting, requested the Meth Panel to prepare options and implications of the questions raised in the table of issues and in particular to prepare a list of options for definitions (i.e. bundle and a programme), boundary, monitoring, additionality, crediting period (i.e. staggered) and approaches to address a large project bundle and guidance for bundling. The Board also requested the Meth Panel to take into account the public comments received in preparing its recommendation to the Board for consideration at the next meeting of the Board.

26. The Meth Panel agreed to recommend a proposal on definitions to distinguish between a “bundle”, a “programme” and a “policy” as well as alternative definitions of a “programme” as contained in annex 13. The Meth Panel agreed to further work on the implications of each definition on the various methodological components as well as validation, registration and verification of such project activities.

27. The Meth Panel noted that the words “programme” and “policy” are widely used, where various COP decisions or recommendations by the Board on the CDM have referred to “project

activities”, “policies” and “bundles”. Decision 7/CMP.1 refers to “project activities under a programme of activities”. The UNFCCC refers to both “programmes” and “policies”. This different wording implies that a “programme” is different from a “policy”, “project activity” and “bundle”. However, in some cases it can be difficult to differentiate between e.g. a programme and a bundle, or a programme and a policy. Further, not all these terms have been defined in the UNFCCC context.

28. The Meth Panel’s discussion highlighted several important issues, as listed below:

(a) The current decision text in 7/CMP.1 is open to different interpretations and should be clarified.

(b) Definitions have already been agreed for “project activity” and “bundle” (in the context of SSC). The Meth Panel agreed to recommend to keep the definition of “project activity” unchanged, and to add to the already-agreed definition of “bundle”.

(c) Definitions are required for “programme of activities” and “policy” as various definitions can have very different impacts on the scope of possible “programmes” and the potential level of non-additional emission reductions credited as a result of the registration of programmes of activities under the CDM. Furthermore definitions should be consistent with guidance given by the Board on policies and regulations in the baseline scenario. The Meth Panel therefore agreed to request the Board provide clarification with regard to decisions relating to the implementation of 7/CMP.1, in particular:

(i) whether implementing:

- a policy or a standard can be eligible under the CDM, and if so, whether this holds for all policies (including mandatory policies or standards); or
- enforcing a policy or a standard can be eligible under the CDM, and if so, whether this holds for all policies (including mandatory policies or standards).

(ii) whether a programme of activities:

- that implements a policy or standard can be eligible under the CDM (risk of perverse incentives versus risk of free riders);
- that measurably accelerates the enforcement of a policy or standard can be eligible under the CDM (risk of perverse incentives versus risk of free riders).

L. Methodological tools

29. The Meth Panel considered proposals for three methodological tools, viz., first order decay method for estimating methane emissions from waste disposed in landfill sites; estimation of combined margin emission factor for an electricity grid; and estimation of methane flare efficiency.

(a) The Meth Panel agreed to further work on the tools, viz: estimation of combined margin emission factor for an electricity grid and the methane flare efficiency.

30. The Meth Panel agreed to recommend the draft Methodological Tool to determine methane emissions avoided from dumping waste at a solid waste disposal site, as contained in annex 14. The draft Tool also contains two options for further consideration by the Board:

(a) Option 1: credit emission reductions for waste disposed during the year y , at end of year $y+1$, which is consistent with the IPCC 2006 guidelines.

(b) Option 2: credit emission reductions for waste disposed during the year y , at end of year y , which is consistent with the formulae in the current approved version of the methodology AM0025.

31. The approach of the Tool is based on the approved methodology AM0025, with parameters used in the equation to estimate baseline methane emissions, updated in accordance with the 2006 IPCC Guidelines for National Greenhouse Gas Inventories. The Meth Panel also noted that the new parameters, may increase or decrease the calculated emissions, depending on the composition of the waste.

32. The Meth Panel agreed to propose methodological tools as methodological elements to facilitate the development of new proposed methodologies and to ensure consistency among methodologies. These tools may be referred to in methodologies, in a similar way to references to the “tool for assessment and demonstration of additionality”.

(a) The two members involved in the preparation of the methodological tool are to receive a one-day fee each.

M. Methodological tool for emissions from cultivation of Biomass

33. The Meth panel observed, while considering proposed new methodologies for project activities where biomass is produced within the project activity either for power generation or for production of biofuels, that emissions related to cultivation of biomass are not consistently treated across the proposed new methodologies. The Meth Panel agreed to initiate work on the preparation of a tool for estimation of emissions from cultivation of biomass.

34. The Meth Panel also agreed to develop draft guidance for consideration of shift of pre-project activities outside the project boundary.

N. Work on afforestation and reforestation

35. The Board, at its eighteenth meeting, requested the Meth Panel to nominate a representative of the panel to participate in the meetings of the A/R WG in order to ensure consistency between methodology recommendations.

36. The Meth Panel thanked Mr. Lambert Richard Schneider for his dedicated work in this regard and elected Mr. Braulio Pikman to continue the good work, as the representative of the Meth Panel in the A/R WG.

O. Postponed agenda items

37. The Meth Panel postponed the following agenda items to the next meeting due to time constraints: (i) the use of IPCC carbon emission values for fuels; (ii) proposal on leakage from replacement of old equipment; (iii) proposal on the consideration of upstream emissions; (iv) proposal on the consideration of CDM projects in the estimation of emissions factors; (v) draft

guidance on the reasons for consolidations and revisions of approved methodologies (vi) a report prepared by an expert on addressing uncertainty in the estimation of emission reductions.

P. Roster of experts

38. 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 under round 15.

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

39. The Meth Panel confirmed that its twenty-third meeting will be held from 9 - 11 October 2006, comprising of three formal days. Further, the Meth Panel scheduled its twenty fourth meeting for 27 November - 1 December 2006.

40. Due to the close proximity (four weeks) of the next (twenty third) meeting of Meth Panel, the Meth Panel exceptionally recommended that technical clarifications to preliminary recommendations proposed at the Meth Panel at the twenty second meeting, be considered only at its twenty fourth meeting and not as per the procedures for submission and consideration of proposed new methodologies.⁵

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⁵ Paragraph 17(e) of Procedures for submission and consideration of proposed new methodologies states: "If project participants provide clarifications related to the preliminary recommendation by the Meth Panel, the Meth Panel shall consider these clarifications **at its next meeting** and prepare its final recommendation to the Executive Board."

External annexes to the twenty - second meeting of the Meth Panel

Annex 1: Draft reformatted baseline and monitoring methodology based on NM0135

Annex 2: Draft reformatted baseline and monitoring methodology based on NM0140-rev

Annex 3: Draft reformatted baseline and monitoring methodology based on NM0145

Annex 4: Draft reformatted baseline and monitoring methodology based on NM0146

Annex 5: Draft reformatted baseline and monitoring methodology based on NM0147

Annex 6: Draft reformatted baseline and monitoring methodology based on NM0163

Annex 7: Draft revision to AM0025

Annex 8: Draft revision to AM0027

Annex 9: Draft revision to AM0028

Annex 10: Draft reformatted consolidated baseline and monitoring methodology based on AM0006 and AM0016

Annex 11: Draft guidance on double counting in project activities using blended biofuel for energy use

Annex 12: Draft recommendation based on review of the cases NM0167, NM0168 and SSC_038

Annex 13: Draft proposal on definitions to distinguish between a bundle, a program and a policy as well as alternative definitions of a program

Annex 14: Draft Tool to determine methane emissions avoided from dumping waste at a solid waste disposal site
