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

UNFCCC Headquarters, Bonn, Germany 16–19 June 2009

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), Mr. Hugh Sealy, opened the meeting and welcomed the members.

2. The agenda was adopted as proposed.

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

3. The SSC WG considered submissions requesting revisions 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: <<u>http://cdm.unfccc.int/goto/SSCclar</u>> and <<u>http://cdm.unfccc.int/methodologies/SSCmethodologies/NewSSCMethodologies/index.html</u>>. They can also be accessed by clicking the hyperlinked submission number in the table below.

Proposed new methodologies				
Submission	Title	Recommendation		
number				
SSC-NM023-rev	Energy efficiency and renewable energy measures in	(See paragraph 4)		
	new housing			
SSC-NM024-rev	Methodology for using recycled material instead of raw	WIP^1		
	material	(See paragraph 19)		
SSC-NM025-rev	Emission reduction measures in ferroalloy production	(See paragraph 20)		
SSC-NM026-rev	Avoidance of Methane emissions through Manure	(See paragraph 5)		
	Composting			
SSC-NM027-rev	Optimizing Public Passenger Transport	(See paragraph 22)		
SSC-NM028-rev	Avoidance of methane emissions through controlled	(See paragraph 21)		
	biological treatment of partially decayed MSW			
SSC-NM029	Switching to efficient biogas flaring systems	(See paragraph 18)		
SSC-NM014-rev	Switch from High Carbon Intensive Energy Source	WIP		
	(HCES) to Low Carbon Intensive Energy Source	(See paragraph 23)		
	(LCES)			

Requests for revisions				
<u>SSC_300</u>	Revision of AMS-III.Q to allow new captive power	(See paragraph 15)		
	plant in the baseline scenario			
<u>SSC_303</u>	Broadening the applicability of AMS-III.A to legume –	(See paragraph 8)		
	grass rotation and additional options for fertilizer use			
<u>SSC_304</u>	Revision of AMS-III.Q for project activities utilizing	(See paragraph 16)		
	waste energy at new facilities			
<u>SSC_310</u>	Revision of AMS-II.A for project activities with no	(See paragraph 6)		
	national/international standards available			
<u>SSC_311</u>	Revision of AMS-II.C for project activity involving	(See paragraph 7)		

¹ Work in progress

	multiple equipment operating as a single system	
<u>SSC_313</u>	Revision of methane producing capacity factor of	(See paragraph 12)
	waste water in AMS-III.I	
<u>SSC_315</u>	Request for revision on the monitoring of electricity in	(See paragraph 13)
	AMS-I.D	
<u>SSC_250</u>	Fuel ratio switch in a self-generation power plant using	WIP
_	Heavy Fuel Oil and Natural Gas	(See paragraph 17)

Requests for clarifications			
<u>SSC_286</u>	Clarification on applicability of AMS-I.D for project activity involving addition of back pressure turbine in existing cogeneration system	(See paragraph 33)	
<u>SSC_301</u>	Clarification on MCF for project activity substituting anaerobic open lagoon to an aerobic biological treatment in AMS-III.I	(See paragraph 24)	
<u>SSC_302</u>	Clarification on whether plant oil produced from sustainable plantations is a renewable biomass, and is it eligible under AMS-I.D?	(See paragraph 25)	
<u>SSC_305</u>	Applicability of AMS-III.D to anaerobic digestion of animal manure and silage at a different location than its origin	(See paragraph 26)	
<u>SSC_306</u>	Applicability of AMS-III.Q for the project activity determining baseline from existing practice	(See paragraph 27)	
<u>SSC_307</u>	Clarification on project activity selling refuse-derived fuel to consumers outside project boundary in AMS- III.E	(See paragraph 28)	
<u>SSC_308</u>	Applicability of AMS-III.Q to condensing low pressure steam as waste energy	(See paragraph 29)	
<u>SSC_309</u>	Clarification on the details of the monitoring requirements in AMS-I.C	(See paragraph 30)	
<u>SSC_312</u>	Applicability of AMS-I.C to project activity replacing old fossil fuel and biomass boilers with a new biomass boiler	(See paragraph 31)	
<u>SSC_314</u>	Clarification on installed/rated capacity of hydropower project	(See paragraph 32)	
<u>SSC_318</u>	Clarification on determining baseline efficiency for cooking stoves using AMS-I.C	(See paragraph 14)	
<u>SSC_319</u>	Use of internal benchmark IRR according to the Guidance on the assessment of investment analysis	(See paragraph 34)	

C. Proposed new methodologies

4. In response to SSC-NM023-rev, the SSC WG agreed to recommend a new methodology titled "AMS-III.AE Energy efficiency and renewable energy measures in new housing" as contained in annex 1. The draft methodology is for activities that lead to reduced consumption of electricity in new grid connected residential buildings (single or multiple-family residences) through the use of one or more of the following measures: efficiency building design practices, efficiency technologies, and renewable energy technologies. Examples include efficient appliances, efficient heating and cooling systems, passive solar design, thermal insulation, and solar photovoltaic systems. It is expected to be used for project activities and POA's involving development of new, sustainably designed

housing. The draft methodology was submitted just before the SSC WG's April meeting and was significantly rewritten by the SSC WG to conform to the recent Board guidance and standard industry practices and is thus the first SSC methodology to define procedures for calibrated computer simulation modeling and regression analysis. Subject to the approval from the Board, the SSC WG agreed to continue to consider the case with a view to expand the application to include non-grid connected households and fossil fuel savings for example from solar domestic water heating.

5. In response to the submission SSC-NM026-rev, requesting a new methodology for project activities shifting from existing anaerobic manure management systems to aerobic manure composting, the SSC WG agreed to recommend a revision of AMS-III.F as contained in annex 7 to expand its applicability to composting of manure.

D. <u>Revisions & requests for revision of approved methodologies</u>

6. Revision of AMS-II.A: in response to SSC_310, the SSC WG agreed to recommend a revision of AMS-II.A as contained in annex 2. The revisions include an option to determine technical energy losses in rural electricity distribution system using a well established peer reviewed method² included in the guidelines of a relevant national level Government agency (e.g. Rural electrification corporation/agency in the public sector or standards bureau/organizations in the region/country).

7. Revision of AMS-II.C: in response to the submission SSC_311, the SSC WG agreed to recommend a revision of AMS-II.C as contained in annex 3. The recommended revisions clarify the consideration of increased output over the historic average and boundary definition. An option to use specific energy consumption for the baseline emission calculations has been added.

8. Revision of AMS-III.A: in response to SSC_303, the SSC WG agreed to recommend a revision of AMS-III.A as contained in annex 4 taking into account expert inputs. The recommended revisions include options to choose from a range of grass-legume combinations for the project. Together with the broader range of eligible baseline nitrogen fertilizer usage, this change would result in expanded applicability of the methodology as currently the methodology is restricted to corn-soybean rotations and urea fertilisation.

9. Revision of AMS-III.D: the SSC WG agreed to recommend a revision of AMS-III.D as contained in annex 5 to provide additional guidance on consideration of the storage time of animal manure taking into account the fact that the manure could be transported from locations other than the location of the anaerobic digester.

10. Revision of AMS-III.E: the SSC WG agreed to recommend a revision of AMS-III.E as contained in annex 6 to include additional guidance on monitoring for project activities involving production and sale of refuse derived fuel (RDF).

11. Revision of AMS-III.H: the SSC WG agreed to recommend a revision of AMS-III.H as contained in annex 8 to include additional eligible technologies for upgrading biogas for bottling or feeding to natural gas distribution grid.

12. Revision of AMS-III.I: in response to the submission SSC_313, the SSC WG agreed to recommend a revision of AMS-III.I as contained in annex 9 to include additional guidance on

² For example reviewed in IEEE literature (IEEE is the acronym of International Institute of Electrical and Electronics Engineers, Inc.)

determination of baseline methane generation potential based on Biochemical Oxygen Demand $(BOD_{5,20})$ with a view to maintain consistency between AMS-III.I and AMS-III.H.

13. Revision of AMS-I D: in response to the submission SSC_315 and other related submissions, the SSC WG agreed to recommend a revision of AMS-I.D as contained in annex 10 to include more guidance regarding the monitoring of electricity generated. The revision also includes additional guidance on calculation of project emissions for geothermal project activities besides editorial changes.

14. Revision of AMS-I C: in response to the submission SSC_318, the SSC WG agreed to recommend a revision of AMS-I.C as contained in annex 11 to include simplified procedures for determining efficiency of small thermal appliances used in household or commercial applications (<45kW thermal capacity). The recommended revisions also include procedures for estimation of baseline emission factors for co-fired systems.

15. Revision of AMS-III.Q: in response to SSC_300, the SSC WG agreed not to recommend a revision of AMS-III.Q to include a hypothetical captive power plant as the baseline. The SSC WG noticed that the proposed revision does not address the key issues e.g., demonstration that in the absence of the CDM, the electricity will not be supplied by the grid, but a new hypothetical captive plant would have been installed.

16. Revision of AMS-III.Q: in response to SSC_304, the SSC WG agreed not to recommend the revision of AMS-III.Q to include Greenfield (new) facilities as the proposed revision does not address the key issue regarding how to determine the baseline scenario that in the absence of the CDM, a facility would have been built without waste energy recovery.

17. Revision of AMS-III.B: Taking into account the guidance from the Board (see paragraph 59 of EB 47 report) and the submissions from the project proponent (see SSC_250 and further inputs received from the project proponent just before the start of SSC WG 21 meeting), the SSC WG agreed to continue to consider a new methodology titled "AMS-III.xx Shift from high carbon intensive fuel mix ratio to low carbon intensive fuel mix ratio" and finalize the recommendation at the next SSCWG meeting.

E. <u>Response to requests for new methodologies</u>

18. In response to SSC-NM029 proposing a new methodology for project activities switching from inefficient biogas flaring systems to efficient flaring systems in wastewater or manure treatment or landfill gas recovery systems, the SSC WG agreed not to recommend the methodology as the methodology does not provide reliable methods for establishing baseline flare efficiency.

19. In response to SSC-NM024-rev, intended for recycling facilities to recover material e.g., recovering HDPE and LDPE plastic residues to displace virgin inputs (e.g., pellets) for the production of finished or intermediary plastic products, the SSC WG agreed to continue to consider the case and finalize the recommendation at the next meeting taking into account expert inputs.

20. In response to SSC-NM025-rev, aimed at activities resulting in reduced consumption of fossil based energy and carbon materials in a metallurgical process, e.g., ferroalloy production, the SSC WG agreed not to recommend the methodology. The technology/measures of the underlying project activity involve an industrial complex with annual emissions greater than one million $tCO_{2}e$ and the estimated annual emission reductions is approx 3% of the baseline emissions. The SSC WG was of the opinion that a simplified small scale methodology may not provide the right methodological framework for this situation. Specifically, it may not be feasible to provide a simplified monitoring procedure to adequately capture all uncertainties given the low signal to noise

ratio in such a complex industrial process. In reaching this conclusion the SSC WG took note of the decision of the Board (Para 58 of EB47).

21. In response to SSC-NM028-rev, proposing a new methodology for activities treating MSW disposed at a closed SWDS (solid waste disposal site) by an aerobic biodegradation process, the SSC WG agreed to seek further clarifications and an expert input, for example, how to determine the amount, composition and age of the landfilled waste.

22. In response to SSC-NM027-rev, proposing a new methodology for activities that reduce the total vehicle kilometres travelled through improvements in system management within a defined transit network, the SSC WG agreed not to recommend the methodology. The SSC WG noted that key issues raised at its twentieth meeting were not addressed in the response from the project proponent (e.g., the methodology does not take into account leakages caused by a decrease in service level and it assumes no optimization takes place in the baseline, and the monitoring guidance is insufficient).

23. In response to SSC-NM014-rev and taking into account the guidance from the Board (see paragraph 59 of EB 47 report) and further inputs received from the project proponents (see SSC_NM014-rev), the SSC WG agreed to continue to consider a new methodology titled "AMS-III.xx Switching from high carbon intensive grid electricity to low carbon intensive fossil fuels" and finalize the recommendation at the next SSCWG meeting.

F. <u>Response to request for clarification - considered at the meeting</u>

24. In response to SSC_301, SSC WG clarified that a MCF (methane correction factor) of zero can be used for a post treatment reactor as long as it is demonstrated that there are no anaerobic pockets within the reactor. The SSC WG agreed to recommend a revision of AMS-III.I to clarify the issue as contained in annex 9 (see paragraph 12 above).

25. In response to SSC_302, the SSC WG clarified that plant oil produced from sustainable plantations that conforms to the definition of renewable biomass provided by the Board, is eligible under Type I project activities.

26. In response to SSC_305, the SSC WG clarified that AMS-III.D is applicable to codigestion of biomass residues and animal manure in an anaerobic digestor as long as the emission reductions are only claimed from the avoided methane emissions from the animal manure (see also paragraph 9 above).

27. In response to SSC_306, the SSC WG agreed not to recommend broadening of AMS-III Q to project activities where the baseline scenario is determined based on existing practice, considering the complexity involved in the described project activity which will be difficult to capture under the small scale CDM framework. The SSC WG took into account paragraph 58 of EB 47 while considering the case.

28. In response to SSC_307, requesting clarification on a project activity selling refuse-derived fuel to consumers outside project boundary applying AMS-III.E, the SSC WG agreed to recommend a revision of AMS-III.E clarifying the monitoring requirements (see paragraph 10 above).

29. In response to SSC_308, the SSC WG agreed to clarify that the author of the query may consider submitting the case to the Meth Panel as the project activity was originally applied under large scale methodology ACM0012 and the size of the underlying project activity exceeded the SSC limits.

30. In response to SSC_309 the SSC WG clarified the monitoring requirements in AMS-I.C; however, it noted that many of the issues raised are not related to methodological issues and therefore not within the mandate of SSC WG. The SSC WG, however, agreed that QA/QC procedures associated with the monitoring requirements for the most common parameters used in small scale methodologies should be standardized at a future meeting and included in the general guidelines for the SSC methodologies for consideration by the Board for approval.

31. In response to SSC_312, the SSC WG agreed to clarify that AMS-I.C is not applicable to the described project activity whose baseline is the use of multiple boilers using different fuels (fossil fuel and biomass). The project proponent may consider submitting a revision of AMS-I.C.

32. In response to SSC_314, the SSC WG agreed to clarify that the maximum or rated/installed capacity for small scale CDM hydro-electric project can be determined using one of the following options (in the order of preference): a) Nameplate/rated capacity of the turbine i.e., based on turbine manufacturer's specification and b) Generator capacity in MW (which is an equivalent of name plate/rated capacity in MVA times the name plate/rated power factor, specified by the manufacturer).

33. In response to SSC_286 that is related to a project activity replacing a pressure reducing device with a backpressure turbine in an existing cogeneration facility, the SSC WG agreed to indicate that the described project activity is not eligible under Type I methodologies as the project activity will not result in a direct conversion of energy from renewable sources. It noted that the same quantity of biomass is used in the project and baseline, and, in the absence of detailed energy balance of the system provided, there are uncertainties related to level of service of steam/heat/electricity applications in the baseline versus the project.

34. In response to SSC_319, requesting a clarification on use of internal benchmark rate of return in the demonstration of additionality (with reference to paragraph 13 of "Guidance on the assessment of investment analysis", see EB 39 annex 35) in the specific context of a project, the SSC WG agreed to indicate that the query is not within the mandate of the SSC WG to respond in accordance with the procedures (see <<u>http://cdm.unfccc.int/Reference/Procedures</u>>).

G. Schedule of meetings

35. The SSC WG agreed to schedule its twenty-second meeting from **21–24 September 2009** taking into account the schedule of the Board. The deadline for new methodology submissions to this meeting is **27 July 2009** and the deadline for submitting requests for clarifications/revisions for this meeting is **24 August 2009**.

H. Desk Reviews

36. 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-first meeting of the SSC WG

- Annex 1: AMS-III.AE Energy efficiency and renewable energy measures in new housing
- Annex 2: Revision of AMS-II.A
- Annex 3: Revision of AMS-II.C
- Annex 4: Revision of AMS-III.A
- Annex 5: Revision of AMS-III.D
- Annex 6: Revision of AMS-III.E
- Annex 7: Revision of AMS-III.F
- Annex 8: Revision of AMS-III.H
- Annex 9: Revision of AMS-III.I
- Annex 10: Revision of AMS-I.D
- Annex 11: Revision of AMS-I.C