	<p align="center">CDM: Recommendation Form for Small Scale Methodologies (version 01)</p> <p align="center"><i>(To be used for presenting questions/proposals/amendments to the simplified methodologies for small-scale CDM project activity categories)</i></p>	
	Date of SSC WG meeting:	24–27 February 2009, SSC WG 19
	Title/Subject (give a small title or specify the subject of your submission, maximum 200 characters):	Applicability of AMS-I.D. and AMS-I.C. to a greenfield cogeneration project that is not implemented by a captive user
	Indicative methodology to which your submission relates (refer the items of Appendix B of the Simplified Modalities and Procedures), if applicable.	AMS-I.D and AMS-I.C (both Version 13)
	Name of the authors of the query:	Stanley Lau Institution: Carbon Partners Asiatica stanley.lau@cp-asiatica.com
Summary of the query: Please use the space below to summarize the query related to SSC methodologies/categories SSC Modalities and Procedures provide recommendation/analysis of the SSC WG.		
<p>Original text from PP:</p> <p>The purpose of this submission is to clarify which of AMS-I.D. or AMS-I.C. should be applied for a type of project activity, hereinafter referred as “Project Activity for Clarification” or “PA Clarification”, which is characterized by the following features.</p> <p>The project activity consists of constructing a <15MW_e grid-connected power plant fuelled by biomass. The project generates electricity primarily for the grid and no electricity except for the parasitic consumption is consumed on-site.</p> <ul style="list-style-type: none"> • However, the project activity also involves using some low-pressure steam bled from the turbine, with a view to making it available for neighbouring users (Users). The overall thermal capacity is less than 45MW_{th} threshold limit. • Although part of the low-pressure steam will be exported to the Users¹, no CERs are claimed for biomass heat generation by the project activity due to biomass-based baseline heat production (i.e. no net change in emissions) and/or uncertainty about the baseline situation in terms of the respective fossil fuel consumption. <p>It is noted that the specific features of our proposed project activity are detailed in the section of “Project Description”.</p> <p>We file this request for clarification based on the observations that:</p> <ol style="list-style-type: none"> 1. AMS-I.D. fits well with PA Clarification. The absence of formulae for the calculation of emission reductions 		

¹ The User can be one or a combination of the following:

- a) A biomass supplier to the project activity. The steam is exported to fulfil the User’s energy requirements. In the absence of the project activity, the User will consume the same biomass that the project activity uses to fulfil its own energy requirements.
- b) A simple consumer. In the absence of the project activity, the User will consume fossil fuels to fulfil its own energy requirements. However, the exact baseline fuel combination is unknown in the absence of three years historical records.

from heat displacement does not pose a problem, given no CERs will be claimed for heat displacement. However, AMS-I.D. is not supposed to be used for a cogeneration project activity.

2. AMS-I.C, which is positioned as the small-scale methodology for cogeneration project activities, has a number of key difficulties for a project that aims at exporting to the grid the electricity it produces as the main product, i.e. PA Clarification. These difficulties, presumably attributable to the methodology having initially been developed for on-site heat and/or electricity displacement, are elaborated in the section of “Applicable Methodology: AMS-I.C. and AMS-I.D.”.
3. Earlier versions of AMS-I.D. allowed the methodology to be used for cogeneration project activities. EB31, which decided to narrow the applicability of AMS-I.D. and excluded cogeneration project activities, stated as follows:

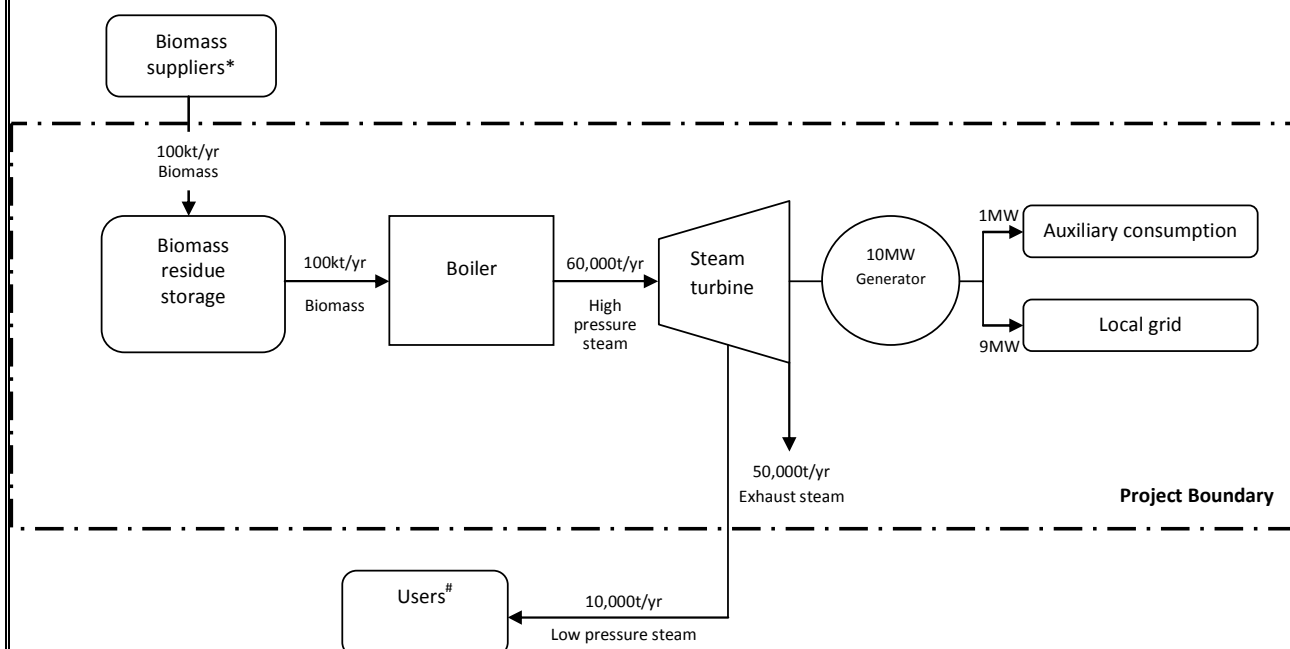
“The Board agreed to the revised SSC methodologies AMS I.A, AMS I.C and AMS I.D as contained in annexes 19, 20 and 21 to this report. The revisions provide options for baseline calculations when cogeneration from fossil fuels is the baseline activity thereby broadening the applicability of AMS I.C. The revised applicability conditions also clarify that all cogeneration project activities should apply AMS I.C.”

It is not clear whether the sentence added to paragraph 3 of AMS-I.D. stipulating against its use for cogeneration projects, was intended to prohibit the methodology from being applied to PA Clarification, whose features are mentioned earlier.

There is no question that PA Clarification discussed here is a solid small-scale CDM project type that deserves an applicable small-scale methodology. The most practical approach seems to interpret paragraph 3 of AMS-I.D. narrowly, and consider it as not prohibiting the application of the methodology to PA Clarification.

Project Description

The proposed project activity (the Project) is a Greenfield stand-alone biomass-based grid power generation project that is to be implemented by an independent power producer. The Project fits well to the features of PA Clarification characterized in the first section of this clarification request and is described in the following schematic diagram.



Note:

* While the biomass suppliers are outside the project boundary, it is subject to leakage analysis.

While the low-pressure steam Users are outside the project boundary, it is subject to leakage and financial analyses as appropriate.

Applicable Methodology: AMS-I.C. and AMS-I.D.

In order to assist with the SSCWG's evaluation of the methodology applicable to the Project, we assessed the baseline scenario and calculation method of AMS-I.C. and AMS-I.D. (both Version 13). The table below summarizes the key differences in the methodologies and our observations.

Item	AMS-I.C.	AMS-I.D.
Baseline scenario	<p><i>Para 7. Cogeneration projects shall use one of the five following options for baseline emission calculations depending on the technology that would have been used to produce the thermal energy and electricity in the absence of the project activity:</i></p> <p><i>(a) Electricity is imported from the grid and steam/heat is produced using fossil fuel;</i></p> <p><i>(b) Electricity is produced in an onsite captive power plant (with a possibility of export to the grid) and steam/heat is produced using fossil fuel;</i></p> <p><i>(c) A combination of (a) and (b);</i></p> <p><i>(d) Electricity and steam/heat are produced in a cogeneration unit, using fossil fuel.</i></p> <p><i>(e) Electricity is imported from the grid and/or produced in an on-site captive power plant (with a possibility of export to the grid); steam/heat is produced from renewable biomass².</i></p>	<p><i>Para 1. <u>This category comprises renewable energy generation units, such as photovoltaics, hydro, tidal/wave, wind, geothermal and renewable biomass, that supply electricity to and/or displace electricity from an electricity distribution system that is or would have been supplied by at least one fossil fuel fired generating unit.</u></i></p>
	<p>Our observations:</p> <p>Being a Greenfield grid power generation project, the baseline for the Project should be the continued generation of power in the grid. The baseline given in AMS-I.D. is consistent with this. In contrast, the baseline scenario options given in AMS-I.C. involve either electricity imported from the grid and/or produced in an on-site captive power plant, which are inconsistent with a Greenfield grid power generation project. (Fit AMS-I.D. only)</p>	

Baseline calculation	<p>Para 14. For case 7 (e), baseline emissions from the production of electricity shall be calculated as per paragraph 11. Emission reductions from heat generation are not eligible.</p> <p>Para 11. For cases 7 (a), (b) and (c)..... For the case (c) <i>the amount of electricity that would have been produced in the onsite power plant and the electricity that would have been exported or imported from the grid should be determined considering most recent historical records (average of the data from a minimum of three most recent years excluding abnormal years is required).</i></p> <p>The emission factor for the displacement of electricity should reflect the emissions intensity of the captive power plant and the grid. If annual electricity produced in the project activity is less than or equal to the sum of captive generation and net grid import (average of most recent three years data), the emission factor shall be calculated as the weighted average of captive electricity generation and the net grid electricity import. If annual electricity produced in the project activity is greater than the sum of captive generation and net grid import (average of most recent three years data), lower of the two i.e., emission factor of the grid or the emission factor of the captive plant shall be used for the incremental generation (i.e., the difference between the electricity generation in the project activity and the sum of captive generation and net grid import).</p>	<p>Para 9. For all other systems, <u>the baseline is the kWh produced by the renewable generating unit multiplied by an emission coefficient (measured in kg CO2e/kWh) calculated in a transparent and conservative manner</u> as:</p> <p>(a) A combined margin (CM), consisting of the combination of operating margin (OM) and build margin (BM) according to the procedures prescribed in the ‘Tool to calculate the emission factor for an electricity system’.</p> <p>OR</p> <p>(b) The weighted average emissions (in kg CO2e/kWh) of the current generation mix.</p> <p>The data of the year in which project generation occurs must be used.</p> <p>Calculations must be based on data from an official source (where available) and made publicly available.</p>
	<p>Our observations:</p> <p>AMS-I.D. seems the only appropriate methodology that can be applied to the Project in terms of the appropriateness of the baseline calculations. AMS-I.C. is conceptually designed for an existing captive user, which imports electricity from the grid and/or produces it in an on-site captive power plant. Taking into consideration the baseline calculations stipulated in paragraphs 11 and 14 of AMS-I.C. that <i>“the amount of electricity that would have been produced in the on-site power plant and the electricity that would have been exported or imported from the grid should be determined considering most recent historical records (average of the data from a minimum of three most recent years excluding abnormal years is required)”</i>, which presupposes the existence of a captive facility, we infer that AMS-I.C. cannot be applied to the Project. (Fit AMS-I.D. only)</p>	
<p>In light of this uncertainty, we therefore wish to clarify whether our interpretation is correct that paragraph 3 is not intended for PA Clarification.</p> <p>To avoid confusion, it is noted that in applying AMS-I.D. to a cogeneration project, leakage and financial analyses (if any) must, naturally, transparently take into account the effects of importing biomass from and/or exporting energy to the Users regardless of where the CDM project boundary is drawn.</p>		
<p>Recommendation by the SSC WG:</p> <p>Please use the space below to provide amendments/change (in your expert view, if necessary).</p>		
<p>Please refer to paragraph 5 of the meeting report of the SSC WG 19 (http://cdm.unfccc.int/Panels/ssc_wg).</p>		

Answer to authors of query by the SSC WG:


Please use the space below to provide answer to the authors of the above query

The small-scale working group of the CDM Executive Board would like to thank the author for the submission.

The SSC WG agreed that the current version of AMS-I.D is not applicable to the proposed project activity. Furthermore, the SSC WG agreed to clarify that the current version of AMS-I.C does not include the baseline scenario described in the submission, hence not applicable.

The SSC WG agreed to recommend a revision of AMS-I.C as contained in annex 2 of the SSCWG 19 meeting report. The recommended revision includes additional baseline scenarios and results in expanded applicability of the methodology for biomass based heat and/or power generation project activities (including cogeneration) that supply: (a) electricity to a grid and/or displace grid electricity or both; (b) electricity and/or thermal energy for on-site consumption or for consumption by other facilities and combination of (a) and (b).

If the revisions are approved by the Board, the project proponent may evaluate if the proposed project activity is covered by the revised version.



Signature of SSC WG Chair

(Hugh Sealy)

Date: 27/02/2009



Signature of SSC WG Vice-Chair

(Peer Stiansen)

Date: 27/02/2009

Information to be completed by the secretariat

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