CDM: Response form for Request for revision of approved methodologies (version 01.1)

Date of Meth Panel meeting:	7 - 11 March 2011
Title and number of Request for revision	Baseline addition covering projects that increase significantly the use of vented waste heat (project) combined with a smaller amount of waste heat already used for captive heat (baseline), generating electricity in a new project AM_REV_0207

Summary of the query:

Please use the space below to summarize the request for revision on the related approved methodologies.

ACM0012 "Consolidated baseline methodology for GHG emission reductions from waste energy recovery projects" is applicable to project activities recovering energy from waste energy sources.

The request for revision aims at expanding the applicability of the methodology to include the projects that install a new captive electricity plant (electricity only) on site where a limited portion of waste heat produced at the facility is (or was ever) captured and used for the heat generation only prior to the implementation of the project activity. The project activity employs equipment with more energy efficient electricity generating technology to utilize all/most of the waste heat for generating electricity for captive purpose. The existing (or existed) equipment to generate heat is replaced or decommissioned (the existed equipment was decommissioned due to the end of its life time).

The pre-project situation and project situation of the project activity in China are summarized below, as per the PDD submitted.

The "Low Temperature Heat Recovery and Power Generation Project of Wugang Agglomeration Plant" involves the construction and operation of an electricity generation project using of low temperature heat from the Nos. 1, 2 and 4 sinter machines of the Agglomeration Plant (the Agglomeration Plant is a branch department of Wugang) located in the main body of the iron and steel production facility of Wuhan Iron and Steel (Group) Co..

Pre-project situation

At present, there are three (Nos. 1, 2 and 4) sinter machines with capacity of 435m^2 and one (No. 3) sinter machine with capacity of 360m^2, in operation at the Wugang Agglomeration Plant. These machines generate waste heat. The proposed project will utilize waste heat from three sintering machines (Nos. 1, 2 and 4), which all have a capacity of 435m2. In the baseline, the waste heat from these sintering machines is not utilized but released into the atmosphere.

For the power generation, Wugang received 38.15% of its electricity demand from captive/cogeneration power plants (two 200 MW coal-fired power plants, other waste energy based cogeneration plant) and the remaining 61.85% from the Central China Power Grid.

Project situation

In order to utilize low temperature heat, which is the by-product of cooling system equipped for the three 435m2 sinter machines, three boilers will be installed for waste heat recovery. The proposed project will employ three units of boilers; along with one unit of steam turbine and one unit of generator with rated capacity of 33MW. The total installed capacity of the project is 35MW (with rated capacity of 33MW) and annual power generation is estimated to be 226,800MWh. After auxiliary consumption and losses, the annual power supply via a 10kV transmission line to the internal electricity system of Wugang is estimated to be 199,584MWh.

The proposed project operation will not make any impact on the existing coal-fired captive power plant, e.g. the power generated by the proposed project does not replace the electricity generated by the existing captive plants, but only replace the electricity imported by the Central China Power Grid (which is dominated by coal-fired power plants). The proposed CDM project activity will reduce emissions to the tune of 194,100tCO2e annually.

The draft revised methodology is submitted with the changes in the sections of applicability conditions, project boundary, baseline scenario identification, additionality, baseline emissions, project emissions and monitoring.

Recommendation by the Meth Panel:

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

Please refer to the box below.

(b) Please use the space below for providing guidance, as per Para 93 of EB25 Report, on what type of projects need to revise the PDD as a consequence of the suggested revision, if the recommendation is to revise the methodology.

Please refer to the box below.

Answer to authors of the request for revision by the Meth Panel :

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

The Meth Panel agrees not to revise the methodology because of the following reasons:

(1) It is understood that the waste heat of sintering machines Nos. 1 and 4 was recovered using waste heat recovery boilers from 1990 to 2004, till the boilers reached the end of their lifetime. Even though the decision on the implementation of CDM project is isolated from the decision to stop the boiler due to end of lifetime (as stated in the request), the fact is that in the absence of the CDM project activity implementing a high efficiency energy recovery power plant, some other heat energy recovery system (with a possibly higher efficiency than baseline boilers) would have been installed WG: Divide into 2 sentences. The baseline scenario assessment with regard to above aspect is absent in the proposed revision. This issue could have a significant impact on the emission factor of the heat generating technology that could be employed in the absence of the project activity.

(2) It is not clear in the figure added in the baseline emission section to cover the situation B, whether the cogeneration power plant is referred to under the project activity, which along with 100 MW also generates some (e.g. X unit of) heat energy. Please explain why the transfer of imported power takes place to satisfy heat demand of X units? Therefore, the issue of level of service becomes very significant in this case. Why is a comparison made with heat in the baseline with imported power under the project. This could be an unlikely and an extremely project specific situation, which cannot be generalized in the methodology. The scheme explained in the PDD is also not clear on how the heat demand of the baseline is satisfied under the project scenario.

(3) The project participants should explain what is meant in the project emission section that the heat generated by the existing facility is transferred to electricity. Moreover the equation used for this purpose $EC_{PJ,transferred} = 3.6HG_{captive,BL}$ is not clear.

The project participants may note that forty-seventh meeting of the Meth Panel, through the revised version of methodology ACM0012, has recommended a completely changed approach for the project activities which improve the waste energy recovery. This revision is still being discussed by the CDM Executive Board. The project participants may like to refer annex 1 of the forty-seventh Meth Panel meeting report and may like to follow up its progress with the CDM Executive Board. If this version is approved by the Board, the project participants should propose revisions in the latest approved version of the methodology, if the new version of the methodology is not applicable to the project activity.

Signed by the Chair, Mr. Philip Gwage
Date: 11/03/2011

Signed by the Vice-Chair, Lex de Jonge
Date: 11/03/2011

Information to be completed by the secretariat	
F-CDM-AM	AM_REV_0207
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