



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

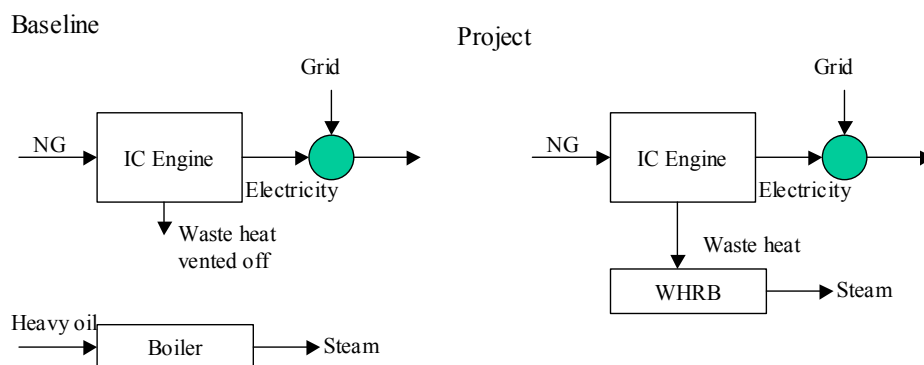
(To be used for presenting questions/proposals/amendments to the simplified methodologies for small-scale CDM project activity categories)

Date of SSC WG meeting:	01–03 September 2008, SSC WG 17
Title/Subject (give a small title or specify the subject of your submission, maximum 200 characters):	Clarification regarding the method of emission reduction calculation of registered PDD (UNFCCC ref. 0706) and monitoring plan in line with the applicable methodology AMS-IIB, version 07
Indicative methodology to which your submission relates (refer the items of Appendix B of the Simplified Modalities and Procedures), if applicable.	AMS-II.B (version 07)
Name of the authors of the query:	Institution: SGS United Kingdom Limited <a href="mailto:Siddharth.Yadav@sgs.com">Siddharth.Yadav@sgs.com</a> , <a href="mailto:Sanjeev.Kumar@sgs.com">Sanjeev.Kumar@sgs.com</a> , <a href="mailto:UKclimatechange@sgs.com">UKclimatechange@sgs.com</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.

The project activity is the registered project (ref number 706) applying AMS-II.B that involves utilization of waste gas/heat coming out from IC engine in a waste heat recovery boiler (WHRB) to produce steam. In the absence of the CDM project activity, the steam from the WHRB would be produced by a Low Sulphur Heavy Stock Fuel Oil (LSHR) boiler. The energy saving is the amount of LSHS that has been avoided due to the project activity.



According to the monitoring section of AMS-II.B, “Energy savings shall be measured after implementation of the efficiency measures, by calculating the energy content of the fuel used by the generating unit and the energy content of the electricity or steam produced by the unit”. Hence both fuel use and output need to be metered. However, in this project activity, energy content of the fuel used and the steam has not been calculated for measuring the energy savings although the fuel use (only natural gas) and generation of steam and electricity are being monitored. The energy saving is indirectly calculated based on the fixed *ex ante* evaporation ratio (13.5 tonne steam / tonne LSHR) over the entire crediting period. The measured steam output is divided by the ratio 13.5 to get the amount of LSHR (tonne) that is avoided. The reference cited for the ratio: Greenhouse Gas Emission Reduction from Industry in Asia and the Pacific” (GERIAP), Performance Evaluation of Boiler August 2004). Also,

please see the registered PDD (pages 11, 12 and 18) and monitoring report of the project # 706.

A clarification has been requested by the DoE regarding the appropriateness of monitoring plan in the registered PDD and the related emission reduction calculations.

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

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

Please refer to paragraph 24 of the meeting report of the SSC WG 17 ([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 (SSC WG) of the CDM Executive Board would like to thank the author for the submission.

It should be noted that AMS-II.B specifies, “Energy savings shall be measured after implementation of the efficiency measures, by calculating the energy content of the fuel used by the generating unit and the energy content of the electricity or steam produced by the unit”. In this project activity, the energy content of the fuel used has not been measured and the energy content of the steam could not be determined, as the parameters required (pressure and temperature) are not measured. The energy saving is indirectly calculated based on the fixed *ex ante* evaporation ratio (13.5 tonne steam / tonne LSHR) over the entire crediting period. The measured steam output is divided by the ratio 13.5 to get the amount of LSHR (tonne) that is avoided. The reference cited for the ratio is: “Greenhouse Gas Emission Reduction from Industry in Asia and the Pacific” (GERIAP), Performance Evaluation of Boiler August 2004). It is stated in the PDD that the fixed *ex ante* evaporation ratio is conservative as compared to the characteristics of the baseline fossil fuel boiler (maximum capacity production and fuel consumption) having efficiency of 11.43 tonne Steam/tonne LSHS. Although it appears that the proposed procedure is conservative, additional information would be needed in order to consider it as correct.

The SSCWG agreed to indicate that a request for deviation in accordance with the procedures be submitted for the consideration of the Board (see ‘procedures for requests for deviation to the Executive Board’ at [http://cdm.unfccc.int/Reference/Procedures/reg\\_proc03\\_v02.pdf](http://cdm.unfccc.int/Reference/Procedures/reg_proc03_v02.pdf)). In requesting the deviation the SSC WG suggested that the additional information be provided on characteristics of the steam produced in the baseline boiler (e.g. pressure and temperature).

Furthermore, a revision of monitoring plan may be requested in accordance with the procedures (see [http://cdm.unfccc.int/Reference/Procedures/iss\\_proc05\\_v01.pdf](http://cdm.unfccc.int/Reference/Procedures/iss_proc05_v01.pdf)) such that it is possible to demonstrate using measured values that the enthalpy of the steam produced in the project activity boiler is always equal or higher than the enthalpy of the steam produced in the baseline fossil fuel boiler for (e.g. by monitoring pressure and temperature values in addition to flow).



Signature of SSC WG Chair .....

(Ulrika Raab)

Date: 03/09/2008



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

(Kamel Djemouai)

Date: 03/09/2008

**Information to be completed by the secretariat**

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