REPORT OF THE FORTY-EIGHTH MEETING OF THE METHODOLOGIES PANEL

Langer Eugen, UN Campus, Bonn, Germany

7 - 11 March 2011

RECOMMENDATIONS BY THE METHODOLOGIES PANEL TO THE CDM 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. On behalf of the panel, the Chair expressed deep appreciation to the outgoing Chair Mr. Lex de Jonge.

2. The panel welcomed Mr. Paulo Manso and Mr. Thomas Bernheim, the CDM Executive Board members to support the Chair and Vice-Chair.

3. The agenda was adopted as proposed.

B. 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 CDM Executive Board (the 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. Provided these are received within four weeks then the preliminary recommendations shall be reconsidered at the next meeting of the panel. If project participants do not provide clarifications related to the preliminary recommendation within a timeframe of three months, the case will be considered withdrawn.

7. The panel agreed on the following recommendations:

Table 1: Proposed new methodologies

Proposed new methodology	Recommendation[1]
NM0302: Emission reductions in the cement production facilities of Holcim Ecuador S.A.	**C**
NM0328: Energy efficiency and fuel switching measures in new buildings	**WIP (see paragraph 8 (a))**
NM0330: Substitution of Fluorinated Compound (FC) gases for cleaning Chemical Vapor Deposition (CVD) reactors in the semiconductor industry	**WIP (see paragraph 8 (b))**
NM0331: Displacement of Traditional Cement Production with the Use of Low-GHG Cement Substitutes	**C**

[1] Recommendations on the proposed new methodologies from 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 to project participants before finalizing its recommendation to the Board.

NM0332: PFCs emission reduction from installation of an abatement device in a semiconductor manufacturing facility	**Preliminary recommendation**
NM0333: Avoidance of landfill gas emissions by passive aeration of landfills	**Preliminary recommendation**
NM0334: Installation of high efficient technology for power transmission	**Preliminary recommendation**
NM0335: PFC emission reduction by gas replacement in the process of CVD cleaning in semiconductor production	**Preliminary recommendation**
NM0336: Introduction of a new, natural gas fired combined cycle power plant for supplying heat (for space and water heating and heat for cooling) to a district heating system and electricity to a power grid	**C**
NM0337: Replacement of fossil fuel fired heaters with biomass residue fired heaters	**WIP (see paragraph 8 (c))**
NM0338: Methodology for GHG emission reductions using advanced electric arc furnace integrated with high-efficiency shaft-type scrap preheater	**Preliminary recommendation**
NM0339: N_2O abatement in New Capacity nitric acid plants	**WIP (see paragraph 8 (d))**
NM0340: N_2O abatement in New Nitric Acid Plants	**WIP (see paragraph 8 (d))**
NM0341: Mitigation of methane emissions from charcoal production by recovering and burning carbonization gases	**Preliminary recommendation**
NM0342: Grid connection of isolated electricity system	**C**

8. The panel requested the Board to take note that it could not conclude its consideration of the following proposed new methodologies:

(a) NM0328 “Energy efficiency and fuel switching measures in new buildings”, where further feedback from the project participants is needed on issues concerning: (i) different approaches used in the estimation of baseline and project refrigerant emissions; (ii) the lack of clarity on the location of measurement of chilled water temperature; (iii) the lack of clarity on whether the geothermal energy sources can be used to supply chilled water or hot water to single buildings; (iv) the appropriateness of applying an average carbon intensity in equations 22 and 52;

(b) NM0330 “Substitution of Fluorinated Compound (FC) gases for cleaning Chemical Vapor Deposition (CVD) reactors in the semiconductor industry”, where further discussion is needed on: (i) the conservativeness of the baseline; (ii) the monitoring procedures;

(c) NM0337 “Replacement of fossil fuel fired heaters with biomass residue fired heaters,” where further discussion is needed on issues concerning: (i) the project activity, (ii) determination of the baseline emission factor; (iii) determination of the efficiency of heaters;

(d) NM0339 “N_2O abatement in New Capacity nitric acid plants” and NM0340 “N_2O abatement in New Nitric Acid Plants”, where the panel requires further analysis on selection of the emission factor for the calculation of the baseline emissions.

C. Development of new methodologies and tools

9. The panel requested the Board to take note that it could not conclude its consideration of the draft "Tool to determine project emissions from freight transport". The panel intends to conclude the development of this tool at its forty-ninth meeting, taking into account the feedback received on the proposed approach during a practitioners workshop on CDM transportation methodologies, held in Bonn on 3 March 2011.

10. In response to the request contained in paragraph 23 of the report from fifty-eighth meeting of the Board, the panel considered the outcome of the practitioners workshop on the draft "Tool for baseline scenario identification and baseline emission calculations" and agreed to make recommendations to the Board as contained in annex 7.

D. Revisions of approved methodologies and tools

11. The panel requested the Board to take note of the following responses to requests for revision related to the application of approved baseline and monitoring methodologies and methodological tools. The requests submitted and the responses provided by the panel are made publicly available on the UNFCCC CDM website at <http://cdm.unfccc.int/methodologies/PAmethodologies/revisions> and <http://cdm.unfccc.int/methodologies/PAmethodologies/tools-revisions>.

Table 2: Requests for revision

Number of the request for revision	Approved methodology or tool	Title of the request for revision	MP response
REV_TOOL_0001	**Tool to calculate the emission factor for an electricity system**	Revision of the Tool to calculate the emission factor for an electricity system to account for cases where the majority of electricity is imported from foreign countries into a host country	**To amend (see paragraph 21)**
AM_REV_0197	**AM0063**	Revision of AM0063 for applicability to new industrial facilities/integrated complex	**WIP (see paragraph 16)**
AM_REV_0202	**AM0028**	Revision of AM0028 to expand applicability to thermal decomposition of N2O version 5	**To amend (see paragraph 13)**
AM_REV_0203	**ACM0002**	Revision to extend applicability of ACM0002 to concentrated solar power plants (CSP)	**Not to revise**
AM_REV_0204	**ACM0007**	Revision to extend applicability of ACM0007 to integrated Solar Combined Cycle Power Plants	**Not to revise**
AM_REV_0205	**AM0029**	Revision of AM0029 to incorporate Combined Cycle Gas Turbine plants fitted with an extraction-type steam turbine, where, as well as generating electricity, a portion of the steam may be extracted to provide heat	**Not to revise**

AM_REV_0206	**ACM0003**	Use of the methodology ACM0003 for project activities involving partial substitution of fossil fuels with alternative fuels or less carbon intensive fuels in lime manufacture	**To amend (see paragraph 18)**
AM_REV_0207	**ACM0012**	Baseline addition covering projects that increase significantly the use of vented waste heat (project) combined with a smaller amount of waste heat already used for captive heat (baseline), generating electricity in a new project	**Not to revise**

12. AM0001 "Incineration of HFC 23 waste streams"

In response to the request contained in paragraph 28 of the report of the fifty-eighth meeting of the Board, the panel requested the Board to take note that work has been started on the revision of this methodology. Key aspects for the revision have been identified and the panel intends to seek additional technical expertise on this matter. As requested by the Board, the panel will report on its progress to the Board at its sixty-first meeting.

13. AM0028 "Catalytic N_2O destruction in the tail gas of Nitric Acid or Caprolactam Production Plants"

In response to the request for revision AM_REV_0202, the panel recommended the Board to approve an amendment of this methodology to broaden the applicability allowing thermal decomposition of N_2O. The draft amended methodology is contained in annex 1.

14. AM0031 "Baseline methodology for bus rapid transit projects"

In response to the request contained in paragraph 21 of the report of the forty-ninth meeting of the Board, and taking into account inputs received during a practitioners workshop on CDM transportation methodologies the panel identified key areas for the improvement and simplification of the methodology, including the demonstration of additionality, the calculation of leakage emission sources and the monitoring provisions. The panel requested the Board to take note that it will continue the consideration of the revision at its forty-ninth meeting.

15. AM0055 "Baseline and monitoring methodology for the recovery and utilization of waste gas in refinery facilities"

Based on an agreement by the panel at its forty-sixth meeting to revise the approved methodology AM0055, the panel requested the Board to take note that it finalized a draft revision to this methodology. The draft revision simplifies the procedures for calculating baseline emissions by eliminating the requirement to measure the baseline efficiency and by providing two simplified options to determine baseline emissions. It also addresses a comment submitted through the UNFCCC website. In accordance with paragraph 21(a) of the "Procedure for the submission and consideration of requests for revisions of approved baseline and monitoring methodologies and tools for large scale CDM projects", the Chair of the panel launched a call for public inputs on the draft revised methodology AM0055, starting on **23 March 2011**. The call will be open for 10 calendar days. The draft revised methodology is contained in annex 2.

16. AM0063 "Recovery of CO_2 from tail gas in industrial facilities to substitute the use of fossil fuels for production of CO_2"

The panel requested the Board to take note that it could not conclude its consideration of the request for revision AM_REV_0197 on AM0063 and that further discussions are needed related to, inter alia: (i) the impact on emission reductions due to extending the applicability of the methodology to Greenfield integrated chemical facilities producing intermediate gas; (ii) which baseline should apply for these type of

plants, i.e. whether benchmark emissions based on several CO_2 production plants or the emissions of existing conventional CO_2 production plant should be used. The panel expects to conclude its consideration at its forty-ninth meeting.

17. AM0090 "Modal shift in transportation of cargo from road transportation to water or rail transportation"

In response to the request contained in paragraph 22 of the report of the fifty-sixth meeting of the Board, the panel requested the Board to take note that it could not conclude its consideration of the issue. The panel will continue to consider the issue at its forty-ninth meeting taking into account the development of the draft "Tool to determine project emissions from freight transport".

18. ACM0003 "Emissions reduction through partial substitution of fossil fuels with alternative fuels or less carbon intensive fuels in cement manufacture"

In response to the request for revision AM_REV_0206, the panel recommended the Board to approve an amendment to the approved consolidated methodology ACM0003. The amendment expands the applicability of the methodology to projects allowing for fuel switch in the calcination kiln of lime manufacturing plants. The draft amended methodology is contained in annex 3.

19. ACM0007 "Consolidated methodology for conversion from single cycle to combined cycle power generation"

Based on an agreement by the panel at its forty-sixth meeting to revise the approved methodology ACM0007 , the panel recommended the Board to approve the revision to the methodology ACM0007. The revision is aimed at improving readability and consistency, expanding applicability and simplifying, specifically:

(a) Simplifying the baseline scenario selection by restricting the baseline scenarios that need to be assessed to three options;

(b) Expanding the applicability by requiring operational history data to be only available for one year instead of three years, as long as one unit at the project site has an operating history of three years;

(c) Expanding the applicability to allow for a limited amount of an alternative fuel type for auxiliary requirements;

(d) Expanding the applicability by allowing the use of exhaust heat in the operational history;

(e) Changing the baseline emissions calculation procedure to make it consistent with other fossil fuel power generation methodologies;

(f) Specifying the method for calculating leakage emissions.

The draft revised methodology is contained in annex 4.

20. "Combined tool to identify the baseline scenario and demonstrate additionality"

In response to the requests contained in paragraph 28 of the fifty-sixth meeting of the Board and paragraph 35 of the forty-eighth meeting of the Board, the panel recommended the Board to approve a revision of the tool. The tool provides examples that clarify the applicability of the tool. The draft revised tool is contained in annex 5.

21. "Tool to calculate the emission factor for an electricity system"

The panel requested the Board to take note that it could not conclude its consideration of this tool to further improve it, as requested by the Board (paras. 25 and 32 of the Boards fifty-fourth and fifty-sixth meetings). The panel will continue the consideration taking into account responses to a questionnaire on the paucity of data to calculate the grid emission factor received from 25 designated national authorities.

In response to the request for revision REV_TOOL_0001, the panel recommended the Board to approve an amendment to the "Tool to calculate the emission factor for an electricity system". The amendment allows the use of an operating margin emission factor different form zero in case of connected electricity systems located in countries other than the project host country. The draft amended tool is contained annex 6.

22. "Tool to determine baseline efficiency of thermal or electric energy generation systems"

In response to the request contained in paragraph 37 of the report of the forty-eighth meeting of the Board, the panel requested the Board to take note that the tool will be incorporated in the relevant methodologies when assessing requests for revision originated by project participants or revisions initiated by the panel, the secretariat or the Board.

23. "Tool to determine the remaining lifetime of equipment"

In response to the request contained in paragraph 25 of the report of the fiftieth meeting of the Board, the panel requested the Board to take note that the tool will be incorporated in the relevant methodologies when assessing requests for revision originated by project participants or revisions initiated by the panel, the secretariat or the Board.

24. "Tool to determine the mass flow of a greenhouse gas in a gaseous stream"

In response to the request contained in paragraph 32 of the report of the forty-seventh meeting of the Board, the panel requested the Board to take note that the panel is preparing a revision of the tool which aims to implement minor corrections and simplifications. Once this revision is finalized, the panel will start to incorporate the tool in relevant approved methodologies when assessing requests for revision originated by project participants or revisions initiated by the panel, the secretariat or the Board.

25. Methodology improvement

In response to the request contained in paragraph 21 of the report of the forty-ninth meeting of the Board, the panel requested the Board to take note that the panel analyzed 15 approved methodologies and one approved tool with the view to further improve their objectivity, applicability, usability and consistency. A list of the methodologies, including the cases which were considered by the panel as a priority, is contained in annex 8.

The panel identified several areas of improvement, including a broader use of conservative default values, further improving the clarity and objectivity of the language, the removal of minor emission sources and the expansion of the applicability. Based on this analysis, the panel agreed to initiate a revision of the following methodologies:

(a) AM0023, with the view to improve the clarity of the language, to assess the internal consistency of the methodology, to consider the use of default values and to improve the monitoring section;

(b) AM0030, with the view to broaden the applicability of the methodology and to simplify the methodology by including a benchmark approach;

(c) ACM0016, with the view to assess the consistency of the methodology and to simplify the methodology, where possible, by including the use of default values.

The panel agreed to consider initiating further revisions at its forty-ninth meeting.

E. Clarifications to approved methodologies and tools

26. The panel requested 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. The requests submitted and the responses provided by the panel are made publicly available on the UNFCCC CDM website at <http://cdm.unfccc.int/methodologies/PAmethodologies/clarifications> and <http://cdm.unfccc.int/methodologies/PAmethodologies/tools-clarifications>. If requests for clarification resulted in a recommendation by the panel to revise an approved methodology or approved tool they are reflected in section D.

Table 3: Requests for clarification

Number of the request for clarification	Approved methodology or tool	Title of the request for clarification	MP response
CLA_TOOL_0009	**Tool to calculate the emission factor for an electricity system**	Request for clarification on determination of the parameter EF grid, OM-DD,y during the first verification process, when the monitoring period is shorter than the first year of project operation	**Clarified (fast track)**
AM_CLA_0191	**AM0001**	Use of historical data if the key components of a HCFC-22 plants have been retrofitted or replaced	**WIP (see paragraph 27)**
AM_CLA_0194	**AM0029**	Clarification for the project implemented by other entity under a tendered Build, Own and Operate (BOO) Scheme AND the tender organizer/ promoter is the project participant and owns the CERs	**Clarified**
AM_CLA_0195 / CLA_TOOL_10	**Tool for the demonstration and assessment of additionality**	Clarification for the project implemented by other entity under a tendered Build, Own and Operate (BOO) Scheme AND the tender organizer/ promoter is the project participant and owns the CERs	**Clarified**
AM_CLA_0196	**AM0090**	Request for clarification regarding the cargo transportation	**Clarified (fast track)**
AM_CLA_0197	**ACM0003**	Clarification on applicability criteria 2 of ACM0003 version 07.3	**Clarified**
AM_CLA_0198	**AM0034**	Deviation request requirements for excluding abnormal campaigns from the operating condition campaigns for project activities registered under version 1, version 2, or version 3.4 of the methodology	**Clarified (fast track)**

AM_CLA_0199	**ACM0014**	Inquiry regarding the applicability of ACM0014 to a baseline scenario with covered lagoons without biogas recovery	**Clarified**
AM_CLA_0200	**AM0009**	Location of the metering points for measurement of dry gas	**Clarified (fast track)**
AM_CLA_0201	**ACM0012**	Verification of total energy supplied by the generator through summation of electricity received by the recipient plants	**Clarified (fast track)**
AM_CLA_0202 / CLA_TOOL_11	**Tool for the demonstration and assessment of additionality**	Request for clarification on Application of Barrier Due to Prevailing Practices, sub step 3 (a) (1) (c) of Annex 10, EB 39	**Clarified (see paragraph 28)**
AM_CLA_0203	**AM0029**	Lack of clarity of applicability of AM0029 Ver. 03 to combined cycle power plants utilising waste heat for public heating	**Clarified (fast track)**
AM_CLA_0204	**AM0034**	Clarification request on derivation of the moving average emission factor for the first campaign in case the date of registration of the project falls in between an ongoing campaign	**Clarified**

27. AM_CLA_0191

The panel requested the Board to take note that it could not conclude its consideration of the request for clarification AM_CLA_0191 on AM0001 "Incineration of HFC 23 waste streams", due to the ongoing revision to this methodology.

28. AM_CLA_0202 / CLA_TOOL_11

The panel requested the Board to take note that the clarification notified the project participants that the issues of first-of-its-kind and consequently the barrier due to prevailing practice, are being currently considered by the Board.

F. Other issues

29. "Guidelines on the assessment of investment analysis"

In response to the request contained in paragraph 27 of the report of the fifty-ninth meeting of the Board, the panel requested the Board to take note that work has been started and the panel intends to conclude this work at its forty-ninth meeting.

30. In response to the request contained in paragraph 51 of the fiftieth meeting of the Board regarding the assessment of options to apply sampling guidelines developed by SSC WG to large scale CDM project activities, with modifications as necessary, the panel requested the Board to take note that it will work in cooperation with the SSC WG to revise the sampling guidelines with the view to recommend one guideline that is applicable to both large scale and small scale projects.

31. M-DEV_0394: Deviation from methodology AM0009 version 04 in order to include emissions from CNG transportation by trailer after the processing facility in project emissions.

The deviation requested to allow the use of AM0009 version 04 "Recovery and utilization of gas from oil wells that would otherwise be flared or vented" for a project activity where the associated gas is compressed used to produce CNG, transported by trailers and then decompressed into dry gas and fed into a pipeline.

The panel agreed to recommend not to accept the request for deviation M-DEV0394. The request is beyond the scope of deviation as defined in "Procedures for requests to the Executive Board for deviation from an approved methodology" (annex 04 of EB 49 report), because AM0009 version 04 is not applicable to a situation where the associated gas is compressed to CNG and transported by trailers. Furthermore, the request for deviation omits the project emission sources due to energy consumed in the compression of the associated gas to CNG and subsequent decompression of the CNG to dry gas. Therefore, the panel is of the opinion that a request for revision of the methodology AM0009 version 4 should be submitted to broaden its applicability to include the project activity described in the request for deviation. The designated operational entity may note that the project participants have a choice to request a revision of the methodology AM0009 version 04 or explore the use of other approved methodologies, for example AM0077.

32. The panel requested the Board to take note that the request from the twenty-ninth SSC WG meeting, seeking consultation with the panel on the submission SSC_488 which requests a revision of AMS-III.W methodology (counter part of AM0064), to include the utilization of methane captured from new exploration boreholes, could not be considered due to time constraints. The request will be considered by the panel at its forty-ninth meeting.

33. The panel requested the Board to take note that requests contained in paragraphs 61 and 65 of the fifty-ninth meeting of the Board, could not be considered due to time constraints. The requests will be considered by the panel at its forty-ninth meeting.

G. Schedule of meetings and rounds of submissions

34. The panel confirmed that the date for its 49th meeting is 2 - 6 May 2011, as per annex 18 of the report of the fifty-ninth meeting of the Board.

35. Following the guidance contained in paragraph 5 of the "Procedure for the submission and consideration of a proposed new baseline and monitoring methodology for large scale CDM project activities", the panel considers proposed new methodologies submitted by a deadline at a subsequent meeting conditional to priorities set by the Board and by the Chair of the Meth Panel.

36. Project participants may note that the deadline for the 39th round of submission of proposed new methodologies to be considered at the forty-ninth meeting of the panel on 2 - 6 May 2011 is 21 March 2011.

37. The panel also informed project participants that the deadline for submission of requests for revision and requests for clarification to be considered at the 49th meeting to be held from 2 - 6 May 2011 shall be 21 March 2011, 24:00 GMT.

H. Desk Reviews

38. The panel noted the satisfactory completion of the desk reviews undertaken for the proposed new methodologies.

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Annexes to the external report of the forty-eighth meeting of the Methodologies Panel

Annex 1: Draft amendment to AM0028 "Catalytic N_2O destruction in the tail gas of Nitric Acid or Caprolactam Production Plants"

Annex 2: Draft revision to AM0055 "Baseline and monitoring methodology for the recovery and utilization of waste gas in refinery facilities"

Annex 3: Draft amendment to ACM0003 "Emissions reduction through partial substitution of fossil fuels with alternative fuels or less carbon intensive fuels in cement manufacture"

Annex 4: Draft revision to ACM0007 "Consolidated methodology for conversion from single cycle to combined cycle power generation"

Annex 5: Draft revision to the "Combined tool to identify the baseline scenario and demonstrate additionality"

Annex 6: Draft amendment to the "Tool to calculate the emission factor for an electricity system"

Annex 7: Recommendations based on the practitioners workshop on the draft "Tool for baseline scenario identification and baseline emission calculations"

Annex 8: List of methodologies and tools assessed by the Meth Panel for simplification and improvement