



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:	10–12 November 2008, SSC WG 18
Title/Subject (give a small title or specify the subject of your submission, maximum 200 characters):	Clarification regarding the interpretation of grid import and determining baseline emission factor in AMS-I.C
Indicative methodology to which your submission relates (refer the items of Appendix B of the Simplified Modalities and Procedures), if applicable.	AMS-I.C
Name of the authors of the query:	Bhawna Singh Institution: Agrinergy Consultancy Private Limited bhawna.singh@agrinergy.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.

The project activity will add a turbine generator to a steam source, the steam would be generated in the baseline scenario and there is no change in the steam output resulting from the project activity (relative to the baseline scenario). Through the addition of the turbine generator the project activity will supply electricity to the grid. The baseline is the existing power plant that meets the captive electricity demand of the adjacent sugar plant through the generation of heat and electricity through the combustion of renewable biomass. The project activity is proposed under baseline scenario 7 (e) of AMS IC version 13.

“Electricity will be 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 biomass”.

We understand from clarification SSC 174 that the methodology is applicable to the export of electricity; however the problem we encounter arises in the determination of the CEF that is applicable to such project activities through the application of paragraph 11 of the methodology which states the following.

“11. 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).

Intuitively one would assume that the CEF to be applied would be the grid CEF as this represents the emissions of the baseline electricity that is being displaced. The problem arises in the interpretation of grid import and the clarification relates primarily to this. In the text above the import of electricity could be interpreted as only import to the site at which the project activity takes place and not general import by third parties on the grid. However it should be noted that the electricity supplied by the project activity replaces electricity imported by third parties from the grid. The issue in applying paragraph 11 is that the

existing captive plant is greater in capacity than the project activity and therefore “the emission factor shall be calculated as the weighted average of captive electricity generation and the net grid import”.

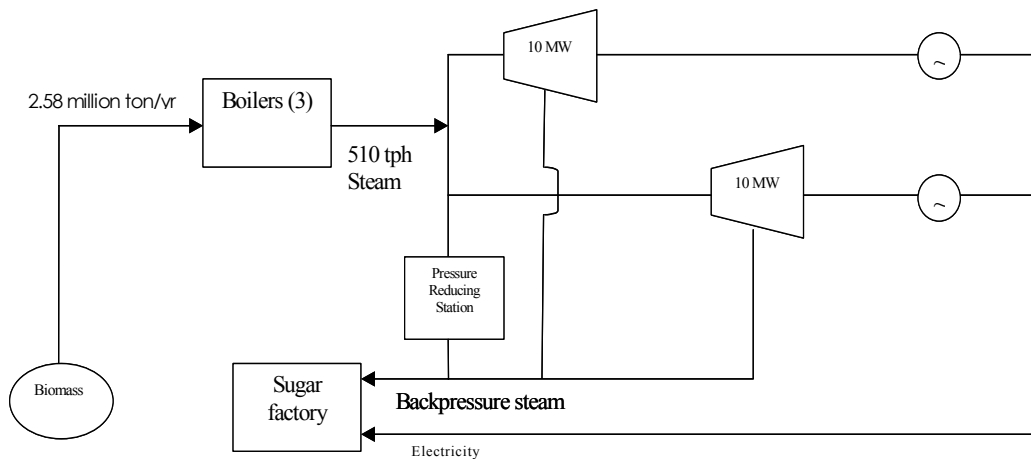
There are therefore three situations that give rise to very different CEFs:

1. If we assume that import only refers to the plant site then we determine the CEF based on the captive generation CEF (as imports to the site have historically been zero). As the captive generation is from renewable biomass the CEF for grid exports becomes zero
2. If we assume that import refers to the plant site and the grid in general and determine the CEF on the basis of the weighted average. As the captive generation in our project is twice that of the project activity generation the CEF is therefore $(0.66 \times \text{captive CEF} + 0.33 \text{ grid CEF})$, i.e. one third of the grid CEF.
3. The final alternative is to apply the grid CEF, which would seem the most relevant and applicable choice.

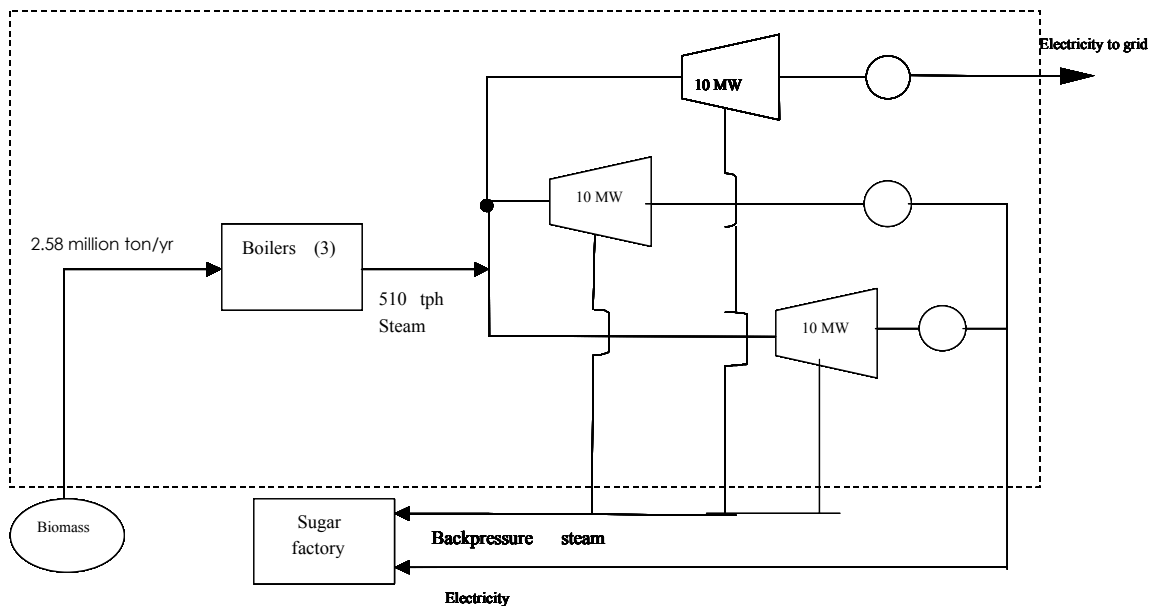
We would therefore be interested to seek a clarification on how the CEF should be calculated?

Diagrammatic representation of the baseline and project activity

Baseline



Project Activity



Recommendation by the SSC WG:

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

Please refer to paragraph 19 of the meeting report of the SSC WG 18
(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.

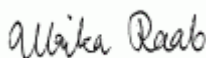
The SSC WG agreed to clarify that the described project activity is not eligible to apply AMS-I.C.

The important attribute of AMS-I.C is that the project activity shall displace fossil fuel based energy production with renewable energy. For cogeneration project activity, AMS-I.C states "Cogeneration projects that displace/ avoid fossil fuel consumption in the production of thermal energy (e.g. steam or process heat) and/or electricity shall use this methodology". The interpretation of paragraph 7 (e) of AMS-I.C version 13 is that electricity is imported from the grid and/or produced in an on-site captive power plant using fossil fuels (with a possibility of export to the grid); steam/heat is produced from renewable biomass. As this is not the situation described in the project activity and it is merely the addition of steam turbine to the existing steam source, AMS-I.C is not applicable to the project activity.

The SSC WG noted from the submission that the project activity involves the generation of steam using a biomass residue as a fuel and the surplus steam is used to drive a turbine-generator to produce electricity, which is then supplied to the grid. The project activity, which involves the addition of turbine-generator in already existing steam source, cannot be considered as a cogeneration plant. The baseline for this project includes the possible scenarios for adding additional generation to the grid rather than generation of power within the boundary or generation of power at consumer sites outside the boundary.

The SSC WG also noted that the use of a pressure-reducing device in the baseline shows that it has surplus steam energy in the baseline. The author of the submission may wish to explore: (a) AMS-III.Q for project activity utilizing waste pressure to generate electricity that will be supplied to grid, **or** (b) AMS-I.D for renewable based electricity generation displacing grid.

Regarding the question about the emission factor to be used (grid or captive power plant), it should be noted that additional information would be needed. However, if the Project Proponent can demonstrate that the electricity supplied by the project activity replaces electricity imported from the grid, the emission factor of the grid could be used.



Signature of SSC WG Chair

(Ulrika Raab)

Date: 12/11/2008



Signature of SSC WG Vice-Chair

(Kamel Djemouai)

Date: 12/11/2008

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