

**REPORT OF THE FIFTIETH MEETING OF  
THE METHODOLOGIES PANEL**

Langer Eugen, UN Campus, Bonn, Germany

27 June - 1 July 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.
2. The agenda was adopted as proposed.

*B. Proposed new methodologies*

3. The panel considered the proposed new methodologies listed in the table below, as well as desk reviews and public inputs received, where applicable.
4. 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>.
5. In accordance with the procedures for the submission and consideration of a proposed new methodology, project participants may submit to the secretariat, copying the DOE, clarifications to preliminary recommendations. If project participants provide the clarifications within four weeks of receiving the preliminary recommendation, then the Meth Panel considers the proposed new methodology at its next meeting. If project participants do not provide clarifications related to the preliminary recommendation within a timeframe of three months after the date of the published report of the Meth Panel meeting at which the proposed new methodology received its preliminary recommendation, the submission will be considered withdrawn.
6. The panel agreed on the following recommendations:

**Table 1: Proposed new methodologies**

Proposed new methodology	Recommendation <sup>1</sup>
<b>NM0292:</b> Highly efficient power plant fuelled with blast furnace gas at TKCSA, in Rio de Janeiro, Brazil	<b>A</b> (see paragraph 7, annex 1 and annex 7)
<b>NM0330:</b> Substitution of Fluorinated Compound (FC) gases for cleaning Chemical Vapor Deposition (CVD) reactors in the semiconductor industry	<b>A</b> (see annex 2)
<b>NM0332:</b> PFCs emission reduction from installation of an abatement device in a semiconductor manufacturing facility	<b>WIP</b> (see paragraph 8(a))

<sup>1</sup> 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 from project participants before finalizing its recommendation to the Board.

<b>NM0333:</b> Avoidance of landfill gas emissions by passive aeration of landfills	<b>A</b> <b>(see annex 3)</b>
<b>NM0334:</b> Installation of high efficient technology for power transmission	<b>WIP</b> <b>(see paragraph 8(b))</b>
<b>NM0337:</b> Replacement of fossil fuel fired heaters with biomass residue fired heaters	<b>A</b> <b>(see annex 4)</b>
<b>NM0338:</b> Methodology for GHG emission reductions using advanced electric arc furnace integrated with high-efficiency shaft-type scrap preheater	<b>WIP</b> <b>(see paragraph 8(c))</b>
<b>NM0343:</b> Methodology for RHF-based energy efficient iron-making technology	<b>WIP</b> <b>(see paragraph 8(d))</b>
<b>NM0344:</b> Introduction of a New Natural Gas Based Gas Turbine Cogeneration in Existing CHP Facilities Connected to the Electricity Grid	<b>WIP</b> <b>(see paragraph 8(e))</b>
<b>NM0345:</b> Methodology for conversion of a Combined Cycle Power Plant to an Integrated Solar Combined Cycle (ISCC)	<b>WIP</b> <b>(see paragraph 8(f))</b>
<b>NM0346:</b> Utilization of ammonia-plant off gas for heat generation	<b>WIP</b> <b>(see paragraph 8(g))</b>
<b>NM0347:</b> Biomass residue co-firing at an existing or a new boiler(s)	<b>WIP</b> <b>(see paragraph 8(h))</b>
<b>NM0349:</b> Avoidance of N <sub>2</sub> O formation by switching over to the catalytic oxidation with oxygen from oxidation with nitric acid in manufacturing of substituted benzoic acids at GIDC, Ankleshwar, India	<b>Preliminary recommendation</b>

7. NM0292 “Highly efficient power plant fuelled with blast furnace gas at TKCSA, in Rio de Janeiro, Brazil”

In response to the request contained in paragraph 20 of the report of the forty-seventh meeting of the Board, the panel requested the Board to take note that it concluded the consideration of the case NM0292 and agreed to recommend the draft methodology for approval. The panel requested the Board to take note of the information note providing an overview of the consideration of the Board’s request, as contained in annex 7.

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

- (a) NM0332 “PFCs emission reduction from installation of an abatement device in a semiconductor manufacturing facility”, as further work is needed on issues concerning: (i) by-product emissions from the abatement system; (ii) calculation of project emissions; and (iii) presentation of algorithms;
- (b) NM0334 “Installation of high efficient technology for power transmission”, due to the inability to reach a conclusion on the emission factor to be considered for the electricity saved, as a result of high efficiency transmission lines, for the purpose of calculation of the emission reductions;
- (c) NM0338 “Methodology for GHG emission reductions using advanced electric arc furnace integrated with high-efficiency shaft-type scrap preheater”, as further work is required to improve the proposed procedure to determine the benchmark emission factors;

- (d) NM0343 “Methodology for RHF-based energy efficient iron-making technology”, as further work is needed to improve the criteria for the identification of a reference plant for determination of baseline emissions;
- (e) NM0344 “Introduction of a New Natural Gas Based Gas Turbine Cogeneration in Existing CHP Facilities Connected to the Electricity Grid”, as further work is needed on issues concerning: (i) calculation of baseline emissions for heat component; and (ii) lifetime of the existing boiler;
- (f) NM0345 “Methodology for conversion of a Combined Cycle Power Plant to an Integrated Solar Combined Cycle (ISCC)”, as further work is needed on issues concerning: (i) baseline scenario and additionality; and (ii) calculation of electricity generation from solar heat;
- (g) NM0346 “Utilization of ammonia-plant off gas for heat generation”, as further work is needed on issues concerning the additionality demonstration;
- (h) NM0347 “Biomass residue co-firing at an existing or a new boiler(s)”, as further work is needed on the possible consolidation of this methodology into AM0085 “Co-firing of biomass residues for electricity generation in grid connected power plants”.

### ***C. Development of new methodologies and tools***

9. Top-down development of a draft methodology for renewable power generation in isolated systems

In response to the task of developing top-down methodologies and tools, as contained in the 2011 work plan of the panel, the panel requested the Board to take note that it has initiated its work on the development of a methodology for renewable power generation in isolated systems, with the aim of recommending a draft methodology to the Board for its consideration at the next panel meeting.

10. Top-down development of a draft tool to determine project emissions from anaerobic digesters

In response to the task of developing top-down methodologies and tools, as contained in the 2011 work plan of the panel, the panel requested the Board to take note that it considered technical advice from an external expert related to the tool. The panel intends to continue to consider the draft tool at a future meeting.

11. Top-down development of a draft tool to determine project emissions from aerobic treatment of solid waste

In response to the task of developing top-down methodologies and tools, as contained in the 2011 work plan of the panel, the panel requested the Board to take note that it considered technical advice from an external expert related to the tool. The panel intends to continue to consider the draft tool at a future meeting.

### ***D. Revisions of approved methodologies and tools***

12. 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**

<b>Number of the request for revision</b>	<b>Approved methodology or tool</b>	<b>Title of the request for revision</b>	<b>MP response</b>
<b>AM_REV_0212</b>	<b>ACM0006</b>	Inclusion of mechanical and other forms of power in the methodology	<b>WIP (see paragraph 17)</b>
<b>AM_REV_0213</b>	<b>ACM0005</b>	Consolidated Baseline Methodology for Increasing the Blend in Cement Production	<b>WIP (see paragraph 16)</b>

13. AM0023 “Leak reduction from natural gas pipeline compressor or gate stations”

In response to the task of improving approved methodologies and tools, as contained in the 2011 work plan of the panel, the panel requested the Board to take note that it finalized a draft revision of this approved methodology. The revision:

- (a) Expands the applicability of the methodology to refinery gas and other natural gas operations;
- (b) Introduces a further alternative to calculate baseline emissions based on default values;
- (c) Undertakes several editorial improvements.

In addition, one measurement method to determine baseline emissions was removed, as the method was not regarded appropriate in the context of the applicable project activities.

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 AM0023, starting on 07 July 2011. The call will be open for 10 calendar days. The draft revised methodology is contained in annex 5.

14. AM0025 “Avoided emissions from organic waste through alternative waste treatment processes”

In response to the task of improving approved methodologies and tools, as contained in the 2011 work plan of the panel, the panel requested the Board to take note that it has continued its work to improve the approved methodology AM0025. The panel intends to continue its work on the methodology at a future meeting.

15. ACM0001 “Consolidated baseline and monitoring methodology for landfill gas project activities”

In response to the task of improving approved methodologies and tools, as contained in the 2011 work plan of the panel, the panel requested the Board to take note that it has continued its work to improve the approved methodology ACM0001. The panel intends to continue its work on the methodology at a future meeting.

16. ACM0005 “Consolidated Baseline Methodology for Increasing the Blend in Cement Production”

The panel requested the Board to take note that it could not conclude its consideration of the request for revision AM\_REV\_0213 on ACM0005, as further work is needed on issues concerning: (i) how to assess a benchmark for the blending in cement, taking into consideration imports; (ii) monitoring of parameters; and (iii) adjustment of algorithms.

17. ACM0006 “Consolidated methodology for electricity and heat generation from biomass residues”

The panel requested the Board to take note that it could not conclude its consideration of the request for revision AM\_REV\_0212 on ACM0006, as further work is needed on issues concerning expanding the applicability of the methodology to include mechanical power.

18. ACM0009 “Consolidated baseline and monitoring methodology for fuel switching from coal or petroleum fuel to natural gas”

In response to the request contained in paragraph 20 of the report of the forty-sixth meeting of the Board, the panel requested the Board to take note that the panel explored the possibility of incorporating an option in the approved consolidated methodology ACM0009 to use the weighted average emission factor of multiple baseline fuels. The panel considered expert inputs on how fuel shift decisions are made in multi-fuel fired facilities, especially the impact of relative fuel prices on such decisions, and noted that the decision to shift fuels in a multi-fuel fired facility is not solely based on fuel prices. For instance, long term contracts with the fuel supplier containing pay or take provisions, quality of combustion in the facilities, impact on down-stream processes, and reliability of fuel supply may also have an impact on the decision to shift fuels. Therefore, it would not be possible to develop a simple model to predict the fuel shift decisions.

Based on the above, the panel is of the opinion that the weighted average emission factor based on the historical mix of baseline fuels does not represent the baseline situation, and a conservative approach is to use the emission factor of the least carbon intensive fuel among the baseline fuels as in case of current version of the methodology ACM0009, version 03.2.

19. ACM0013 “Consolidated baseline and monitoring methodology for new grid connected fossil fuel fired power plants using a less GHG intensive technology”

The panel requested the Board to consider an information note prepared by the panel on issues identified in the approved consolidated methodology ACM0013. The information note is contained in annex 9.

Based on the arguments presented in the above-mentioned information note, the panel recommended the Board to put the methodology on hold with immediate effect, and to initiate a revision to the methodology.

20. ACM0015 “Consolidated baseline and monitoring methodology for project activities using alternative raw materials that do not contain carbonates for clinker production in cement kilns”

In response to the request contained in paragraph 28 of the report of the fifty-third meeting of the Board concerning methodological approaches applicable to the estimation of baseline emissions for possible CDM PAs using less GHG intensive raw materials in Greenfield cement plants, the panel requested the Board to take note that it continues its work to develop the provisions required for the determination of baseline emissions for Greenfield cement plants within the context of ACM0015. The panel will seek external expertise on this matter.

21. ACM0017 “Production of biodiesel for use as fuel”

In response to the request contained in paragraph 21 of the report of the fifty-eighth meeting of the Board, the panel requested the Board to take note that the panel considered the revision of approved consolidated methodology ACM0017 with respect to exclusion of consumers from the project boundary, similarly to the approach applied in the latest version of AM0089 “Production of diesel using a mixed feedstock of gasoil and vegetable oil”, revised at the fifty-eighth meeting of the Board, and agreed that the exclusion is not appropriate in the context of ACM0017. The panel also requested the Board to take note of an information note containing the rationale for the above-mentioned opinion, as contained in annex 10.

22. “Tool to determine methane emissions avoided from disposal of waste at a solid waste disposal site”

In response to the task of improving approved methodologies and tools, as contained in the 2011 work plan of the panel, the panel requested the Board to take note that it considered technical advice related to the revision to the “Tool to determine methane emissions avoided from disposal of waste at a solid waste disposal site”. The panel intends to continue its work on the tool at its next meeting.

23. “Tool to calculate the emission factor for an electricity system”

In response to the requests contained in paragraph 25 of the report of the fifty-fourth meeting of the Board and in paragraph 32 of the report of the fifty-sixth meeting of the Board, concerning the analysis to determine if the use of ex ante dispatch analysis is suitable when compared with other methods of estimating the operating margin, the panel requested the Board to take note that it was not able to conclude its work on this issue. The panel will continue to work on the analysis requested by the Board with the view to provide a recommendation at its next meeting.

In response to the request by the SSC WG related to the approved SSC methodology AMS-I.D and concerning the classification for the intermittent and non-dispatchable nature of power generation activities and the combined margin calculation as applied in the tool, the panel requested the Board to take note of its response as contained in annex 12.

24. “Tool to assess the validity of the original/current baseline and to update the baseline at the renewal of a crediting period” - Annex 1 of the “Procedures for renewal of the crediting period of a registered CDM project activity”

In response to the requests contained in paragraph 30 and 31 of the fifty-sixth meeting of the Board and paragraph 43 of the report of the sixtieth meeting of the Board, the panel requested the Board to take note that the panel could not conclude its consideration of this matter. The panel will continue to work on the tool with the view to finalize a recommendation at its next meeting.

***E. Clarifications to approved methodologies and tools***

25. 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**

<b>Number of the request for clarification</b>	<b>Approved methodology or tool</b>	<b>Title of the request for clarification</b>	<b>MP response</b>
<b>AM_CLA_0191</b>	<b>AM0001</b>	Use of historical data if the key components of a HCFC-22 plants have been retrofitted or replaced	<b>WIP</b> <b>(See paragraph 26)</b>
<b>AM_CLA_0208</b>	<b>ACM0013</b>	Clarification on the determination of reference year v in projects applying ACM0013, Version 04.0.0 in China	<b>Clarified</b> <b>(fast track)</b>

AM_CLA_0209	ACM0012	Clarification on a) definition of cogeneration, b) combination of cogeneration and process heat and c) whether hypothetical boiler can be the baseline	<b>Clarified (fast track)</b>
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26. The panel requested the Board to take note that it could not conclude its consideration of the request for clarification AM\_CLA\_0191 on the approved methodology AM0001 “Incineration of HFC 23 waste streams”, as the revision to AM0001 is currently being considered by the Board.

#### *F. Other issues*

27. “Guidelines on the assessment of investment analysis”

In response to feedback received from stakeholders on the application of the “Guidelines on the assessment of investment analysis”, the panel requested the Board to approve a draft revision of the guidelines. The draft revision clarifies that:

- (a) In situations where the investment analysis is carried out in nominal terms, project participants can convert the real term values provided in the table contained in the appendix of these guidelines to nominal values by considering the inflation rate; and
- (b) The default values for the expected return on equity showed in the table contained in the appendix of these guidelines are calculated after taxes.

The panel also requested the Board to take note of an information note prepared by the panel that outlines the rationale for the default values provided for the cost of equity.

The draft revised guidelines are contained in annex 6 and the information note is contained in annex 8.

28. Development of standardized baselines

In response to the task of developing standardized baselines, as contained in the 2011 work plan of the panel, the panel requested the Board to take note that:

- (a) The panel further considered which approved methodologies could be used to derive standardized baselines with a view to recommend a first standardized baseline to the Board at a future meeting; and
- (b) The panel reviewed the document “Draft framework for the establishment of sector specific standardized baselines”, as contained in annex 2 of the annotations of the sixty-second meeting of the Board and as presented by the secretariat, and agreed on an information note containing remarks on the draft framework. The information note is contained in annex 11.

29. “Draft standard on consideration of suppressed demand in CDM methodologies”

The panel reviewed the document “Draft standard on consideration of suppressed demand in CDM methodologies”, as contained in annex 1 of the annotations of the sixty-second meeting of the Board, and agreed to recommend to the Board to take into account the following issues related to the document:

- (a) Poverty and inadequate supply of basic human needs is a serious issue;
- (b) The standard could provide a clear definition of the concept of suppressed demand, in line with CDM modalities and procedures;

- (c) The document could benefit from more guidance on the minimum service level, including on how data is selected and the periodicity of updates of the data;
- (d) Further specification to which areas/sectors/project types the standard is applicable could be inserted (e.g. household sector);
- (e) Whether a geographical and social limitation (e.g. LDCs) is needed for the application of the standard;
- (f) The concept of suppressed demand has been implemented implicitly and explicitly in some approved large-scale and small-scale methodologies, hence it is important that any new guidance on suppressed demand considers the impact it may have on existing methodologies.

The panel also recommended the Board to ask for public inputs before approving the standard.

30. Review of the draft tables of calculation developed by the secretariat

In response to the task of supporting the secretariat on the development of tables of calculation for approved methodologies, as contained in the 2011 work plan of the panel, the panel requested the Board to take note that it agreed to initiate the assessment of a calculation table for the “Tool to calculate the emission factor for an electricity system” with a view to finalize the assessment at its next meeting.

#### ***G. Schedule of meetings and rounds of submissions***

31. The panel confirmed that the date for its 51st meeting is 15 to 19 August 2011, as per annex 29 of the report of the sixtieth meeting of the Board.

32. 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.

33. Project participants may note that the deadline for the 41st round of submissions of proposed new methodologies to be considered at the fifty-first meeting of the panel on 15 to 19 August 2011 was 6 June 2011, the deadline for the 42nd round of submissions of proposed new methodologies to be considered at the fifty-second meeting is 8 August 2011.

34. The panel also informed project participants that the deadline for the submission of requests for clarification to be considered at the fifty-first meeting of the panel to be held from 15 to 19 August 2011 is 18 July 2011, 24:00 GMT, and the deadline for the submission of requests for revision to be considered at the fifty-first meeting of the panel to be held from 15 to 19 August 2011 was 4 July 2011, 24:00 GMT.

#### ***H. Desk Reviews***

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



**Annexes to the external report of the fiftieth meeting of the Methodologies Panel**

- Annex 1: Draft reformatted baseline and monitoring methodology based on NM0292;
- Annex 2: Draft reformatted baseline and monitoring methodology based on NM0330;
- Annex 3: Draft reformatted baseline and monitoring methodology based on NM0333;
- Annex 4: Draft reformatted baseline and monitoring methodology based on NM0337;
- Annex 5: Draft revision of AM0023 “Leak reduction from natural gas pipeline compressor or gate stations”;
- Annex 6: Draft revision of the “Guidelines on the assessment of investment analysis”;
- Annex 7: Information note on NM0292 “Waste gas based combined cycle power plant in a Greenfield iron & steel plant”;
- Annex 8: Information note on the Default values for equity return for CDM projects;
- Annex 9: Information note on ACM0013;
- Annex 10: Information note on the consideration of excluding consumers from project boundary in case of ACM0017 (Production of biodiesel for use as fuel);
- Annex 11: Information note on remarks on the “Draft framework for the establishment of sector specific standardized baselines”;
- Annex 12: Draft response to the request for revision SSC\_486.

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