



## CDM: Recommendation Form for Small Scale Methodologies (version 01)

*(To be used for presenting questions/proposals/amendments to the simplified methodologies for small-scale CDM project activity categories)*

<b>Date of SSC WG meeting:</b>	16–19 June 2009, SSC WG 21
<b>Title/Subject (give a small title or specify the subject of your submission, maximum 200 characters):</b>	Applicability of AMS-I.C to project activity replacing old fossil fuel and biomass boilers with a new biomass boiler
<b>Indicative methodology to which your submission relates (refer the items of Appendix B of the Simplified Modalities and Procedures), if applicable.</b>	AMS-I.C version 13
<b>Name of the authors of the query:</b>	Paolo Teramo / Vicente San Valero Institution: RINA S.p.A. <a href="mailto:paolo.teramo@rina.org">paolo.teramo@rina.org</a> <a href="mailto:vicente.valero@rinabrasil.com.br">vicente.valero@rinabrasil.com.br</a>

### **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.

Original text from PP:

The CDM project activity consists of a biomass boiler, used only for thermal energy generation, that displaces/avoids fossil fuel consumption that would have been used in the absence of the project activity. The type of biomass used by the project activity is bamboo.

The situation before the implementation of the proposed CDM project activity is:

On 2005, two different boilers were in operation: one fossil fuel boiler, and one biomass (wood/bamboo) boiler.

On 2006, three different boilers were in operation: one fossil fuel boiler, and other two biomass (wood/bamboo & wood) boilers. Reason to add the third biomass (wood) boiler was because of problems in the wood/bamboo boiler (bamboo formed a silicate which damaged the boiler) and to complete the plants capacity needs at that time. The wood biomass boiler was rented from the same manufacturer of the (future) bamboo biomass boiler (project activity).

After the implementation of the project activity, the three boilers were replaced by a new bamboo biomass boiler. The existing wood/bamboo biomass boiler was scrapped, the wood biomass boiler was returned to the manufacturer and the fossil fuel boiler was refurbished and it is to operate as back up of the new bamboo boiler in emergency situations.

The baseline scenario (simplified baseline) proposed by the project participants considers that, in the absence of project activity, a new fossil fuel boiler would have been used (to be demonstrated/justified).

Considering the above, clarification is requested for the following:

1- Baseline emissions reductions should be calculated based on:

(a) the fossil fuel that would have been consumed (existing fossil fuel boiler) in the absence of the project activity times an emission coefficient for the fossil fuel displaced ?; or,

(b) the methodology paragraph 10 formula,  $BE_y = HG_y * EFCO_2 / \eta_{th}$ , being  $HG_y$  = the net quantity of steam/heat supplied by the project activity (new bamboo boiler) during the year y?

(c) is there any required average of data (previous years) for the fossil fuel consumed or net quantity of steam/heat supplied, to be provided by PPs for validation?

2- Is the amount of steam already generated on the existing wood/bamboo biomass, to be discounted from the emissions reduction calculation?

#### **Recommendation by the SSC WG:**

Please use the space below to provide amendments/change (in your expert view, if necessary).

Please refer to paragraph 31 of the meeting report of the SSC WG 21  
([http://cdm.unfccc.int/Panels/ssc\\_wg](http://cdm.unfccc.int/Panels/ssc_wg)).

#### **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 to clarify that AMS-I.C is not applicable to the described project activity. The project proponent may consider submitting a revision of AMS-I.C version 14 for biomass based thermal energy generation whose baseline is the use of multiple boilers using different fuels (fossil fuel and biomass).

It is to be noted that the described project activity can not be considered as a co-firing system as it is defined as the use of fossil fuel(s) and/or biomass in one single piece of energy generation equipment. The project proponent however may consider the approach contained in paragraph 22 of AMS-I.C version 14 to determine baseline emissions in the new submission. For example, baseline emissions shall be determined based on three years average historical data on the relative share of fossil fuel and biomass in the baseline fuel mix. The relative share is determined based on the energy content of each fuel. If biomass is used before project implementation, then baseline emissions on account of using biomass will be zero for the biomass proportion. The emission reductions attributable to the project activity will only be related to the amount of fossil fuel replaced in the project situation. The SSC WG noted from the described project activity that the fossil fuel boiler is not completely replaced as it will be operated as a back-up. The revision of the methodology has to consider this situation. One possible solution could be to include a condition to limit the proportion of steam generated in the fossil fuel boiler from total steam generated (e.g., no more than 10%) during the crediting period and to include the back-up equipment in the project boundary.



Signature of SSC WG Chair .....

(Hugh Sealy)

Date: 19/06/2009



Signature of SSC WG Vice-Chair .....

(Peer Stiansen)

Date: 19/06/2009

**Information to be completed by the secretariat**

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