

REPORT OF THE TWENTY-SEVENTH MEETING OF THE SMALL-SCALE WORKING GROUP

GRID-Arendal, Norway
16–19 August 2010

RECOMMENDATIONS BY THE SSC WG TO THE EXECUTIVE BOARD

A. Opening of the meeting and adoption of the agenda

1. The Small-Scale Working Group (SSC WG) thanked the Royal Ministry of Environment, Government of Norway for hosting the meeting in Arendal, Norway where excellent meeting facilities were provided. Mr. Lawrence Hislop, Head of the Polar Programme of Grid-Arendal welcomed the SSC WG to Arendal on behalf of Mr. Peter Prokosch, Director, Grid-Arendal.
2. The Chair of the SSC WG, Mr. Peer Stiansen, opened the meeting.
3. The agenda was adopted as proposed.

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

4. The SSC WG considered submissions requesting revisions to, or clarifications of approved SSC methodologies as well as requests for the creation of new methodologies. The detailed responses provided by the SSC WG are made publicly available at:

<<http://cdm.unfccc.int/goto/SSCclar>> and

<<http://cdm.unfccc.int/methodologies/SSCmethodologies/NewSSCMethodologies/index.html>>.

They can also be accessed by clicking the hyperlinked submission number in the table below.

Requests for revisions		
SSC_432	Revision to include a stepwise procedure on baseline efficiency determination for a new cogeneration system	(See paragraph 6)
SSC_433	Consideration of raw materials in ER calculations	(See paragraph 8)
SSC_441	Revision of AMS-III.G to allow the use of bio-filters to reduce the methane content of landfill gas	(See paragraph 9)
SSC_445	Revision of ASM-III.F for co-digestion of biomass waste and wastewater	(See paragraph 12) WIP
SSC_447	Expanding the applicability of AMS-III.X	(See paragraph 7)
SSC_452	Revision of AMS-III.H for the determination of sludge quantity and methane mass flow rate in case of capacity addition	(See paragraph 11)
SSC_454	Revision to include cover crops of short-cycle cellulosic biomass from non-dedicated plantations	(See paragraph 10)

Requests for clarifications		
SSC_431	Applicability of AMS-III.N for manufacturing of PUF using Pentane by installing new production lines in existing facilities	(See paragraph 13)
SSC_434	Query on the applicability of “Guidelines for demonstrating additionality of renewable energy projects =< 5 MW and energy efficiency projects with energy savings <= 20 GWH per year”	(See paragraph 16)
SSC_435	Query on the definition of a Greenfield project	(See paragraph 14)
SSC_436	Query on the applicability of “Guidelines for demonstrating additionality of renewable energy projects =< 5 MW and energy efficiency projects with energy savings <= 20 GWH per year”	(See paragraph 16)
SSC_437	Request for clarification on a new reservoir	(See paragraph 15)
SSC_438	Consideration of biomass briquettes as one biomass type	(See paragraph 17)
SSC_439	Applicability of the “suppressed energy demand” principle to specific projects	(See paragraph 18)
SSC_440	Query on the applicability of “Guidelines for demonstrating additionality of renewable energy projects =< 5 MW and energy efficiency projects with energy savings <= 20 GWH per year”	(See paragraph 16)
SSC_442	Applicability of AMS-II.D to total energy efficiency improvement by installing CHP at site	(See paragraph 19)
SSC_443	Clarification on the definition of “Monitoring, Measuring, Reading and Recording Frequencies”	(See paragraph 20)
SSC_444	Clarification on Lamp failure rate (LFR) as determined under methodology AMS-II.J	(See paragraph 21)
SSC_446	Clarification on the applicability of AMS-III.C and AMS-III.S to a project activity introducing chemical additives to existing vehicles	(See paragraph 22)
SSC_448	Clarification on the applicability of AMS-III.H to wastewater and solid biomass waste generated in agro-industrial activities in one digester	(See paragraph 23)
SSC_449	Clarification on the project consideration as a Greenfield project	(See paragraph 24)
SSC_450	Clarification relating to measurement campaign for Greenfield project	(See paragraph 25)
SSC_451	Monitoring requirements for the energy delivered by hot oil boilers with fixed flow rates	(See paragraph 26)
SSC_453	Eligibility of plastic types other than HDPE/LDPE in AMS-III.AJ	(See paragraph 27)
SSC_455	Biomass waste diverted from municipal waste incinerators to a cogeneration plant	(See paragraph 28)

Request for new methodologies		
Submission number	Title	Recommendation
SSC-NM038-rev2	Fuel switch in a cogeneration/trigeneration system	(See paragraph 29)
SSC-NM040-rev	Fossil Fuel Switch in Manufacturing of Ceramic Products	(See paragraph 30)
SSC-NM046-rev2	Reduction of methane emissions by switching from Transplanted to Direct Seeded Rice practice with adjusted water management	(See paragraph 34)
SSC-NM047-rev	Switching Fossil Fuels at Steel Production Facilities	(See paragraph 30)
SSC-NM050-rev	The use of less carbon intensive fossil fuels to offset electricity and/or thermal energy	(See paragraph 35)
SSC-NM052-rev	Transport energy efficiency activities using Idling stop device	(See paragraph 31) WIP
SSC-NM053-rev	Determination of greenhouse gas emissions reductions based on whole-building simulation of building mitigation efforts using eQUEST/DOE-2.2	(See paragraph 36) WIP
SSC-NM054-rev	Freight Mode - Switching Road to Rail	(See paragraph 37)
SSC-NM056	Land cargo transportation is substituted with water transportation extended	(See paragraph 32)
SSC-NM057	Production of biodiesel and/or plant oil for transport	(See paragraph 33)

C. Response to requests for revision of methodologies

5. **Revision of AMS-I.E:** the SSC WG noted that the Board had requested it to develop a simplified methodology for safe drinking water applications at the time of approval of the large scale methodology AM0086 “Installation of zero energy water purifier for safe drinking water application”. Taking into account submissions such as SSC_411, the SSC WG agreed to recommend a revision of AMS-I.E, as contained in annex 1, to cover renewable energy water purification applications displacing non-renewable biomass usage.
6. **Revision of AMS-I.C:** in response to the submission SSC_432 requesting a revision to include a procedure for determining baseline efficiency for a new cogeneration system where subsystem equipment are provided by different manufacturers, the SSC WG agreed to recommend a revision of the methodology, as contained in annex 2.
7. **Revision of AMS-III.X:** in response to the submission SSC_447, the SSC WG agreed to recommend a revision of AMS-III.X, as contained in annex 3, to remove the requirement to conclude the installation within the first year and to include projects that may not be undertaking the recovery or claiming emission reductions from recovering HFC. With regard to other requests for changes in the submission, such as inclusion of new refrigerator purchase programs under the methodology the SSC WG agreed to indicate a preference for a separate new methodology for such activities. This is because the baseline for new purchase programs, as compared to AMS-III.X, would need to be determined through a different approach that provides for conservative options for establishing baseline refrigerator characteristics and addresses the issues of free ridership and leakage.
8. **Revision of AMS-III.Z:** in response to the submission SSC_433 requesting a revision of AMS-III.Z to exclude the requirements to estimate project emissions related to production and transportation of additive materials used in the production of project bricks, the SSC WG agreed not to recommend a revision of the methodology. The production of additives such as cement and lime may involve significant up-stream emissions and the group was unable to see a sound substantiation for neglecting these emissions.

9. **Revision of AMS-III.G:** in response to the submission SSC_441 requesting a revision of AMS-III.G to allow the use of bio-filters to reduce/eliminate the methane content of landfill gas, the SSC WG agreed to invite the project proponent to submit a new methodology for the bio-filter system, because of fundamental differences in the methane destruction mechanism in the case of bio-filter technology as compared to the technology/measures currently covered in AMS-III.G.
10. **Revision of AMS-I.D:** in response to the submission SSC_454 requesting a revision to AMS-I.D to allow the use of short-cycle cellulosic biomass cultivated between the regular cropping seasons in the context of the PoAs, the SSC WG agreed not to recommend the proposed revision. The SSC WG agreed that a further assessment would be needed to determine potential emission effects of cultivation of short-cycle cellulosic biomass such as soil carbon losses, emissions on account of irrigation and fertilizer use and nitrous oxide emissions from cultivation of legume. The group was of the opinion that a submission of a new methodology may be more appropriate to tackle these issues.
11. **Revision of AMS-III.H:** in response to the submission SSC_452 requesting a revision of AMS-III.H the SSC WG agreed to clarify that: (i) Forecasted sludge generation volume can be used for the *ex ante* baseline emission estimation in the context of a capacity addition project; and (ii) The equation for the calculation for baseline emission can be used for *ex ante* project estimation from flaring excluding the parameter GWP of methane and the “Tool to determine project emissions from flaring gases containing methane” shall be followed for the *ex post* purpose.
12. **Revision of AMS-III.F:** in response to the submission SSC_445 requesting a revision of AMS-III.F, the SSC WG agreed to continue considering the case and finalize it at its next meeting, taking into account an expert input particularly with regard to the technology applied by the underlying project (co-digestion of wastewater and solid biomass waste). The group agreed that further treatment of the waste stream after co-digestion and approaches for determining any associated methane emissions are also important considerations.

D. Response to requests for clarifications

13. In response to the submission SSC_431 requesting clarification on the applicability of AMS-III.N for manufacturing of PUF using Pentane in new production lines in existing facilities using HCFC refrigerants, the SSC WG agreed to clarify that the underlying project activity as described can not be considered as a Greenfield project and AMS-III.N is not applicable.
14. In response to the submission SSC_435 requesting clarification on the definition of Greenfield projects, the SSC WG agreed to clarify that since the baseline analysis for Greenfield project varies per project type, the SSC WG would like to consider per individual methodology if and how Greenfield projects may apply that methodology. Therefore the SSC WG will not provide an overall definition of a Greenfield project.
15. In response to the submission SSC_437 requesting clarification on the definition of an existing reservoir in AMS-I.D, the SSC WG agreed to clarify that such a reservoir must have been in operation for at least three years before the starting date of the project activity as has been recommended by the forty-fifth meeting of the Methodology Panel (MP 45 report, para 15).
16. In response to the submissions SSC_434, SSC_440 and SSC_436 requesting clarifications on the “Guidelines for demonstrating additionality of renewable energy projects = < 5 MW and energy efficiency projects with energy savings <= 20 GWH per year (version 01)”, hereafter referred to as the microscale additionality guidelines in this report, the SSC WG agreed to clarify that:
- (a) With regard to conversion of electrical units to thermal units a factor of 3 may be used as in any of the Type II methodologies;

- (b) The group agreed to recommend to the Board that above-mentioned microscale additionality guidelines may be applied to individual projects in a bundled project under the condition that the debundling check is also performed applying ‘the guidelines on assessment of debundling for SSC project activities (EB 54, annex 13)’. However to exclude occurrence of fragmentation of a regular small-scale project activity to become eligible to apply the microscale additionality guidelines, the SSC WG agreed to recommend that when the microscale additionality guidelines are applied in conjunction with the ‘Guidelines on assessment of debundling for SSC project activities (EB 54, annex 13)’, paragraph 3 of section A of the latter guidelines,¹ should be excluded from the application;
- (c) With regard to the application of the microscale additionality guidelines to projects that have undergone public comments, the group is of the opinion that the issue is not under the purview of the work of the SSC WG.

17. In response to the submission SSC_438 requesting clarification on the consideration of biomass briquettes as one type of renewable biomass, the SSC WG agreed to clarify that biomass briquettes composed of various biomass residues can, in principle, be treated as one type of renewable biomass. However, a monitoring procedure in the methodology is required among others, to demonstrate that the briquette production process takes place under controlled conditions and the composition, mass, moisture content, NCV and final consumption of the briquettes produced are accurately determined.

18. In response to the submission SSC_439 requesting clarification on baseline determination when certain services in the baseline were met to an inadequate level and the trend shows an increasing level of service, the SSC WG agreed to clarify that according to paragraph 46 of CDM Modalities & Procedures, the baseline may include a scenario where future anthropogenic emissions by sources are projected to rise above current levels, due to the specific circumstances of the host Party.

19. In response to the submission SSC_442 requesting clarification on the applicability of AMS-II.D to total energy efficiency improvement by installing CHP at site, the SSC WG agreed to clarify that AMS-II.D is not applicable to the proposed project and the project in principle is covered under AMS-II.H. However, a procedure to cover the project activity with the continued use of existing baseline system has been recommended for inclusion in a future revision of AMS-II.H. This proposed revision is consistent with similar provisions in AMS-II.K.

20. In response to the submission SSC_443 requesting clarification on the definition of “Monitoring, Measuring, Reading and Recording Frequencies”, the SSC WG provided clarifications. Noting that these terminologies are used both by large scale as well as small-scale methodologies, the SSC WG plans to consult the Methodology Panel for providing further clarifications and the possible preparation of standard definitions for these and other monitoring terms in current and future methodologies.

21. In response to the submission SSC_444 requesting clarification on lamp failure rate (LFR) under AMS-II.J when the project proponent provides a warranty for the CFLs to the extent of 10 years from the date of installation, the SSC WG provided clarifications. The SSC WG believes that AMS-II.J contains several simplifying assumptions and monitoring the effectiveness of a warranty program (which also requires action by the project participants to return failed CFLs) would require much more extensive monitoring than what is currently envisaged under AMS-II.J.

¹ Paragraph 3 states ‘If a proposed small-scale project activity is deemed to be a debundled component in accordance with paragraph 2 above, but total size of such an activity combined with the previous registered small-scale CDM project activity does not exceed the limits for small-scale CDM project activities as set in paragraph 6 (c) of the decision 17/CP.7,3 the project activity can qualify to use simplified modalities and procedures for small-scale CDM project activities’.

22. In response to the submission SSC_446 requesting clarification on the applicability of AMS-III.C and AMS-III.S to a project activity introducing chemical additives to fuels in existing vehicles, the SSC WG agreed to clarify that neither AMS-III.C nor AMS-III.S are eligible to the described project activity. The SSC WG agreed to clarify that as per the guidelines in EB 32, para 28, the proposed project activity could result in emission reductions only when the chemical additive leads to improvements in energy efficiency and not combustion efficiency.
23. In response to the submission SSC_448 requesting clarification on the applicability of AMS-III.H to a project activity involving co-digestion of wastewater and solid biomass waste, the SSC WG agreed to indicate that it is considering recommending a revision of AMS-III.F which will cover the underlying project activities described. The project proponent may wish to follow the progress of SSC_445 in this regard.
24. In response to the submission SSC_449, the SSC WG agreed to clarify that assessment of the baseline selection of underlying wastewater treatment project described is under the scope of validation taking into account the clarifications recommended by the SSC WG with regard to the definition of an existing and a Greenfield facility that are agreed by the Board.
25. In response to the submission SSC_450 requesting a clarification on measurement campaign in the context of a specific Greenfield project, the SSC WG agreed to clarify that assessment of similarity between wastewater generated from tapioca processing and sago processing needs to be assessed by a DOE as part of validation process and is not within the scope of work of the SSC WG. Assessment of the representativeness of baseline tapioca processing plant for the underlying sago processing plant for the purpose of measurement campaign is also under the scope of the validation process.
26. In response to the submission SSC_451 requesting clarification on the monitoring requirements in AMS-I.C for the energy delivered by hot oil boilers, whether manufacturers' specified flow rates can be used instead of directly monitoring flow rates, the SSC WG agreed not to accept the proposal. The variability in mass flow and other relevant parameters such as temperature need to be captured through monitoring to ensure accurate estimation of emission reductions.
27. In response to the submission SSC_453 requesting clarification on the eligibility of plastic types other than HDPE/LDPE in AMS-III.AJ, the SSC WG agreed to clarify that the methodology as it is currently written is not applicable for the proposed types of plastics (PET, PP and PS) and a revision is necessary for that purpose. Thus, the SSC WG encourages the project proponent to submit a request for revision of the methodology by providing default values for the energy usage related to production of the proposed types of plastics.
28. In response to the submission SSC_455 requesting clarification on biomass waste diverted from municipal waste incinerators to a new cogeneration plant, the SSC WG agreed to clarify that the PPs shall follow the leakage guidance on competing uses for the biomass to demonstrate that there is a surplus availability of biomass (>25%) for using it in a cogeneration plant in accordance with the "General Guidance on leakage in biomass project activities" (EB 47, annex 28, para 17 & 18).

E. Response to requests for new methodologies

29. In response to NM038-rev2 "Fuel switch in a cogeneration/trigeneration system", the SSC WG agreed to recommend the methodology, as contained in annex 4. The methodology involves fossil fuel switch in a cogeneration plant from a carbon intensive fuel (e.g. coal based system) to a low carbon intensive fuel (e.g. natural gas based system).
30. In response to NM040-rev for fossil fuel switch in manufacturing of ceramic products, NM047-rev for switching fossil fuels at steel production facilities and taking into account

submission such as SSC_417, the SSC WG agreed to recommend a consolidated methodology covering fossil fuel switch project activities in various production processes - steel, ceramics, etc. as contained in annex 5.

31. In response to NM052-rev “Transport energy efficiency activities using post - fit idling stop device”, the SSC WG prepared a draft reformatted methodology. The group agreed to continue considering the case and make a final recommendation at its twenty eighth meeting after taking into account any further inputs from the project proponent.

32. In response to NM056 for cargo transportation in extended water ways to substitute road transportation, the SSC WG, considering that the project activity involves investment in large and complex infrastructure, agreed not to recommend the methodology as the group was of the opinion a simplified small-scale methodology may not provide the right framework for the large infrastructure projects. Furthermore the SSC WG was of the opinion that such kind of project activities may require a mandatory investment analysis to assess the baseline scenario accounting for the benefits associated with the shift in transportation mode (e.g. improved level of service).

33. In response to NM057 for production of biodiesel for transport, the SSC WG, taking into account the approach approved by the Board on the treatment of the land use issues related to the crop cultivation for biodiesel production, agreed not to recommend the methodology. The SSC WG suggested that the project proponent may explore whether the underlying project activity is covered by the recently approved methodologies AMS-III.AK and AMS-I.H for biodiesel production and use in transportation and stationary applications.

34. In response to NM046-rev2 “Reduction of methane emissions by switching from Transplanted to Direct Seeded Rice practice with adjusted water management”, the SSC WG agreed not to recommend the methodology due to many uncertainties related to proposed monitoring methods which could not be resolved in spite of significant efforts from the project proponent and the working group.

35. In response to NM050-rev for the use of less carbon intensive fossil fuels to offset carbon intensive electricity and/or thermal energy, the SSC WG agreed to clarify that no new methodology would be required and the submission author may explore applying AMS-II.K. The SSC WG is of the opinion that the baseline scenario provided in the methodology adequately captures the underlying project.

36. In response to NM053-rev for the determination of greenhouse gas emissions reductions based on whole-building simulation of building using eQUEST/DOE-2.2, the SSC WG agreed to continue considering the proposed draft methodology, taking into account expert inputs.

37. In response to NM054-rev for shifting freight mode from road to rail, the SSC WG, considering that the project activity involves investment in large and complex infrastructure, agreed not to recommend the methodology, as the group was of the opinion a simplified small-scale methodology may not provide the right framework for the large infrastructure projects. Furthermore the SSC WG was of the opinion that such kind of project activities may require a mandatory investment analysis to assess the baseline scenario accounting for the benefits associated with the shift in transportation mode (e.g. improved level of service).

F. General guidance

38. As envisaged in the workprogramme (second semester 2010) of SSC WG <http://cdm.unfccc.int/Reference/Notes/info_note06.pdf> the group prepared a top down, draft Type III methodology titled “Substituting fuel based lighting with LED lighting systems”, as contained in annex 6 of this report, that took into account public <http://cdm.unfccc.int/public_inputs/2010/fuel_LED_repl/index.html> and expert inputs. The group agreed to seek further input from the authors of the public submissions who previously

provided comments on the framework methodology before making a final recommendation to the Board at its next meeting.

39. The SSC WG, following an analysis, agreed to make a recommendation to the Board with regard to possibilities of including in baseline and monitoring methodologies, as appropriate, a scenario where future anthropogenic emissions by sources are projected to rise above current levels due to specific circumstances of the host Party. The recommendations are contained in annex 7.

40. The SSC WG noted that the Board had tasked the group to make a recommendation on combination of SSC methodologies that could be applied directly in a PoA without the need for every PoA to seek an approval of these specific combinations. As envisaged in the workprogramme (second semester 2010) of the SSC WG, the group agreed to make a recommendation as contained in annex 8 of this report.

G. Schedule of meetings

41. The SSC WG agreed to schedule its twenty-eighth meeting from 19–22 October 2010 taking into account the schedule of the Board. The deadline for new methodology submissions to this meeting is 20 August 2010 and the deadline for submitting requests for clarifications/revisions for this meeting is 21 September 2010.

H. Desk Reviews

42. 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 twenty-seventh meeting of the SSC WG

- Annex 1: Revision of AMS-I.E
- Annex 2: Revision of AMS-I.C
- Annex 3: Revision of AMS-III.X
- Annex 4: SSC-III.AM “Fuel switch in a cogeneration/trigeneration system”
- Annex 5: SSC-III.AN “Fossil fuel switch in existing manufacturing industries”
- Annex 6: “Substituting fuel based lighting with LED lighting systems”
- Annex 7: “Treatment of increase in future anthropogenic emissions of host country”
- Annex 8: “Combination of methodologies for PoA”