

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

UNFCCC Headquarters, Bonn, Germany
24 - 28 September 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 29¹ recommendation
NM0181-rev: Introduction of a new primary district heating system - Houma District Heating project, Shanxi Province, P.R.C., as contained in annex 1.	A
NM0197-rev: India – Accelerated Chiller Replacement Program.	WIP² (see paragraph 7)
NM0202-rev: AzDRES Power Plant Energy Efficiency and Change in fuel mix.	WIP (see paragraph 8)
NM0203-rev: Energy efficiency improvements of Pucheng Power Plant	Preliminary Recommendation

¹ Recommendations to the proposed new methodologies from the twenty-ninth 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 Work in progress implies that the deliberations on these methodologies could not be concluded at the twenty-ninth meeting of the Meth Panel. These cases will be further considered before providing a recommendation to the Board.

Cases	MP 29¹ recommendation
through retrofitting turbines in China.	
NM0208: Afam Integrated Gas and Power (AIGP) project	WIP (see paragraph 9)
NM0209-rev: Reduction in GHGs emission from primary aluminium smelter at Hindalco, Hirakud India, as contained in annex 2.	A (see paragraph 10)
NM0212: SF ₆ Switch at Dead Sea Magnesium.	WIP
NM0216-rev: Improved electrical energy efficiency by open slag bath operations in ferroalloy production (Highveld Vanadium-Iron Smelter Energy Efficiency Project).	WIP
NM0222: Conversion of SF ₆ to the Alternative Cover Gas SO ₂ in Magnesium Production in China	WIP
NM0224: Bio-diesel from Crude Palm oil and Jatropha Oil	C
NM0225: Replacement of OPC with Supplemental Cementitious Material for production of Concrete at L&T Ready Mix Concrete plants	Preliminary Recommendation
NM0226: Fuel switching from naphtha to natural gas at grid-connected power generation facility of GIPCL, in Vadodara, Gujarat, as contained in annex 3.	A (consolidated in ACM0011)
NM0227: Recovery of vented gas at the «Guneshli» oil field in Azerbaijan	WIP
NM0228: AGRESCO Biodiesel Project, as contained in annex 4.	A (integrated with AM0047)
NM0229: Metrobus Insurgentes, Mexico City	Preliminary Recommendation
NM0230: Recovery and Utilization of CO ₂ from Refinery Tail Gas	Preliminary Recommendation
NM0231: Waste heat utilization for charge pre-heating in sponge iron manufacturing process at HKMPL, India	WIP

7. The panel discussed the case NM0197-rev (India - Accelerated Chiller Replacement Program) and noticed that the proposed new methodology is presented as a methodology for a Programme of Activities (PoA) and not for a project activity. The present guidance by the Board on PoA requires the use of an approved methodology for a CDM Programme Activity (CPA) in the POA. The proposed new methodology presents procedures for demonstration of additionality, identification of baseline scenario, estimation of emissions, etc for a POA. This may run counter to the guidance on PoA, which requires the identification of baseline scenario and estimation of emissions to be carried out for each CPA using an approved methodology. The panel agreed to seek further guidance from the Board on whether a methodology for POA can be approved, before concluding its consideration of the case NM0197-rev.

8. The panel considered the case NM0202-rev and agreed to continue its deliberations on the case, with a view to concluding discussions at its next meeting. One of the key issues in the proposed new methodology is the nature of the project activity. The methodology is proposed for a project activity, which comprises a number of measures, including repair of existing equipment, in an existing power plant where in the past proper maintenance and operation procedures have not been undertaken. The proposed methodology does not demonstrate additionality of each individual measure carried out as part of the project activity. Furthermore, the estimated emissions reductions are attributed to the whole set of measures under the project activity and not to individual measures undertaken as part of the project activity. The panel will continue to consider the procedures for assessing and demonstrating additionality, as well as the procedures to estimate emissions reductions for project activities covered under NM0202.

9. In considering the case NM0208, which is for project activities that supply electricity to the grid where there is a significant off-grid capacity in the country that could be affected by the project power plant, the panel observed that in order to develop a widely applicable methodology for countries which may have significant off-grid capacity, it would require considerable information on the electricity supply systems, types of off-grid sources and databases on off-grid sources, etc. The panel also noted that the project participants have made considerable efforts in answering the issues raised. The panel agreed to solicit further expertise to undertake an analysis of the situation in order to identify ways of addressing the concerns raised and other outstanding issues. The panel was of the view that given that there is potentially significant off-grid capacity in a number of non-Annex I countries, further work will be useful to enable the recommendation of a widely applicable methodology.

10. The Meth Panel recommended for Board's approval the draft methodology, based on case NM0209-rev, as contained in annex 2, for project activities that deal with technological upgrade of primary aluminum production. The panel was of the view that additionality for such project activities should be demonstrated through investment analysis. The panel reasoned that though the technological upgrade is not a common practice in the host country, in most of other countries this kind of project activity could be considered as common practice in the sector. The panel considers this case to be exceptional. Taking into account the Board's guidance that all the options for demonstrating additionality should be available to project participants, the panel recommended the approval of this methodology with one of the following options:

- (i) Use investment analysis to demonstrate additionality; or
- (ii) Use the "Tool for demonstration and assessment of additionality" to demonstrate additionality.

C. Clarifications and requests for revisions of approved methodologies

11. 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/MPprev>, 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 29 recommendation.
AM_CLA_0050	ACM0010 (Ver. 02):	Requirement for emissions reductions when aerobic treatment	Clarified
AM_CLA_0051	AM0025 Ver. 08)	Request for clarification with regard to applying K factors and sludge	Clarified (see paragraph 19)
AM_CLA_0052	ACM0010 Ver. 2	Clarification on applicability of methodology to projects where there is no existing anaerobic manure treatment system functioning	Clarified
AM_CLA_0053	ACM0010 Ver. 02	Calculation of methane emissions from AWMS where gas is captured	Clarified
AM_CLA_0054	ACM0002 Ver 06	Types of capacity additions to be included in the BM.	Clarified
AM_CLA_0055	AM0039	Clarification on the use of local values for degradable organic carbon (DOC _j) and decay rates (k _j) for waste types that are not sufficiently characterised by default values	Clarified
AM_CLA_0056	AM0039	Baseline emissions calculation with reference to 2006 IPCC Guidelines for National Greenhouse Gas Inventory.	Clarified (see paragraph 12)
AM_CLA_TOOL_0001	Tool for avoided methane	Consideration of Empty Fruit Bunches (EFB) as wood waste or food waste	Clarified (see paragraph 19)
AM_CLA_TOOL_0002	Additionality Tool	Inclusion of other baseline alternatives than project activity without CDM in benchmark analysis and clarification on costs and revenues to be considered	Clarified

Revision number	Approved Methodology	Title of the request for revision	MP 29 recommendation
AM_REV_0055	ACM0003 Ver. 04	The proposed revised methodology will expand ACM0003/ ver. 04 scope to include projects that source biomass from dedicated plantations as an alternative fuel	Revise (see paragraph 15)
AM_REV_0056	AM0036 Ver. 01	Addition of renewable power generation	Not to Revise
AM_REV_0057	AM0051	Revision to AM0051 to simplify the practical application of methodology and clarify some points in the existing methodology.	Revise (see paragraph 14)
AM_REV_0058	AM0043 Ver 05	Amendment to include leak reduction from a natural gas distribution grid by replacing old steel pipes with polyethylene pipes, Version 2.	Revise (see paragraph 13)
AM_REV_0059	ACM0012	Revision to apply approved methodology to increase waste pressure/heat recovery for power generation where existing facilities already use a share of pressure/heat in electricity generation process.	Not to Revise
AM_REV_0060	ACM0008 Ver. 03	Revision to ACM0008 version 03 to allow practical application of the methodology to catalytic oxidation of ventilation air methane and to clarify some points in the existing methodology.	Revise (see paragraph 16)
AM_REV_0061	AM0034 Ver.03	Expanding the applicability conditions of AM0034 including the production of caprolactam and the use of NSCR devices (in the baseline scenario) besides the abatement technology implemented in the project activity.	Not to Revise
AM_REV_0062	ACM0006 Ver. 06	Proposal of new scenario for efficiency project activities.	Not to Revise

D. Revision of approved methodologies and methodological tools

12. **AM0039:** The panel recommended the revision of the approved methodology in response to the request for clarification AM_CLA_0056. The draft revision refers to the use of the “Tool to determine methane emissions avoided from dumping waste at a solid waste disposal site”. The draft revised approved methodology is contained in annex 5.

13. **AM0043:** The panel recommended the revision of the approved methodology in response to the request for revision AM_REV_0058. The draft revision expands the applicability of the approved methodology to project activities that replace old steel pipes with polyethylene pipes. The present version of the approved methodology is applicable to project activities that replace cast iron pipes with polyethylene pipes. The draft revised approved methodology is contained in annex 6.

14. **AM0051:** The panel recommended the revision of the approved methodology in response to the request for revision AM_REV_0057. The draft revision also allows measurement of N₂O in the flue gases after the secondary catalyst (catalyst inserted in the reaction chamber to destroy N₂O) at a location further down the production chain as compared to directly beneath the secondary catalyst as per the present version. The draft revised approved methodology is contained in annex 7.

15. **ACM0003:** The Meth Panel recommended a revision of the approved consolidated methodology ACM0003 in response to the request for revision AM_REV_0051. The draft revision expands the applicability of the approved methodology to project activities that source biomass, used as an alternative fuel in cement production, from dedicated plantations, which are grown on land that has been used for agriculture prior to the project implementation. The draft revision also removed the applicability condition “irrigation is not used in producing biomass”. The draft revised approved methodology is contained in annex 8.

16. **ACM0008:** The Meth Panel recommended a revision of the approved consolidated methodology ACM0008 in response to the request for revision AM_REV_0060. The draft revision expands the applicability of the approved methodology to project activities that flare the ventilation air methane using catalytic oxidation. The draft revised approved methodology is contained in annex 9.

17. **ACM0010:** The Meth Panel recommended a revision of the approved consolidated methodology ACM0010 in response to the request for clarification AM_CLA_0053. The draft revision clarifies: (i) the definition of “number of animals”; and (ii) the default value of methane leakage from a digester which applies to the total biogas produced and is accordingly adjusted for its use in equation estimating methane generation from digester. Furthermore, in line with the mandate given by the Board at its thirty-second meeting the approved methodology was revised to include: the “tool to calculate project emissions from the consumption of electricity” and the “tool to calculate project or leakage CO₂ emissions from fossil fuel combustion”; and (iii) include a procedure for estimating project emissions from the consumption of electricity where electricity consumption is not measured, as per the guidance provided by the Board concerning deviation at issuance for a registered project activity. The revised version of the methodology is contained in annex 10.

18. **AM0021:** As requested by the Board at its thirty-second meeting, the panel considered a draft revision of the approved methodology. The panel agreed that the draft revision would be finalized at its thirtieth meeting, before recommending it to the Board.

19. **Tool to determine methane emissions avoided from dumping waste at a solid waste disposal site:** The Meth Panel recommended a revision of the approved methodological tool in response to the request by the Board (paragraph 29, thirty-third meeting report) and in response to

the request for clarification AM_CLA_0051. The draft revisions clarify (i) as an example that in the case of empty fruit bunches (EFB), as their characteristics are similar to wood in terms of cellulose, hemi-cellulose, and lignin content, the parameters correspondent of wood should be used, and (ii) adds sewage sludge as a possible category of waste for which the tool can be used to estimate emissions of disposed waste in a landfill. The draft revised approved methodological tool is contained in annex 11.

20. Furthermore, the panel took note of the two clarifications suggesting that empty fruit bunches (EFB) despite some similarity with wood have a higher degradability. The panel also took note of the results of experimental work, which is not peer-reviewed, submitted during the meeting, to substantiate the assertion of the project participants. The last submission could not be considered in detail due to its late submission. The panel therefore agreed to use the inputs from an expert in this field, who shall provide inputs on the degradability of the EFB taking also into account all material provided.

E. Deviation Request

21. The panel discussed the deviation requested from a project participant on the use of the approved methodology AM0018 in a registered project activity concerning the use of the largest value of SSCR (specific steam consumption ratio) for the project activity in previous months, during the issuance period, if for a particular month the production is not within 5% of the rated capacity, as required by the approved methodology. The panel recommended that project emissions from consumption of steam should be based on actual steam consumption in the project activity if for a particular month the SSCR cannot be estimated as per the procedures provided in the approved methodology.

F. Consolidated methodologies

22. Consolidated landfill gas capture and flare/use methodology: The panel considered the draft proposal, as per the mandate given by the Board at its thirty-second meeting on the consolidation of approved methodologies AM0002, AM0003, AM0010, and AM0011 with approved consolidated methodology ACM0001, which is for project activities that capture landfill gas and flare/use it. The draft consolidation, as contained in annex 12, includes all the applicability conditions of the underlying approved methodologies.

- (i) The draft revision of the consolidated methodology includes:
 - a. Alternative to use “Combined tool for identification of baseline scenario and demonstration of additionality”.
 - b. Inclusion of “Tool to determine methane emissions avoided from dumping waste at a solid waste disposal site” to estimate ex-ante methane generation from the landfill to be reported in the PDD.
 - c. Inclusion of the “Tool to calculate project or leakage CO₂ emissions from fossil fuel combustion” and “Tool to calculate project emissions from electricity consumption”; and
 - d. Expansion of the applicability of the approved methodology to project activities that use the captured landfill gas to supply to consumers through distribution network including necessary equations.
- (ii) The panel also recommended the withdrawal of the approved methodologies AM0002, AM0003, AM0010 and AM0011.

23. The Meth Panel considered the draft note prepared on the consolidation of approved methodologies, as per the mandate of the Board given at its thirty-second meeting, (i) AM0013: “Avoided methane emissions from organic waste-water treatment” and AM0022: “Avoided Wastewater and On-site Energy Use Emissions in the Industrial Sector”; and (ii) 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”, which the panel agreed to finalize at its thirtieth meeting. The panel also agreed to further investigating the possibility of expanding the consolidation of AM0013 and AM0022 to new industrial facilities where waste water would be generated.

G. Issues of general guidance

24. The Methodology panel in context of discussing the proposed new methodology NM0225, agreed to request the Board to provide guidance whether the following project activity is eligible as a CDM project activity: project activity that reduces the consumption of a raw material, which is produced outside the project boundary and where one cannot really guarantee that the raw material not used in the project activity will therefore not be produced. In such cases the emission reductions are not under control of project participants and emission reductions occur outside the project boundary.

25. The Meth Panel considered the revised draft recommendation on addressing uncertainty in the estimation of project emissions. The panel discussed the four approaches to address the uncertainty in the emission reductions estimations. The panel agreed to prepare its recommendation for consideration by the Board at its thirtieth meeting.

26. The panel agreed to seek guidance from the Board regarding a case, which was submitted during the twentieth round and is currently being pre-assessed by the panel (Green House Gas (GHG) emission reduction by use of Natural Nitrification Inhibitor coated Urea in the cropland), which was previously twice considered and rejected by the Board (NM0175 and NM0214). The submitted case is for the project activities that produce nimin coated urea fertilizer, which leads to a smaller quantity of N₂O emissions from agricultural fields than regular urea. The project activity does not include the farmers within the project boundary and only monitors the manufacture and sale of fertilizer. The methodology states that each fertilizer bag will have a survey form, which the farmers will fill out and submit to the producer. In the previous recommendation by the panel, it was clearly stated that the methodology should include the farmers in the project boundary to monitor the amount and location of application of fertilizer in the project as the panel had noted that the proposal was similar to project activities that produce biofuels, which do not include consumers in the project boundary. See Guidance on double-counting in CDM project activities using blended biofuel for energy use (EB 26, annex 12). The panel therefore agreed to seek confirmative guidance that such activities are eligible under the CDM, only if farmers are included within the project boundary and monitoring of the actual consumption and location of fertiliser used.

27. The Meth Panel discussed the issue of crediting project activities with avoided methane emissions from the stockpiling of biomass. The panel reiterated that there are only a few studies available on methane generation from stock-piling of biomass residues. These studies indicate a high variability and large spatial and temporal variations. It also noted that the stockpiles may not

continue to exist for the whole crediting period. This affects the provision of a reliable method for estimating emissions from stockpiles. In view of this the panel agreed to solicit further expert inputs in order to develop a reliable estimation method for recommendation to the Board.

H. Methodological Tools

28. The Meth Panel considered a draft tool for grid emission factors and agreed to recommend it to the Board, as contained in annex 13. The draft tool includes following elements that increase the flexibility and provide more clarity in estimating grid emissions, when compared to the approved consolidated methodology ACM0002:

- (i) Definition of “significant transmission constraints” is added;
- (ii) Alternatives are provided to estimate the grid emission factor where data on actual fuel consumption of the power plants are not available;
- (iii) Clear definition of vintage of data required in estimating the operating margin and build margin; and
- (iv) Project participants can choose between different alternatives to estimate operating margin emission factor.

29. The Meth Panel also considered the issue of including the CDM project plants in estimating the operating and build margin emission factor estimation. The panel agreed as follows:

- (i) Power plants registered as a CDM project activity shall be included in estimating the operating margin emission factor. The panel was of the view that operating margin refers to the displacement of existing plants and that may imply that even power plants registered as CDM will be affected by a new power plant.
- (ii) and further requests guidance from the Board whether sample group m to estimate build margin emission factor should include power plants registered as a CDM project activity and provided the following options:
 - a. Option A: Power plant capacity additions registered as CDM project activities should be included in the sample group m .
 - b. Option B: Power plant capacity additions registered as CDM project activities should be included in the build margin only if the set of power units in the build margin, without considering capacity additions registered as CDM project activities, would consist of power plants that have been built earlier than 10 (5) years before the submission of the CDM-PDD to the DOE.
 - c. Option C: Power plant capacity additions registered as CDM project activities should be excluded from the sample group m.

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

30. The Meth Panel confirmed that its thirtieth meeting will be held from 12 to 16 November 2007.

31. The Meth Panel reminded project participants that the deadline for the twenty - first round of submissions of proposed new methodologies is to be 19 November 2007. 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.

32. The Meth Panel also reminded the project participants that the deadline for consideration of request for revision and request for clarification at the thirtieth meeting to be held from 12 to 16 November 2007 shall be 01 October 2007, 17:00 GMT.

J. Roster of experts

33. 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 twenty-ninth meeting of the Meth Panel

- Annex 1 - Draft reformatted baseline and monitoring methodology based on NM0181-rev
- Annex 2 - Draft reformatted baseline and monitoring methodology based on NM0209-rev
- Annex 3 - Draft revision of ACM0011 to incorporate NM0226
- Annex 4 - Draft revision of AM0047 to incorporate NM0228
- Annex 5 - Draft revision to AM0039
- Annex 6 - Draft revision of AM0043
- Annex 7 - Draft revision of AM0051
- Annex 8 - Draft revision to ACM0003
- Annex 9 - Draft revision to ACM0008
- Annex 10 - Draft revision to ACM0010
- Annex 11 - Draft revision of “Tool to determine methane emissions avoided from dumping waste at a solid waste disposal site”
- Annex 12 - Draft revision of ACM0001 to include AM002, AM0003, AM0010 and AM0011
- Annex 13 - Draft tool for estimating grid emission factors