REPORT OF THE SEVENTEENTH MEETING OF THE METHODOLOGIES PANEL

UNFCCC Headquarters, Bonn, Germany 6-9 September 2005

I. RECOMMENDATIONS BY THE METHODOLOGIES PANEL TO THE EXECUTIVE BOARD

A. Opening of the meeting and adoption of agenda

1. The Meth Panel adopted the agenda as proposed.

2. The Meth Panel expressed its deep appreciation to the outgoing member, Ms. Sujata Gupta, for her outstanding work and encouraged her to continue to share her expertise as desk reviewer.

B. Consideration of proposed new methodologies

3. The Methodologies Panel (Meth Panel) considered the following proposed new methodologies:

NM0045-rev2: Birla Corporation Limited: CDM project for Optimal Utilization of Clinker
NM0047-rev: Indocement's Sustainable Cement Production Project - Blended Cement Component
NM0066: Coalmine Methane Utilization Project at Nanshan Mine, China
NM0076-rev: Chile: Chacabuquito 26 MW Run-of-River Hydropower Project
NM0078-rev: Conversion of single-cycle to combined cycle power generation in Ghana
NM0075: Pansan coal mine methane utilisation and destruction
NM0079-rev: Taishan Huafeng Cement Works Waste Heat Recovery and Utilisation for Power
Generation Project
NM0082-rev: Khon Kaen fuel ethanol project
NM0090: Organic Waste Composting at the Matuail landfill site Dhaka, Bangladesh
NM0092-rev: Transalloys Manganese Alloy Smelter Upgrade and Energy Efficiency Project in South
Africa
NM0093: Fuxin Coal Mine Methane (CMM)/Coal Bed Methane (CBM) Utilization Project
NM0094: Huainan Panyi and Xieqiao Coal Mine Methane Utilization Project
NM0095: ACC New Wadi Blended Cement Project
NM0098: Nobrecel Fossil-to-Biomass Fuel Switch Project in Brazil (incorp. Biomass)
NM0102: China Jincheng Coal Mine Methane Power Generation Project
NM0105: Bus Rapid Transit System for Bogotá, Colombia: TransMilenio Phase II to IV
NM0106: Optimisation of linker use in the Ramla Cement Plant in Israel through investment in grinding
technology
NM0107: Waste Gas-based cogeneration system for power & steam generation
NM0108: Biodiesel production and switching fossil fuels from petro-diesel to biodiesel in transport
sector - 30 TPD Biodiesel CDM Project in Andhra Pradesh, India
NM0110: Mitigation of Methane Emissions in the Charcoal Production of Plantar, Brazil
NM0111: Baseline Methodology for catalytic N2O destruction in the tail gas of Nitric Acid Plants
NM0112: Increased electricity generation from existing hydropower stations through Decision Support
System optimization
NM0113: Mondi Gas Turbine Co-generation in Richards Bay, South Africa
NM0115: CO ₂ , electricity and steam from renewable sources in the production of inorganic compounds
NM0116: Reduction in Ordinary Portland Cement Consumption in Concrete mix preparation utilizing
lower cement concrete technology
NM0117: Nanjing Chemical Industries Co Ltd (NCIC) Nitrous Oxide Abatement Project
NM0118: The model project for renovation to increase the efficient use of energy in brewery
NM0119: Petrotemex Energy Integration Project
NM0120: Demand side electricity management program at Companhia Brasileira de Distribuição
NM0121: Bumbuna Hydroelectric Project
NM0122: Shell Cogeneration Project
NM0123: Substitution of raw material in cement processing
NM0124: PFC emission reductions at ALUAR Aluminio Argentino
NM0125: La Vuelta and La Herradura Hidroelectric Project

4. After considering the proposed new methodologies as well as desk reviews and public inputs received, the Meth Panel:

(a) Agreed on the **final recommendations** on proposals, NM0079-rev, NM0090, NM0092-rev, NM0107, NM0108, NM0110, NM0112, NM0113, NM00116, NM0119, NM0120, NM0122, NM0125 for the consideration of the Executive Board at its twenty-first meeting. Final recommendations will be made available in the UNFCCC CDM web site: http://cdm.unfccc.int/methodologies/PAmethodologies/publicview.html. In particular the Meth Panel:

- (i) Recommended the approval of proposals NM0079-rev and NM0090. A reformatted version of NM0079-rev and NM0090 are contained in annexes 1 and 2 to this report.
- (ii) Recommended the revision of proposals NM0107, NM0108, NM0110 and NM0112;
- (iii) Recommended to not approve NM0092-rev, NM0113, NM0116, NM0119, NM0120, NM0122 and NM0125.

(b) Agreed on **preliminary** recommendations on proposals NM0078-rev, NM0105, NM0111, NM0117, NM0118, NM0123 and NM0124. In accordance with the procedures for submission and consideration of a proposed new methodology, project participants would have the opportunity to provide technical clarifications on these preliminary recommendations. Preliminary recommendations for which project participants do not provide any clarification within the ten-day consultation period will be made available in the UNFCCC CDM web site:

http://cdm.unfccc.int/methodologies/PAmethodologies/publicview.html.

(c) Agreed to **continue considering** NM0076-rev and NM0115 at its next meeting with view to prepare a final recommendation for possible approval of the cases.

(d) Agreed that an expert review is required for NM0082-rev because of the number and type of changes included in the revised re-submitted version of this methodology. The Meth Panel will prepare a recommendation on this case at its next meeting.

(e) Agreed to defer the consideration on NM0121. The Meth Panel recognizes that the consideration of methodologies referred to the production of electricity in dams with reservoirs will require additional support from experts in order to elucidate how to determine the emissions of greenhouse gases from the reservoirs. The treatment of the methodology for case NM0121 should then be deferred until the recommendation from experts has been considered by the Meth Panel.

5. The Meth Panel also agreed on **draft consolidation baseline and monitoring methodologies** for:

(a) "Increasing the blend in cement production", based on cases NM0045-rev2, NM0047-rev, NM0095 and NM0106, as contained in annex 3 of this report.

(b) "Grid-connected electricity generation from biomass residues", based on AM0004, AM0015, NM0050, NM0098 and NM0081, as contained in annex 4 to this report.

(c) "Coal bed methane and coal mine methane capture and use for power (electrical or motive) and heat and/or destruction by flaring", based on NM0066, NM0075, NM0093, NM0094 and NM0102, as contained in annex 5 of this report.

6. **Detailed recommendations** that highlight the number and importance/seriousness of issues that need resolving for individual new methodologies are available at

<u>http://cdm.unfccc.int/methodologies/PAmethodologies/publicview.html</u>. The Meth Panel notes the continued occurrence of issues previously highlighted (in its meeting reports, as well as in the detailed methodology recommendations) as methodological problems. These include inadequacies in defining baseline scenario candidates, assessing additionality and/or uncertainty analysis, as well as a lack of

justification for key assumptions. Some new methodologies submitted also contain significant data gaps and/or errors. Further, other new methodology submissions are couched in language that is difficult to understand and/or ambiguous and/or in language too vague to be verifiable. Project developers are encouraged to pay special attention to these aspects before submitting new methodologies to the Board.

7. The Meth Panel acknowledges that case **NM0072** is still on hold awaiting a decision by the Board regarding the eligibility of policies as CDM project activities.

C. <u>Revisions of approved methodologies</u>

ACM0002: Consolidated methodology for grid-connected electricity generation from renewable sources - Version 2

8. In response to a request for revision of the consolidated approved baseline and monitoring methodologies ACM0002 by project participants, the Meth Panel agreed on recommendations in order to provide more details on the application of the ACM0002 to retrofit projects.

9. A revised version of the approved baseline and monitoring methodologies ACM0002 with changes highlighted is contained in annex 6 to this report to be considered by the Executive Board at its twenty first meeting.

ACM0001: Consolidated methodology for landfill gas project activities

AM0003: Simplified Financial Analysis for Landfill Gas Capture Projects

10. The Meth Panel agreed on recommendations to revise the approved baseline and monitoring methodologies ACM0001 and AM0003 in order to ensure consistency between these methodologies, in particular with regards to the application of adjustment factor (AF).

11. A revised version of the approved baseline and monitoring methodologies ACM0001 with changes highlighted is contained in annex 7 to this report to be considered by the Executive Board at its twenty first meeting.

12. A revised version of the approved baseline and monitoring methodologies AM0003 with changes highlighted is contained in annex 8 to this report to be considered by the Executive Board at its twenty first meeting.

AM0011: Landfill gas recovery with electricity generation and no capture or destruction of methane in the baseline scenario

13. The Meth Panel agreed to recommend that the second applicability bullet of the approved baseline and monitoring methodologies AM0011 be revised as follows: "There are no regulations *and contractual requirements* governing the landfill gas emissions".

AM0006: GHG emission reductions from manure management systems

AM0013: Forced methane extraction from organic waste-water treatment plants for grid-connected electricity supply - Version 2

AM0016: Greenhouse gas mitigation from improved animal waste management systems in confined animal feeding operations - Version 2

AM0022: Avoided Wastewater and On-site Energy Use Emissions in the Industrial Sector - Version 2

14. The Meth Panel agreed to start revising baseline and monitoring methodologies AM0006, AM00013, AM0016 and AM0022 in order to ensure consistency amongst them regarding the formulae, parameters, variables to be monitored and uncertainty treatment relating to anaerobic lagoons.

D. Forms for recommendations

15. At its nineteenth meeting the Board agreed that, in order to make more efficient use of expertise, to select one lead reviewer from among the two desk reviewers selected to consider each case; the lead reviewer is to be paid 3 days fee and the second reviewer a 2 days fee. The two reviewers should provide inputs independently.

16. In order to implement this decision by the Board the Meth Panel agreed to recommend revising the form for the recommendations by desk reviewers in two forms as contained in annexes 9 (a) and (b) to this report.

17. The Meth Panel further recommends that its recommendation form be also revised as contained in annex 10.

E. <u>Procedures for revision of approved methodologies</u>

18. In order to improve the process of revising a proposed methodology the Meth Panel recommends that the procedures for revision of approved methodologies are amended to provide for:

(a) The Meth Panel to assess, as part of a pre-assessment of a proposed new methodology, whether the proposed new methodology needs a full appraisal as new methodology or if it rather constitutes a revision of an already approved methodology and can therefore be considered in accordance with the "Procedures for the revision of an approved baseline or monitoring methodology by the Executive Board";

(b) A proposed revision to an approved methodology to be requested by project participants through a DOE using the form contained in annex 11. The Meth Panel may pre-assess the request for revision and appraise whether the proposed revision needs a full appraisal as proposed new methodology or if it rather constitutes a revision of an already approved methodology and can therefore be considered in accordance with the "Procedures for the revision of an approved baseline or monitoring methodology by the Executive Board".

F. Process for pre-screening proposed new methodologies

19. As highlighted in the report of the sixteenth meeting of the Meth Panel, the panel thinks that a thorough pre-assessment of methodologies would help to improve the quality of methodologies reviewed by external experts and the Meth Panel. It would also save time and resources – some of which are currently spent on a full assessment of poor-quality methods that have passed a brief pre-assessment exercise (which focuses on the additionality aspect of a proposed new methodology). A revised pre-assessment form, where more aspects of the proposed new methodology are pre-assessed, was recommended for approval by the Board at its twentieth meeting. More time for the pre-assessment procedure was also requested. The Meth Panel requests the Board for guidance on this issue. It recommends that the current methodology assessment procedure is changed so that a detailed pre-assessment is undertaken as per suggestions contained in the report of the sixteenth meeting of the Meth Panel (and that this is remunerated half a day).

G. Treatment of biomass in project activities

20. The Meth Panel took note of the progress in work by the afforestation and reforestation working group (AR WG) regarding the definition of renewable biomass and it will consider at its next meeting a final recommendation by the AR WG.

H. <u>Project actvities resulting in "negative emission reductions"</u>

21. The Meth Panel noted that in some cases project activities may temporarily result in "negative emission reductions", for example due to a poor performance or due to leakage effects outweighing emissions reductions. The Meth Panel therefore recommends the following general guidance on the issuance of CERs: If a project activity temporarily results in "negative emission reductions", i.e. baseline emissions minus project emissions minus leakage effects are negative, any further CERs will only be

issued when the emissions increase has been compensated by subsequent emissions reductions by the project activity. For example, if a project activity results in "negative emission reductions" of 30 tCO2e in the year t and in emissions reductions of 100 tCO2e in the year t+1, only 70 CERs are issued for the period t to t+1.

22. The Meth Panel highlights that in some exceptional cases project activities may continuously result in increases of emissions. In this case, it may not be possible to fully compensate for the increases in emissions.

I. <u>Selection of baseline scenario</u>

23. The Meth Panel initiated consideration of a draft for an optional tool to assist in selecting a baseline scenario from among a set of alternatives and agreed to finalize a recommendation on this tool at its next meeting.

J. National and regional policies

24. After further lengthy deliberations on the question of treatment of national policies in baseline methodologies, and attempts to elaborate further recommendations as requested by the Board, the Meth Panel could not reach consensus on an acceptable approach. In order to facilitate further work on this issue, and with a view to develop a recommendation to the Board, the Meth Panel agreed to analyze how existing CDM project activities consider national policies in their baseline scenarios.

K. Use of regression analysis in methodologies

25. The Meth Panel noted that several new methodologies propose using multiple regression analysis to estimate baseline emissions, project emissions, or both. The Meth Panel considers that safeguards in order to ensure conservativeness and rigor of the fitted regression model should be used. General guidance to achieve such objectives are listed below:

(a) In the process of fitting the regression, assumptions and requirements for regression models should be considered e.g. testing for multicollinearity;

(b) Independent variables that are likely to influence the dependent variable in question should be accounted for. Technical background information that may support the selection of such variables should be provided with the methodology for the review of the panel;

(c) Testing for statistical significance for all independent variables should be done. Independent variables which are statistically significant at 95% confidence level should be selected in the regression model;

(d) Prediction intervals at 95% confidence level should be quantified for any predicted value. It should be noted that the uncertainty in predictions will increase as the number of data points used in fitting the regression decreases. Therefore, it is recommended to increase the number of data points to reduce such uncertainties;

(e) When estimating baseline emissions, the lower bound of the prediction interval should be used. Conversely, the upper bound of the prediction interval should be used when estimating project emissions;

(f) If the time series data is used to fit the regression, autocorrelation should be tested. In case autocorrelation is found to be statistically significant, time series analysis should be used instead of regression.

L. Conditions of use of measurement instruments in the monitoring

26. The Meth Panel agreed that additional expertise and further analyses is required to develop draft recommendations for monitoring issues and to examine if any of the existing standards and resources (such as ISO 17025, ISO 14064, GHG Protocol, etc.) could be used effectively for this purpose. The Meth Panel will prepare a draft recommendation at its next meeting.

M. Weighting of the operating margin and the build margin in the "combined margin"

27. The Meth Panel considered an expert technical paper (contained in annex 12 to this report) and agreed to finalize recommendations on guidance on the weighting of the operating margin and the build margin in the "combined margin" at its eighteenth meeting.

N. <u>Possibility of using one CDM-PDD to submit a project activity</u> <u>that applies several methodologies</u>

28. The Meth Panel has received methodologies that propose to combine different CDM project activities, certain of them already being addressed by other approved methodologies. It is recommended to exclude from proposed new methodologies stand-alone activities that are already addressed by approved methodologies.

29. However, in order decrease transaction costs for projects developers that intend to combine several distinct CDM project activities in the same investment project on the same physical site, with the same starting date and length of crediting period, the Meth Panel suggests that the Board allows such projects developers to submit a unique CDM-PDD in which several methodologies are applied separately.

O. Roster of experts

30. The Meth Panel noted the satisfactory completion of the desk reviews undertaken for proposed new methodologies considered at the meeting as well as the desk reviews considered for submissions submitted at round 11.

-.-.-