

## REPORT OF THE THIRTY-SEVENTH MEETING OF THE METHODOLOGIES PANEL

UNFCCC Headquarters, Bonn, Germany  
2 - 6 March 2009

### RECOMMENDATIONS BY THE METHODOLOGIES PANEL TO THE EXECUTIVE BOARD

#### **A. Opening of the meeting and adoption of the agenda**

1. The Chair of the Methodologies Panel (the panel), Mr. Philip Gwage opened the meeting.
2. The agenda was adopted as proposed.
3. On behalf of the panel, the Chair expressed deep appreciation to Mr. Akihiro Kuroki as the outgoing Chair of the panel for his dedication and excellent support to the panel. The Chair also welcomed Mr. Pedro Martins Barata as Vice chair and Mr. Thomas Bernheim as EB support member to the Panel.

#### **B. Consideration of proposed new methodologies**

4. The panel considered the proposed new methodologies listed in the table below, as well as desk reviews and public inputs received, where applicable.
5. The final recommendations, proposed by the panel for 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 submit clarification within a timeframe stipulated by the Chair of the panel (but not exceeding 4 weeks) shall be considered at the next meeting of the panel. If project participants do not provide clarification related to the preliminary recommendation by the panel within the timeframe of three (3) months, the case will be considered withdrawn.
7. The panel agreed on the following recommendations:

<b>Cases</b>	<b>MP 37<sup>1</sup> recommendation</b>
<b><u>NM0250</u></b> : Fès Waste Water Treatment Plant (WWTP) with sludge treatment and biogas recovery & utilization for electricity generation at Fès city, Morocco	<b>WIP (see paragraph 8)</b>
<b><u>NM0251</u></b> : South Korea SF6 capture and recycling project	<b>A</b>
<b><u>NM0258</u></b> : Metrobus Insurgentes, Mexico City	<b>Preliminary Recommendation</b>
<b><u>NM0265</u></b> : Reduction of flaring of COG through conversion into dimethyl ether to be used as fuel in Shanxi, China	<b>WIP (see paragraph 9)</b>

<sup>1</sup> Recommendations on the proposed new methodologies from the thirty-seventh meeting of the panel A (recommended for approval) and C (recommended for non-approval) are final recommendations to the Board. Preliminary Recommendations are technical clarifications requested by the panel from project participants before finalizing its recommendation to the Board.

<b>Cases</b>	<b>MP 37<sup>1</sup> recommendation</b>
<a href="#"><u>NM0266</u></a> : Mumbai Metro One, India	<b>Preliminary Recommendation</b>
<a href="#"><u>NM0267</u></a> : Shuixi Gou Coal Field Fire Extinguishing Project	<b>WIP (see paragraph 10)</b>
<a href="#"><u>NM0269</u></a> : Cambodia “Rural Electrification and Transmission Project (RETP)” 220 kV Interconnection between Cambodia and Vietnam	<b>WIP (see paragraph 11)</b>
<a href="#"><u>NM0272</u></a> : Second Interconnection Colombia - Ecuador 230 Kv	<b>WIP (see paragraph 11)</b>
<a href="#"><u>NM0278</u></a> : Use of Charcoal from Renewable Biomass Plantations as Reducing Agent in Pig Iron Mill in Brazil	<b>WIP (see paragraph 12)</b>
<a href="#"><u>NM0280</u></a> : Installation of zero energy water purifier in India	<b>WIP (see paragraph 13)</b>
<a href="#"><u>NM0282</u></a> : Usipar Pulverized Charcoal Injection Project	<b>WIP (see paragraph 14)</b>
<a href="#"><u>NM0288</u></a> : Installation of Combined Cooling Heating and Power (CCHP) systems in commercial buildings of DLF Building - 10, Gurgaon, India	<b>WIP (see paragraph 15)</b>
<a href="#"><u>NM0290</u></a> : Reduction of greenhouse gas emissions from landfill sites improved to be in semi-aerobic conditions	<b>C</b>
<a href="#"><u>NM0292</u></a> : Highly efficient power plant fuelled with blast furnace gas at TKCSA, in Rio de Janeiro, Brazil	<b>WIP (see paragraph 16)</b>
<a href="#"><u>NM0293</u></a> : Mitigation of Methane Emissions in the Charcoal Production of Arcelor Mittal, Brazil	<b>Preliminary Recommendation</b>
<a href="#"><u>NM0294</u></a> : Avoidance of landfill gas emissions by in-situ aeration of landfills	<b>Preliminary Recommendation</b>
<a href="#"><u>NM0295</u></a> : Installation of an energy-saving ironmaking plant in the northern part of Vietnam	<b>WIP (see paragraph 17)</b>
<a href="#"><u>NM0296</u></a> : Partial conversion of feedstock from coal to natural gas feedstock conversion for the large-scale manufacture of synthesis gas at Sasol Synfuels at the Secunda facility in South Africa	<b>C</b>
<a href="#"><u>NM0297</u></a> : Carbon dioxide and methane emissions avoidance from Block-C, Central Kalimantan	<b>WIP (see paragraph 18)</b>
<a href="#"><u>NM0298</u></a> : Solar water heating in South Africa	<b>C</b>
<a href="#"><u>NM0299</u></a> : Reducing losses of SF6 in electricity transmission and distribution equipment manufacturing by Hyosung Inc	<b>C</b>

8. The panel requested the Board to take note that it received the expert inputs required to address issues related to emissions of N<sub>2</sub>O and CH<sub>4</sub> associated with the operation of aerobic wastewater treatment plants and final disposal of sludge concerning the case NM0250. The panel considered these inputs but was not able to conclude on a final recommendation and agreed to further consider the case at its next meeting.

9. The panel requested the Board to take note that it could not conclude its consideration of the case NM0265. The panel considered that further work is required on a reformatted version of the methodology to simplify the procedure and equations for the estimation of baseline and project emissions. The panel intends to conclude its consideration of the case at its next meeting.
10. The panel requested the Board to take note that it received and considered an expert input on the case NM0267 in relation to the identified issue of permanence. The panel considered that permanence of emissions reductions resulting from the proposed type of the project activity cannot be ensured. The panel therefore requested the Board to provide guidance on the issue of permanence. A note prepared by the panel on the issue of permanence in relation to the cases NM0267 and NM0297 is contained in annex 2.
11. The panel requested the Board to take note that it could not conclude its consideration of the cases NM0269 and NM0272. The panel considers that further work is required on merging both proposals in a single consolidated methodology and on addressing other issues, including: (a) how to ensure that energy transferred between the two countries is not re-exported to a third country; (b) how to ensure the accuracy/conservativeness of CM based approach for the determination of the emission factor of the exporting/importing grid.
12. The panel requested the Board to take note that it could not conclude its consideration of the case NM0278 due to unresolved issues relating to baseline emissions calculation and baseline scenario selection, and a requirement of consistency checks. The panel intends to conclude its consideration of the case at its next meeting.
13. The panel requested the Board to take note that it could not conclude its consideration of the case NM0280 due to unresolved issues, including: (i) the purpose of formation of baseline sampling group which is not monitored in the crediting period, (iii) uncertainty about determination of some methodological factors, (iv) issues related to sampling plan and (v) baseline emission calculations. The panel intends to conclude its consideration of the case at its next meeting.
14. The panel requested the Board to take note that it could not conclude its consideration of the case NM0282 due to unresolved issues, including: (i) lack of procedure to ensure the renewable origin of biomass used in the charcoal plant where charcoal residue is sourced and (ii) lack of threshold value of charcoal residue in the production of charcoal. The panel intends to conclude its consideration of the case at its next meeting.
15. The panel requested the Board to take note that it could not conclude its consideration of the case NM0288 due to unresolved issues, including: (i) complexity of the methodology due to many scenarios defined, (ii) inconsistency between the baseline scenarios and baseline emissions equations and (iii) calculation of baseline emissions. The panel intends to conclude its consideration of the case at its next meeting.
16. The panel requested the Board to take note that it could not conclude its consideration of the case NM0292 due to the following issues: (i) applicability conditions; (ii) cap on the amount of waste gas generated in the industrial facilities; and (iii) procedure to determine the efficiency of the baseline power plant.
17. The panel requested the Board to take note that it could not conclude its consideration of the case NM0295 due to unresolved issues, including: (i) appropriateness of regression analysis of fifty mini blast furnaces to determine the baseline emission factor, (ii) unclear procedure for the determination of the emission factor of the carbon fed and (iii) plausible baseline scenario of using scrap in place of iron nuggets manufactured by the project activity. The panel agreed that an expert input on some of these issues is required. The panel intends to conclude its consideration of the case once the expert input is available.

18. The panel requested the Board to take note that it identified an issue relating to permanence of emission reductions resulting from the proposed project activity in case NM0297. The panel therefore requested the Board to provide guidance on the issue of permanence. A note prepared by the panel on the issue of permanence in relation to the cases NM0267 and NM0297 is contained in annex 2.

### C. Requests for clarification on and revision to approved methodologies

19. The panel recommended the Board to take note of the following responses to requests for clarification related to the application of approved baseline and monitoring methodologies and methodological tools and approve the following responses to requests for revision to approved methodologies. Two requests for clarification were processed prior to the panel meeting in accordance with the fast-track procedure.<sup>2</sup> The requests submitted and the responses provided by the 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 revision/clarification that resulted in a recommendation by the panel to revise an approved methodology are reflected in section D below.

Number of the request for clarification	Approved methodology	Title of the request for clarification	MP 37 response
<a href="#">AM CLA 0084</a>	ACM0015	Meth applicability to greenfield projects	<b>WIP</b> (see paragraph 20)
<a href="#">AM CLA 0125</a>	ACM0008	Request for clarification regarding requirement to conduct investment comparison analysis to demonstrate additionality	<b>Clarified and revised</b> (see paragraph 25)
<a href="#">AM CLA 0139</a>	ACM0006	Clarification for the applicability of the scenario 12 of the methodology related to baseline units	<b>Clarified</b> (fast track)
<a href="#">AM CLA 0140</a>	ACM0013	Clarification on unit balance for Baseline Emission Factor	<b>Clarified and editorially revised</b> (fast track see paragraph 26)

<sup>2</sup> In accordance with the fast-track procedure, the secretariat, while preparing the draft response to a request for clarification, may assess that the clarification is simple enough and does not require the panel's consideration. In this case the secretariat forwards the proposal to two appointed members for early consideration. If both the appointed panel members agree to the draft proposal within two days, the secretariat seeks the approval of the Chair of the panel within one day and upon endorsement forwards the final response to the DOE and posts it on the UNFCCC CDM web page for methodology clarifications.

<b>Number of the request for revision</b>	<b>Approved methodology</b>	<b>Title of the request for revision</b>	<b>MP37 response</b>
<a href="#"><u>AM REV 0106</u></a>	<b>ACM0006</b>	Inclusion of additional scenario for cogeneration projects with a combination of biomass and fossil fuel heat generation in the baseline	<b>Not to revise</b>
<a href="#"><u>AM REV 0109</u></a>	<b>AM0009</b>	AM0009 v3-rev “Recovery and utilization of gas from oil wells that would otherwise be flared or vented”	<b>To revise (see paragraph 22)</b>
<a href="#"><u>AM REV 0118</u></a>	<b>ACM0006</b>	Inclusion of a new scenario for project activities that are a combination of energy efficiency, capacity expansion and fossil fuel substitution	<b>To revise (see paragraph 24)</b>
<a href="#"><u>AM REV 0125</u></a>	<b>AM0014</b>	Revision of AM0014 to include new energy users and multiple fuels	<b>WIP (see paragraph 21)</b>
<a href="#"><u>AM REV 0126</u></a>	<b>AM0014</b>	Revision to extend AM0014 to include newly developing facility	<b>WIP (see paragraph 21)</b>
<a href="#"><u>AM REV 0133</u></a>	<b>ACM0015</b>	Revision is proposed to modify the applicability conditions of the availability of alternative material for clinker manufacturing in order to improve the use of the amount of AMC that in project activity conditions shall be stored or not be used in any case	<b>To revise (see paragraph 27)</b>
<a href="#"><u>AM REV 0135</u></a>	<b>ACM0006</b>	Expansion of ACM0006 to include a new scenario	<b>Not to revise</b>
<a href="#"><u>AM REV 0136</u></a>	<b>AM0036</b>	Revision for new boilers and sourcing of biomass residues outside the project region	<b>Not to revise</b>
<a href="#"><u>AM REV 0137</u></a>	<b>AM0058</b>	Revision for baseline definition for power plant and baseline emissions from electricity generation	<b>Not to revise</b>

20. The panel requested the Board to take note that it further considered the application of ACM0015 to greenfield cement plants in the context of the request for clarification AM\_CLA\_0084. The panel discussed options for procedures to estimate parameters for greenfield projects. The panel will start working on revising the methodology. .

21. The panel requested the Board to take note that it could not conclude its discussions on the requests for revision AM\_REV\_0125 and AM\_REV\_0126 on AM0014 due to a number of changes to be addressed in this very old methodology, along with the submitted requests for revision. The panel intends to conclude the revision to AM0014 at its next meeting.

#### **D. Revision to approved methodologies**

22. **AM0009:** The panel recommended the Board to approve the revision to the approved methodology made (i) in response to a part of the request for revision AM\_REV\_0109 and (ii) as a result of a thorough overall review of this methodology by the panel. The draft revision: (1) expands the scope of the methodology by allowing the use of gas coming to the surface from gas-lift systems; (2) modifies the project activity diagram; (3) adjusts the table for emission sources in the project boundary section; (4) includes provisions to identify plausible alternative baseline scenarios for the oil and gas infrastructure needed and gas-lift system for the relevant scenario; (5) simplifies the procedure to calculate baseline emissions; (6) neglects project emissions related to gas leaks, venting and flaring during the recovery, transport and processing of the recovered gas; (7) eliminates the leakage emissions section; and (8) eliminates the uncertainty assessment section. The draft revised approved methodology is contained in annex 3.

23. **AM0034:** The panel recommended the Board to approve the editorial revision to the approved methodology in response to EB45 request arising from a request for deviation. The revision includes the use of *in-situ* analyser for the monitoring of N<sub>2</sub>O concentration as a part of Automated Measuring System (AMS). The revision also changes the title of annex 1. The draft editorially revised approved methodology is contained in annex 4.

24. **ACM0006:** The panel recommended the Board to approve the revision to the approved consolidated methodology to include scenario 22 in response to the request for revision AM\_REV\_0118. The new scenario is applicable to project activities that involve the replacement of an existing biomass residue fired cogeneration plant by a new biomass residue fired cogeneration plant, which is operated next to (an) existing fossil fuel fired cogeneration plant(s) co-fired with minor quantity of biomass residues. The replacement increases the power generation, heat generation and the biomass residue firing capacity. In the absence of the project activity, the existing biomass residue plant would also be replaced by a new biomass residue fired power plant (referred to as “reference plant”), however, this reference plant would have a lower efficiency of electricity generation than the project plant e.g. by using a low-pressure boiler instead of a high-pressure boiler. The draft revised approved methodology is contained in annex 5.

25. **ACM0008:** The panel recommended the Board to approve the revision to the approved methodology made in response to the request for clarification AM\_CLA\_0125. The revision incorporates the provision to facilitate the use of the latest approved version of the “Tool for the demonstration and assessment of additionality”. The current version 05 of the methodology does not allow the use of benchmark analysis as a part of investment analysis of the tool, even in cases when the baseline scenario is use of electricity from the grid. In such cases EB41 guidance recommends the use of benchmark analysis as a part of investment analysis. The draft revised approved methodology, which reflects the EB guidance, is contained in annex 6.

26. **ACM0013:** The panel recommended the Board to approve the editorial revision to the approved methodology made in response to the request for clarification AM\_CLA\_0140. The draft editorial revision corrects error in the units and unit conversion factor from GJ to MWh in equations. The draft editorially revised approved methodology is contained in annex 7.

27. **ACM0015:** The panel recommended the Board to approve the revision to the approved methodology made in response to a part of the request for revision AM\_REV\_0133. The draft revision includes a more conservative and simpler option in the project emissions section. The panel also recommends the Board not to approve a part of request in AM\_REV\_0133 which intends to modify the applicability condition removing the quantification (1.5 times) of AMC surplus and includes provision to discount emission reductions in cases where AMC availability is not surplus. The draft revised approved methodology is contained in annex 8.

#### **E. Requests from the Board to the panel**

28. **AM0033:** The panel requested the Board to take note that it discussed the EB45 request related to AM0033, arising from a request for registration of a project activity. AM0033 was withdrawn and merged in ACM0015 in 2007. The panel agreed to handle this request within the currently considered revision of ACM0015 (see paragraph 27).

29. **AM0034:** The panel requested the Board to take note that it discussed the EB45 request related to AM0034 arising from a request for deviation. The panel agreed to editorially revise the methodology by including the in-situ analyser for the monitoring of N<sub>2</sub>O concentration in the monitoring section (see also paragraph 23).

30. **AM0047:** The panel requested the Board to take note that it did not discuss the revision to AM0047 as expert inputs on the issues relating to emission factors from changes in soil carbon stocks following a land use change or a change in management of the land were not available by MP 37. The panel intends to continue its consideration of this case once the required expert inputs become available.

31. **ACM0001:** The panel requested the Board to take note that it discussed the EB45 request on ACM0001 arising from a request for issuance. The panel was not able to finalise its consideration and agreed to continue its work on the issue in its next meeting.

32. **ACM0005:** The panel requested the Board to take note that it discussed the EB43 request related to ACM0005 arising from a request for deviation. The panel agreed not to revise the methodology to incorporate the proposed alternative procedures for the measurement of clinker and gypsum. The panel recommended to maintain the direct measurement method proposed in the methodology. The panel came to this conclusion due to the following reasons: (i) It is possible to measure gypsum and clinker directly for any cement production CDM project activity without much difficulty as measurement systems are available in the market. (ii) There are many uncertainties involved in the approach suggested for the deviation: (a) the factor proposed for conversion of raw meal to clinker is uncertain as it depends on the lime characteristics, which can vary substantially, for example, as stated in the project specific case, it is difficult to select from the several values between 1.44 and 1.56 for this conversion factor; (b) the SO<sub>3</sub> balance method for determination of gypsum to be added may be a good quality indicator, however it may not provide a conservative value of additive for the purpose of determining the emission reductions. This is because, though the maximum gypsum to be added to cement can be determined based on maximum SO<sub>3</sub> content permitted in cement, the actual quantity added may be difficult to estimate accurately and may give rise to potential for gaming.

33. **ACM0006:** The panel requested the Board to take note that it continued its work on the overall revision of ACM0006. This work includes the development of three separate methodologies that will cover, respectively, project activities that involve power generation only, heat generation only and cogeneration. These three methodologies will replace ACM0006 in order to provide project proponents with a more user-friendly set of methodologies that cover the same types of project activities as currently covered by ACM0006. The panel will further report on this issue as progress is made.

34. **ACM0006:** The panel requested the Board to take note that it discussed the EB45 request related to ACM0006 arising from requests for deviation. The panel recommended not to revise ACM0006 to introduce alternative method of the estimation of bagasse consumption other than direct monitoring. If project proponents wish to have other monitoring methodologies included for biomass measurements, they can propose a revision to ACM0006 in accordance with the Procedure for Revisions of Approved Methodologies. In terms of guidance on the proposed methods of estimation of bagasse (as the specific requests for deviation are for sugar mills), the panel considers that the weighing of bagasse is the preferred solution as per the methodology. However, the panel considers the proposed options for calculating bagasse are acceptable as a temporary solution, for example if the weighing equipment fails for a certain period. Given the temporary nature of the solution, the period to be allowed for monitoring of bagasse using these methods should be maximum 6 months. To ensure conservativeness, the proposed solutions should only be used when the derived estimate is conservative (to be verified by DOE) as it is clarified for two approaches as follows: (i) Approach 1, based on material balance of sugar cane, added water and extracted juice, is deemed to overestimate the amount of bagasse and would be conservative if more bagasse leads to less CERs, (for example, it is applicable to the scenarios of ACM0006, where more bagasse results in lower project efficiency and hence in less CERs), (ii) Approach 2, which relies on the steam raising ratio, is deemed to underestimate the amount of bagasse and would hence be conservative if less bagasse would result in less CERs.

#### **F. Issues of general guidance and tools**

35. **Tool for determination of moisture content of a stream containing water vapour and residual or combustion gases:** The panel requested the Board to take note that it could not conclude the development of the draft tool. The panel considered that further work is required to expand its scope to include the calculation of greenhouse gas emissions, once the moisture is determined. The panel intends to finalise the preparation of the tool at its next meeting.

36. **Methodological aspects of projects activities where a grid-connected power plant partially or fully displaces off-grid generation capacity.** The panel further considered the development of methodological approaches to estimate emissions reductions for grid-connected power plants that partially or fully displace off-grid generation capacity. The panel will continue its work on this issue next meeting and will further report as progress is made.

37. **Terms of Reference of the Methodologies Panel.** As requested by the Board at its 44th meeting, the panel prepared a draft revision to the Terms of Reference of the Methodologies Panel to reflect the current procedures and operation of the panel. The panel requested the Board to approve the draft revised Terms of Reference as contained in annex 9 to the report.

38. **CMP.4 decision “Further Guidance relating to the CDM”.** The panel requested the Board to take note that it discussed the sections of CMP.4 decision relating to methodologies and additionality and identified specific actions to be taken to assist the Board in implementing this decision.

39. **Improvements to the process.** The panel requested the Board to take note that it discussed various proposals for improvement of the process of consideration of methodological issues aiming at improving quality of and consistency between approved methodologies; speeding up consideration of methodological cases; and enhancing efficiency of operation of the panel and the secretariat. The panel agreed to finalise a list of concrete and prioritised actions for improvement of the methodological process at its next meeting.

40. **Project activities involving public transport systems.** The panel requested the Board to take note that it discussed methodological issues related to public transport systems and agreed that further expertise is required to help the panel solve a number of technical issues that arise in



such types of projects. The panel also agreed that, due to the complexity of the issues raised, an institution rather than individual experts should be hired to carry out this task. Therefore, the panel requests the Board to consider the possibility of engaging an expert institution to coordinate and carry out an extensive work in this area.

**G. Schedule of meetings and rounds of submissions of proposed new methodologies**

41. The panel confirmed that its 38th meeting will be held from 4 - 8 May 2009, as per annex 16 of the report of the 43rd meeting of the Board.

42. The panel reminded project participants that the deadline for the 28th round of submissions of proposed new methodologies is 14 April 2009. The panel also reminded project participants that baseline and monitoring methodologies could be submitted at any time prior to this deadline.

43. The panel also reminded project participants that the deadline for submission of requests for revision and requests for clarification to be considered at the 38th meeting to be held from 4 - 8 May 2009 shall be 23 March 2009, 24:00 GMT. Further information is available at <https://cdm.unfccc.int/methodologies/PAmethodologies/Revisions/index.html> and <https://cdm.unfccc.int/methodologies/PAmethodologies/Clarifications/index.html> respectively.

**H. Roster of experts**

44. The panel noted the satisfactory completion of the desk reviews undertaken for the proposed new methodologies considered at the meeting.

**Annexes to the external report of the thirty-seventh meeting of the Methodologies Panel**

Annex 1 - Draft reformatted baseline and monitoring methodology based on NM0251

Annex 2 - Note on permanence of emission reductions

Annex 3 - Draft revision to AM0009

Annex 4 - Draft editorial revision to AM0034

Annex 5 - Draft revision to ACM0006

Annex 6 - Draft revision to ACM0008

Annex 7 - Draft editorial revision to ACM0013

Annex 8 - Draft revision to ACM0015

Annex 9 - Terms of reference of the Methodologies Panel