REPORT OF THE EIGHTEENTH MEETING OF THE METHODOLOGIES PANEL UNFCCC Headquarters, Bonn, Germany 17 - 19 October 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.

B. Consideration of proposed new methodologies

2. The Methodologies Panel (Meth Panel) considered the proposed new methodologies for following cases:

NM0066: Coalmine Methane Utilization Project at Nanshan Mine, China NM0075: Pansan coal mine methane utilisation and destruction NM0093: Fuxin Coal Mine Methane (CMM)/Coal Bed Methane (CBM) Utilization Project NM0094: Huainan Panyi and Xieqiao Coal Mine Methane Utilization Project NM0102: China Jincheng Coal Mine Methane Power Generation Project NM0070: Conversion of existing open cycle gas turbine to combined cycle operation at Guaracachi power station, Santa Cruz, Bolivia NM0076-rev Chile: Chacabuquito 26 MW Run-of-River Hydropower Project NM0078-rev: Conversion of single-cycle to combined cycle power generation in Ghana NM0082-rev: "Khon Kaen fuel ethanol project " NM0105: Bus Rapid Transit System for Bogotá, Colombia: TransMilenio Phase II to IV NM0111: Baseline Methodology for catalytic N₂O destruction in the tail gas of Nitric Acid Plants NM0115: CO₂, electricity and steam from renewable sources in the production of inorganic compounds 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 NM0121: Bumbuna Hydroelectric Project NM0123: Substitution of raw material in cement processing NM0124: PFC emission reductions at ALUAR Aluminio Argentino NM0126: National Fertilizers Limited (NFL) Nitrous Oxide Abatement Project NM0127: PT Navigat Organic Energy Indonesia Integrated Solid Waste Management (GALFAD) Project in Bali, Indonesia NM0128: Modal shifting in industry for transport of product/feedstocks NM0129: Sunflower Methyl-Ester Biodiesel Project in Thailand NM0130: The Nho Que Hydropower Project NM0131: Peruvian Fuel-Switching Project

NM0132: Industrial fuel switching from petroleum fuels to natural gas without extension of capacity and lifetime of the facility where barriers to switching exist.

3. 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, NM0076-rev, NM0078-rev, NM0105, NM0111, NM0115, NM0117, NM0118, NM0123, NM0124, NM0128,

for the consideration of the Executive Board at its twenty-second meeting. Final recommendations will be made available in the UNFCCC CDM web site: <<u>http://cdm.unfccc.int/methodologies/PAmethodologies/publicview.html</u>>. In particular the Meth Panel:

- Recommended the approval of proposals NM0076-rev, NM0111, and NM0115. The reformatted versions of NM0076-rev and NM0115 are contained in annexes 1 and 2 to this report. The reformatted versions of the case NM0111 will be prepared at the next meeting of the Meth Panel;
- (ii) Recommended approval of the consolidated baseline and monitoring methodologies for:
 - "Conversion from single cycle to combined cycle power generation", which is based on case NM0078-rev and on elements of the case NM0070, as contained annex 3 to this report;
 - "Coal bed methane and coal mine methane capture and use for power (electrical or motive) and heat and/or destruction by flaring", which is based on proposed new methodologies NM0066, NM0075, NM0093, NM0094 and NM0102, as contained in annex 4 of this report. The Meth Panel acknowledges that this consolidated methodology is not applicable to open cast mines and abandoned mines and welcome proposed new methodologies for such project activities. Such new methodologies may use part of the current consolidated methodology;
- (iii) Recommended **the revision of proposals** NM0105, NM0117, NM0118, NM0123, NM0124;
- (iv) Recommended to **not approve** NM0128;

(b) Agreed on **preliminary** recommendations on proposals NM0082-rev, NM0129, NM00126 and NM0127. 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:

<<u>http://cdm.unfccc.int/methodologies/PAmethodologies/publicview.html</u>>;

(c) Agreed to continue **deferring the consideration on cases NM0121 and NM0130**. The Meth Panel stressed 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 cases NM0121 and NM0130 is deferred until the recommendation from experts is available;

(d) Agreed to recommend that **cases NM0131 and NM0132 are consolidated in approved methodology AM0008**: "Industrial fuel switching from coal and petroleum fuels to natural gas without extension of capacity and lifetime of the facility". The Meth Panel will finalize this consolidation at its nineteenth meeting with a view to prepare a recommendation for the consideration of the Board at its twenty-third meeting.

4. Detailed recommendations are available in the UNFCCC CDM web site at <<u>http://cdm.unfccc.int/methodologies/PAmethodologies/publicview.html</u>>.

C. <u>Clarifications for approved methodologies</u>

5. The Meth Panel considered the following requests for clarifications related to the application of approved baseline and monitoring methodologies:

(a) AM0002: "Assessment of actions taken to close out CAR related to noncompliance with AM0002" (SGS UKL);

(b) AM0002: "Request to vary monitoring period and monitor flare efficiency by reference to temperature of combustion" (SGS UKL);

(c) AM0008: "Applicability of AM0008 to power generation" (SGS-UKL);

(d) ACM0004: "Request for guidance on definition of captive electricity generation" (SGS UKL);

(e) ACM0002 ver 2/AMS-I.D: "Determination of relevant electricity grid boundaries in India – state grid vs. regional grid vs. national grid" (Tuev Sued);

(f) ACM0003: "Clarification of scope for ACM0003" (DNV-CUK).

6. The requests and clarifications provided are made publicly available at the UNFCCC CDM web site at http://cdm.unfccc.int/methodologies/Clarifications. Clarifications that implied a recommendation by the Meth Panel to revise an approved methodology are reflected in the section D. below.

7. The Meth Panel noted a request for clarification of ACM0001 ver.1, ACM0002 ver. 2 and AM0015 on "Step 0 of the tool for the demonstration and assessment of additionality" (DNV-CUK). The Meth Panel was not able to address this request which was submitted after the deadline of 6 weeks for consideration of the Meth Panel. It will however prepare a response to this query at its next meeting. Since this request for clarification was previously submitted directly to the Board, the Board may wish to consider the request for clarification at its twentysecond meeting.

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

AM0002: Greenhouse gas emission reductions through landfill gas capture and flaring where the baseline is established by a public concession contract

8. In response to two requests for clarifications and revision of the approved baseline and monitoring methodologies AM0002 by project participants, the Meth Panel agreed on recommendations for revision as contained in annex 5 to this report.

9. The first request was for the revision of the methodology to allow for estimating flare efficiency based on combustion temperature and not the methane content of the exhaust gases. Although the request was not approved since no clear methodology was presented, it highlighted the need for a revision of the methodology since flare efficiency was not included in estimating project emissions.

10. The second request was to allow for requesting verification and certification for a period of less than 1 year. The proposal suggested by the project proponent would require a complex adjustment to correct for CERs at the end of the year. The Meth Panel proposes another simplified approach to allow for more flexibility which accommodates the needs of this request as well as for other project proponents.

AM0025: Avoided emissions from organic waste composting at landfill sites

11. In response to a request from project participants to clarify that the approved baseline and monitoring methodologies of AM0025 also apply to organic waste composting that happens outside the landfill sites, the Meth Panel agreed to recommend that the title of AM00025 is amended as follows: "Avoided emissions from organic waste through composting".

ACM0002: Consolidated methodology for grid-connected electricity generation from renewable sources --- Version 3

12. Where the application of ACM0002 does not result in a clear grid boundary, given the many country-specific variations in grid management policies, DNAs are suggested to define an unambiguous delineation of grid boundaries, so that for a given project, the choice of grid boundaries is clear. Where DNA guidance is not available, the following boundaries are recommended:

(a) In large countries with layered dispatch systems, such as India, the regional grid definition should be used. A state/provincial grid definition may in many cases be too narrow given significant electricity trade among states/provinces that might be affected, directly or indirectly, by a CDM project activity. In the presence of significant inter-state/provincial transmission capacity, a regional grid definition represents an imperfect but reasonable default;

(b) In other countries, the national (or other largest) grid definition should be used by default.

13. The Meth Panel recommends that this guidance should be included as a revision to ACM0002.

ACM0003: Emissions reduction through partial substitution of fossil fuels with alternative fuels in cement manufacture

14. A DOE requested to clarify whether the approved baseline and monitoring methodologies of ACM0003 allow the use of non-biogenic carbon such as rubber tyres, plastics and mixed municipal waste.

15. The Meth Panel clarified that this methodology was developed for the use of zero emissions alternative fuels only and recommends that the first bullet of applicability conditions of the methodology is changed as follows: "Fossil fuel(s) used in cement manufacture are partially replaced by *renewable energy sources*, including renewable biomass or biomass residues *where they are* in surplus and leakages in other uses of the renewable biomass or biomass residues will not occur".

16. Project developers are welcome to propose a revision to this methodology in order to consider other types of alternative fuels.

ACM0006: Consolidated methodology for grid-connected electricity generation from biomass residues

17. The Meth Panel took note of the request by the Board to revise the approved consolidated baseline and monitoring methodologies ACM0006 in order to expand it to cogeneration plants using condensing cum extraction turbines. A revised version of ACM0006 shall be prepared for discussion of the Meth Panel at its nineteenth meeting with a view to prepare a recommendation for the consideration of the Board at its twenty third meeting.

18. In addition, in response to a query by project participants, the Meth Panel will prepare a recommendation, based on a proposal by the project participants, for further amendment of ACM0006 to make the underlying project of NM0096 fully fit with the methodology.

E. Forms for recommendations

19. In order to better address the assessment of the new section in the CDM-NMB on the renewal of crediting period the Meth Panel agreed to add a section regarding the renewal of a crediting period in its recommendation form and in the forms for the recommendations by desk reviewers.

F. Selection of baseline scenario

20. The Meth Panel continued consideration of an optional tool to assist in selecting a baseline scenario from among a set of alternatives and agreed to finalize this tool at its nineteenth meeting with a view to prepare a recommendation for the Board at its twenty third meeting.

G. Double counting

21. If both the producer and user of a GHG-friendly system are eligible to generate CDM credits there is a risk of double or triple counting of emission reductions. This could occur if producers, intermediaries (retailers, suppliers, utilities etc.) and consumers of a GHG-friendly system/product claim that it is their action that reduces GHG emissions. This could occur for several different project types, e.g.:

- (a) Production/ supply/sale/consumption of blended cement;
- (b) Production/ supply/sale/consumption of biofuels for transport;
- (c) Production/supply/sale/use of energy-efficient equipment.

22. Baseline/monitoring methodologies have already been approved by the Board for the production of blended cement and for the use of energy-efficient equipment. The issue of potential double counting was not raised in these methodologies.

23. Two methodologies currently under assessment by the Meth Panel (for the production and sale of blended biofuels for transport) could potentially give rise to double counting of emission reductions. This could happen if the underlying projects for these methodologies which involve producers, as well as other potential projects aiming to increase the consumption of biofuels in transport, both claimed credits for the same biofuel (one for producing/selling it, and the other for consuming it). However, no methodologies claiming credits for the consumption of biofuels have been approved to date.

24. Both biofuel methodologies under assessment (NM0082-rev and NM0129) suggest different means to avoid potential double counting of emissions credits. NM0082rev focuses on

ensuring that there is no conflict between individual projects. The method suggested by NM0129 focuses on eligible project types, and would limit eligibility to either supply-side or demand-side projects within a particular host country, based on a first-come first-served basis. Preliminary recommendations on these methodologies have been sent to the project participants. The Meth Panel requests guidance from the Board on the double counting aspects of these methodologies, as outlined in annex 6. In particular the panel requests clarifications on the following issues:

(a) Are the each of the two different methodological proposals suggested acceptable?; or

(b) Should there be a single agreed means of reducing double counting for biofuel projects?; or

(c) Should alternative means of avoiding potential double counting in biofuel production be developed?

H. Use of lifecycle analysis in proposed new methodololgies

25. The Meth Panel noted that some methodologies (NM0082-rev, NM0129) make use of life cycle analysis (LCAs) to calculate emission reductions. LCA tools build on a number of implicit assumptions on parameters and methodological choices, e.g. regarding the inclusion or non-inclusion of upstream and downstream emission sources, the choice of emission factors or the allocation of emissions to co-products. Therefore, project participants should not merely refer to LCAs or LCA tools to calculate emission reductions but provide all equations and assumptions underlying the calculation of emission reductions in baseline and monitoring methodologies in a transparent manner. This could be accomplished, e.g., by attaching a copy of the referenced LCA study or calculations, and flagging the relevant pages.

I. Treatment of the lifetime of plants and equipment in proposed new baseline methodologies

26. In evaluating proposed new baseline and monitoring methodologies that involve the replacement or retrofit of existing equipment of facilities, the Meth Panel observed that in many methodologies the lifetime of the existing equipment is not appropriately addressed. For example, a number of methodologies for the improvement of energy efficiency implicitly assume that the current level of energy efficiency would continue throughout the project lifetime, which may be unrealistic, as the existing equipment may need to be replaced, retrofitted or modified during the crediting period. The Meth Panel therefore recommends the additional guidance contained in annex 7 of the report.

J. <u>Preparation of a proposal on minimum criteria to be covered by methodologies proposing</u> the use of sampling

27. The Meth Panel noted that several methodologies utilize sampling to estimate some parameters used in estimating emission reductions. For example, some methodologies employ sampling to estimate waste composition used in estimating methane emissions. The Meth Panel recommends that uncertainties should be quantified for such parameters at 95% confidence level. The choice of the upper or lower bounds to be used in estimating emission reductions should be done in a manner that ensures conservativeness.

K. Inclusion / exclusion of emission sources

28. The Meth Panel recommends that in defining in baseline and monitoring methodologies which emission sources should be considered in the project boundary, in the baseline scenario

and in the calculation of leakage emissions, project participants should make conservative assumptions, i.e. the magnitude of emission sources neglected in the calculation of project emissions and leakage effects (if positive) should be expected to be equal or less than the magnitude of emission sources neglected in the calculation of baseline emissions.

L. Conditions of use of measurement instruments in the monitoring

29. A preliminary report providing an overview of the existing standards and resources (such as ISO, IEC, IPCC, EVO, ASHRAE) and their broad relevance for monitoring of CDM project activities was considered. The Meth Panel noted that further detailed analysis is required to be conducted to develop draft recommendations for monitoring issues (including measurement systems, uncertainty, calibration, traceability and costs), related to CDM project-specific parameters. Of particular concern are traditionally unmeasured substances such as HFC-23 and N₂O, for which the work will be prioritized.

30. For more common, routine parameters related to CDM project activities (such as temperature, power generation, fuel consumption, etc), existing standards and resources will be assessed to identify the most appropriate monitoring framework to be applied for the measurements.

M. Preparation of a framework on the use of OM/BM weighting

31. The Meth Panel agreed to recommend clarifications regarding the use of OM/BM weighting as contained in annex 8 to this report.

N. Follow up treatment of biomass in project activities

32. The Meth Panel took note that further work on the definition of renewable biomass will be undertaken after the AR WG has had the opportunity to prepare a recommendation on this matter.

33. The Meth Panel also took note that the Board has launched a call for inputs related to alternative methods for calculating emission reductions for small-scale project activities that propose the switch from non-renewable to renewable biomass.

O. Interactions with DOEs

34. The Meth Panel held a teleconference call with representatives of DOEs on 19 October 2005 where discussions took place regarding the initial implementation of the procedures for clarification of application of approved methodologies, pre-assessment of proposed new methodologies that DOEs could undertake voluntarily, inputs from DOEs regarding monitoring methodologies and improvement of feedback from DOEs on the verifiability of proposed new methodologies.

35. The Meth Panel recommends that, subject to availability of resources, a one day meeting to discuss issues, including those relating to monitoring, should be organized in the first quarter of 2006.

P. Roster of experts

36. 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 12.