

**REPORT OF THE FIFTEENTH MEETING  
OF THE SMALL-SCALE WORKING GROUP**

UNFCCC Headquarters, Bonn, Germany  
14 - 16 April 2008

**RECOMMENDATIONS BY THE SSC WG TO THE EXECUTIVE BOARD**

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

1. The Chair of the Small-Scale Working Group (SSC WG), Ms. Ulrika Raab welcomed the members of the working group. The Chair and the Members of the working group welcomed the new Vice-Chair Mr. Kamel Djemouai.
2. The agenda was adopted as proposed.

**B. Revision of the simplified modalities and procedures  
for small-scale CDM project activities**

3. The SSC WG considered submissions requesting revision to, or clarifications of, approved SSC methodologies as well as requests for creation of new methodologies. The detailed responses provided by the SSC WG are made publicly available at: <<http://cdm.unfccc.int/goto/SSCclar>>.

<b>Proposed new methodologies</b>		
<b>Submission number</b>	<b>Title</b>	<b>Recommendation</b>
<a href="#">SSC_163</a>	E-Diesel for Stationary or Mobile Sources	(See paragraph 10)
<a href="#">SSC_170</a>	Demand-side programs to promote high-efficiency electrical end-use technologies using deemed savings (follow-up to SSC_140)	(See paragraph 9)
<a href="#">SSC_171</a>	Promotion of natural refrigerants in air-conditioning and refrigeration systems (follow-up to SSC_151)	(See paragraph 14)
<a href="#">SSC-NM0001-rev</a>	Fugitive methane recovery from mining operations	(See paragraph 4)
<a href="#">SSC-NM0002-rev</a>	Methodology for energy efficiency improvement in industrial facilities - Generation projects	(See paragraph 6)
<a href="#">SSC-NM0003-rev</a>	Switching from High Carbon-Intensive Energy Source (HCES) to Low Carbon-intensive Energy Source (LCES) in a facility	WIP <sup>1</sup> (See paragraph 13)
<a href="#">SSC-NM0005</a>	Thermal energy from plant oil for the user of cooking stoves	(See paragraph 11)
<a href="#">SSC-NM0006</a>	Cable Cars for Public Transit	(See paragraph 12)
<a href="#">SSC-NM0007</a>	Urea offset programmes for inoculants application in soybean-corn rotations on acidic soils on existing crop land	(See paragraph 5)

<b>Requests for revisions</b>		
<a href="#">SSC_157</a>	Revision AMS III.H: methane recovery in waste water treatment	(See paragraph 8)

<b>Requests for clarifications</b>		
<a href="#">SSC_162</a>	Clarification on applicability of AMS II.D and III.B: energy efficiency and fuel switch measures taken in a facility simultaneously	(See paragraph 15)
<a href="#">SSC_164</a>	Query on Power Output to grid in hydro projects	(See paragraph 22)

<sup>1</sup> Work in progress implies that the deliberations on this methodology could not be concluded at the fifteenth meeting of the SSC WG. The case will be further considered before providing a recommendation to the Board.

<a href="#">SSC_165</a>	Modification of Methane Conversion Factors according to climate and residence time	(See paragraph 23)
<a href="#">SSC_166</a>	Query on energy efficiency measures with more than one emission reduction component	(See paragraph 24)
<a href="#">SSC_167</a>	Clarification on the use of the methodology AMS III.E for avoiding CO <sub>2</sub> emission production from biomass decay open burning through controlled combustion	(See paragraph 16)
<a href="#">SSC_168</a>	Inclusion of HFC emission reductions in the baseline under AMS II.C	(See paragraph 17)
<a href="#">SSC_169</a>	Clarification regarding the applicability of the small-scale methodology AMS II.D	(See paragraph 18)
<a href="#">SSC_173</a>	Clarification on use of AMS I.C and AMS I.D for a project using biogas from wastewater	(See paragraph 19)
<a href="#">SSC_174</a>	Clarification on the use of AMS I.C related to renewable biomass cogeneration projects that export of electricity to the grid	(See paragraph 20)
<a href="#">SSC_175</a>	Clarification regarding metering the energy produced by a sample of the systems	(See paragraph 21)

### C. Proposed new methodologies

4. **Proposal for a new type III methodology for fugitive methane recovery from non-hydrocarbon mining operations:** in response to the submission SSC-NM001-rev, the SSC WG agreed to recommend a new methodology titled “SSC III.U Methane capture and destruction in non-hydrocarbon mining activities” for project activities that capture and destroy methane released from geological structures as a direct result of non-hydrocarbon underground mineral exploration and mining activities. Abandoned or decommissioned mines, as well as open cast mines are excluded. The methodology is not applicable to mines that extract coal or oil shale, as well as boreholes or wells opened for gas/oil exploration or extraction. The recommended methodology is contained in [annex 1](#).

5. **Proposal for a new type III methodology for urea offset program for inoculant application (SSC-NM007):** in response to the submission SSC-NM007, the SSC WG agreed to recommend a new methodology titled “SSC III.A Urea offset by inoculant application in soybean-corn rotations on acidic soils on existing cropland” for project activities that substitute urea with the application of inoculants on soybean. Emissions reductions credited under the methodology are estimated as the difference in energy required for producing urea and inoculant. The recommended methodology is contained in [annex 2](#).

6. **Proposal for a new type II methodology for energy efficiency improvements in industrial facilities:** in response to the submission SSC-NM002-rev the SSC WG agreed to recommend a new methodology titled “SSC II.I Efficient utilisation of waste energy in industrial facilities” for project activities which improve the efficiency of electricity or thermal energy generation from recovered waste energy. The recommended methodology is contained in [annex 3](#).

### D. Revisions & requests for revision of approved methodologies

7. **Revision of type II methodologies:** as requested by the Board at its thirty-third meeting the SSC WG considered type II energy efficiency methodologies for proposing additional guidance. It agreed to recommend revisions to AMS II.C as contained in [annex 4](#). The proposed revisions include:

- A cap on baseline capacity/emissions and additional guidance on determination of baseline emissions;
- Guidance on consideration of electricity transmission and distribution losses;

- Further guidance on treatment of direct emissions from refrigerants.

Further, the SSC WG agreed to continue its work on the revision of other type II methodologies and make recommendations at its next meeting.

8. **Request for revision of AMS III.H (SSC\_157):** the SSC WG noted that SSC\_157 (linked to SSC 137 and SSC 108) requested a revision of AMS III.H to broaden its applicability to cover project activities that replace an open flaring system at an existing anaerobic wastewater treatment plant by an enclosed flaring system. The SSC WG agreed not to recommend the proposed revision, as the proposed default value for the flaring efficiency of the open flare in the baseline situation is not sufficiently substantiated. If an acceptable approach to identify a conservative default value can be established, a new small-scale methodology is feasible. Such a methodology can be applicable not only to wastewater treatment, but also to other biogas generating activities like landfills and animal manure management systems. A detailed response can be found at row [SSC\\_157](http://cdm.unfccc.int/goto/SSCclar) at <<http://cdm.unfccc.int/goto/SSCclar>>.

#### E. Response to request for new methodologies

9. **Proposal for a new type II methodology for demand-side programs to promote high-efficiency electrical end-use technologies using deemed savings (SSC\_170):** The SSC WG considered the inputs from the project proponents and the external expert inputs carefully and was of the opinion that the proposal represents an innovative approach that potentially can be applied to efficient lighting project activities in non-annex 1 countries. The working group also noted the following areas where further work is needed:

- There are relatively few studies available on usage of lighting technologies in non-annex I countries that cover their market effects and lifetime performance. Therefore it is difficult to identify specific values that can characterise lighting project activities in non-Annex I countries;
- The proposed approach may not be easily applied to equipment with varying current characteristics and energy consumption such as refrigerators or variable speed drives;
- Several new approaches are proposed in the submission which have implications beyond methodological issues, such as:

(a) The proposed methodology is designed for a Programme of Activities and not for a CDM project activity or CDM programme activities (CPA) under a Programme of Activities (PoA);

(b) Crediting emission reductions based entirely on estimated values provided in the annex to the methodology without any monitoring during the crediting period.

The SSC WG proposed revisions to the draft methodology submitted and agreed to share the revised version with the project proponents for their inputs before finalising its recommendation.

10. **Proposal for a new type III methodology for use of bioethanol-diesel blends in stationary or mobile applications:** SSC\_163 (linked to SSC\_155 and SSC\_124) is for project activities involving blending of bioethanol in petrodiesel for stationary or mobile applications. The cultivation of biomass to produce bioethanol and/or production of bioethanol is not included in the project boundary, as bioethanol is acquired from the market. The SSC WG agreed that there are substantive issues such as those related to the potential leakage emissions that have to be addressed. A detailed response can be found at row [SSC\\_163](http://cdm.unfccc.int/goto/SSCclar) at <<http://cdm.unfccc.int/goto/SSCclar>>.

11. **Proposal for a new type I methodology for thermal energy from plant oil for the user of cooking stoves:** SSC-NM005 is for project activities that replace fossil fuel, such as kerosene, with crude plant oil or waste oil in cooking stoves used in households or small enterprises. The cultivation of

oil seeds and production of plant oil is included in the project boundary. The SSC WG agreed to continue to consider the methodology, taking into account the relevant ongoing work on biofuel methodologies and the guidance from the Board, before making a recommendation. A detailed response can be found at row [SSC-NM005](#) at <<http://cdm.unfccc.int/methodologies/SSCmethodologies/NewSSCMethodologies/index.html>>.

12. **Proposal for a new type III methodology for Cable Car for public transit:** SSC-NM0006 is for public transport projects installing a new cable car line as part of a mass transit system, which will displace fossil fuel based transport modes including buses, cars etc. The SSC WG agreed to seek further clarifications, *inter alia*, technology improvement factor used, leakage estimations, and consideration of passenger travel distance, before finalizing its recommendation. The detailed response can be found at row [SSC-NM006](#) at <<http://cdm.unfccc.int/methodologies/SSCmethodologies/NewSSCMethodologies/index.html>>.

13. **Proposal for a new type III methodology for switching from High Carbon-Intensive Energy Source (HCES) to Low Carbon-intensive Energy Source (LCES) in a facility:** SSC-NM003 is for project activities that implement captive energy generation using low carbon intensity fuel to displace grid electricity as well as high carbon intensity fossil fuel based captive generation. The SSC WG agreed to continue considering the case and make a recommendation at the next meeting.

14. **Proposal for a new type III methodology for the promotion of natural refrigerants in air-conditioning and refrigeration systems (SSC\_171):** in response to the submission SSC\_171 (linked to SSC\_151), the SSC WG agreed to continue to consider the case and make a recommendation at the next meeting. It requested the secretariat to invite project participants to comment on the revised draft methodology being considered by the working group that is covering the servicing of equipment in the mobile air conditioning sector using natural refrigerants.

#### **F. Response to request for clarification - considered prior to the meeting<sup>2</sup>**

15. SSC\_162 requested clarification on AMS III.B in the context of a new gas based captive electricity generation unit integrated with a vapour absorption chiller being implemented to displace grid electricity. The SSC WG clarified that AMS III.B is not applicable to the component of the proposed project activity involving displacement of grid electricity. The SSC WG encouraged the project participants to explore applying AMS II.H to the proposed project activity. The detailed response can be found at row [SSC\\_162](#) at <<http://cdm.unfccc.int/goto/SSCclar>>.

16. SSC\_167 requested clarification on the applicability of AMS III.E to a project activity that combusts wood residues (e.g. sawmill waste) for energy generation that would be subjected to open burning in the baseline situation. The SSC WG clarified that AMS III.E is not applicable as CO<sub>2</sub> emissions from burning of renewable biomass are considered carbon neutral, therefore avoided CO<sub>2</sub> emissions from this source is not credited under the CDM. A detailed response can be found at row [SSC\\_167](#) at <<http://cdm.unfccc.int/goto/SSCclar>>.

17. SSC\_168 was in the context of a PoA being developed that involved replacement of inefficient, fluorinated gas-containing household refrigerators by efficient, HFC/CFC-free refrigerator. The clarifications requested were:

(a) Whether Kyoto F-gases (e.g., HFC 134a used as a refrigerant) can be included in the baseline and emission reduction calculations when applying approved methodology AMS II.C, in the case where old refrigerators exchanged under the project activity are recycled and replaced with HFC-free models.

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<sup>2</sup> Considered in accordance with paragraph 8 of annex 6 of the thirty-fourth report of the Board.

(b) Would it be possible to submit a new SSC category for household refrigerators that would include emission reductions from both energy efficiency and HFC recovery (energy efficiency would be Type II and HFCs would be Type III).

The SSC WG clarified that AMS II.C is not applicable to the component of the project activity resulting in avoidance of direct emission of refrigerants. It further clarified that the project proponents may submit a new SSC methodology for household refrigerators that would include emission reductions from both energy efficiency and avoided HFC emissions for application to CDM programme activities (CPA) under a Programme of Activities (PoA). The detailed response can be found at row [SSC\\_168](#) at <<http://cdm.unfccc.int/goto/SSCclar>>.

18. SSC\_169 requested a clarification on AMS II.D in the context of project activities that generate power from natural gas (NG) engines to displace hypothetical coal based generation in absence of the project activity as coal based generation is economically more attractive. The SSC WG took note of the fact that currently the electricity is sourced from grid and clarified that neither AMS II.D nor any other approved small-scale methodology is applicable to the proposed project activity. In this regard the project participant may wish to follow the progress of new small-scale methodology submission SSC-NM003. The detailed response can be found at row [SSC\\_169](#) at <<http://cdm.unfccc.int/goto/SSCclar>>.

19. SSC\_173 was in the context of an existing anaerobic wastewater treatment pond being converted to an anaerobic digester. Clarifications were sought:

(a) Whether AMS I.C and AMS I.D can be applied for biogas electricity/heat without using a type III methodology;

(b) Whether the use of biogas for electricity/heat is covered under AMS I.C and AMS I.D

The SSC WG clarified that AMS I.D and/or AMS I.C can be applied for biogas electricity/heat generation activities on a stand-alone basis i.e. without using a type III methodology for avoided methane emissions, as long as the project activity does not lead to increase in methane emissions. The detailed response can be found at row [SSC\\_173](#) at <<http://cdm.unfccc.int/goto/SSCclar>>.

20. SSC\_174 requested clarification regarding the surplus electricity delivered to the grid from a renewable biomass-based cogeneration project activity applying AMS I.C. The SSC WG clarified that export of surplus electricity is eligible under AMS I.C. The detailed response can be found at row [SSC\\_174](#) at <<http://cdm.unfccc.int/goto/SSCclar>>.

21. SSC\_175 was for use of AMS I.C in the context of a project activity that replaced small coal-based stoves or water heaters by biomass-fired stoves or water heaters (each unit producing less than 5 tonnes of reductions per annum). Clarifications were requested:

(a) Whether sampling methods specified under monitoring can also be used to establish the efficiency of baseline coal stoves?

(b) Can “metering” of heat generated be based on net calorific value per unit of biomass times the amount of biomass used?

The SSC WG clarified that the efficiency of the coal stoves being replaced can be based on sampling methods as specified under monitoring or based on referenced literature values. The SSC WG clarified that where the direct measurement of the heat output is not plausible, the heat output shall be estimated based on consumption of the biomass multiplied by the efficiency of the biomass stove. The detailed response can be found at row [SSC\\_175](#) at <<http://cdm.unfccc.int/goto/SSCclar>>.

### **G. Response to request for clarification - considered at the meeting**

22. SSC\_164 was in the context of metering of electricity specified under AMS I.D. The SSC WG clarified that electricity supplied by the project activity to the grid shall be cross-checked by receipt of sales, which is consistent with provisions of ACM0002. Further it clarified that data shall be recorded monthly and the project developer should measure the power output fed to the grid. A detailed response can be found at row [SSC\\_164](#) at <<http://cdm.unfccc.int/goto/SSCclar>>.

23. SSC\_165 requested clarification on whether ambient temperatures and residence time have to be considered to meet the applicability requirements of AMS III.H. The SSC WG clarified that minimum conditions to ascertain that the baseline wastewater or sludge treatment system was anaerobic, such as 30 days of retention time for the non-soluble content of the wastewater, should be met. A detailed response can be found at row [SSC\\_165](#) at <<http://cdm.unfccc.int/goto/SSCclar>>.

24. SSC\_166 requested clarification on applicability of AMS II.D to an energy efficiency project activity that reduces steam and electricity consumption of the process, where the aggregate savings exceed the small-scale threshold but individual components do not. SSC WG clarified that methodology can be applied to such situations to claim reductions from only one of the components provided both the component are included in the boundary and monitored. A detailed response can be found at row [SSC\\_166](#) at <<http://cdm.unfccc.int/goto/SSCclar>>.

### **H. Schedule of meetings**

25. The SSC WG agreed to schedule its sixteenth meeting from 30 June to 2 July 2008 taking into account the schedule of the Board. The deadline for new methodology submissions to this meeting is 4<sup>th</sup> May 08 and the deadline for submitting request for revisions for this meeting is 1<sup>st</sup> June 08.

### **I. Desk Reviews**

26. The SSC WG noted the satisfactory completion of the desk reviews undertaken for the proposed new SSC methodologies considered at the meeting.

**External annexes to the fifteenth meeting of the SSC WG**

- Annex 1: SSC III.U Fugitive methane recovery from non-hydrocarbon mineral exploration and mining activities
- Annex 2: SSC III.A Urea offset by inoculant application in soybean-corn rotations on acidic soils on existing cropland
- Annex 3: SSC II.I Efficient utilisation of waste energy in industrial facilities
- Annex 4: Revision of AMS II.C Demand-side energy efficiency activities for specific technologies