



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:	15–18 March 2011, SSC WG 30
Title/Subject (give a small title or specify the subject of your submission, maximum 200 characters):	Clarification on the applicability of AMS-I.D to a project activity utilizing waste heat from a process using renewable energy source
Indicative methodology to which your submission relates (refer the items of Appendix B of the Simplified Modalities and Procedures), if applicable.	AMS-I.D “Grid connected renewable electricity generation”
Name of the authors of the query:	Rainer Winter / Arthur Moraes Institution: TÜV NORD CERT GmbH / Carbotrader cdm@tuev-nord.de , moraes.arthur@carbotrader.com , sfriesen@tuev-nord.de

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 DOE:

Dear Members of the CDM Executive Board - UNFCCC Secretariat,

We refer to the issue/question raised in the *Request for registration incomplete for “Generation with Blast Furnace Gas of SIDERPITA (JUN1060), Brazil” - Ref No. 00003175* received on 23/12/2010, and would like to provide the following response/comment to the issue raised, as agreed with Project participant.

The applicability of the Methodology for the project 3175 may be determined in light of the chronology of the project activity as specified herein.

The Carbotrader was the consultant company designated, in March 2007 by the Companhia Siderurgica Siderpita and Efficientia S.A., for the development of the PDD as well as accompaniment of the validation process.

In the light of the early pioneers of CDM projects in Brazil and around the world submitted for validation by March 2007 the Carbotrader was in the dilemma of driving the creation of a new methodology for the proposed project activity or using a methodology already available.

Given the similarities with the project activity “UTE Barreiro SA Renewable Electricity Generation Project - reference 0143” approved by the Executive Board on 22/01/2006 which makes use of renewable wood tar to produce blast furnace waste gas for electric power generation and which had used methodology AMS. I. D. (version 6), the PPs of project no. 3175 was certain to be in compliance with the applicable requirements of AMS.I.D and developed the PDD on that basis.

Considering that AMS I.D. version 13 details energy use by renewable sources, the PP deems to be in compliance with the applicability conditions of the methodology AMS ID considering the following elaboration:

“1. 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.”

The project activity comprehends the use of renewable biomass sources for the generation of electricity to be internally consumed and delivered to the national grid. All the pig iron production at the plant is based on the use of charcoal as reducing agent, which is produced from wood from sustainable eucalyptus plantations. Hence, the blast furnace gas, a by-product of the pig iron production, can be considered as a renewable energy source. AMS I.D. does not state that waste gas cannot be utilized if coming from a renewable biomass, as it is the case. Only in case of waste gas with methane recovery the methodology says it is not applicable.

2. If the unit added has both renewable and non-renewable components (e.g.. a wind/diesel unit), the eligibility limit of 15MW for a small-scale CDM project activity applies only to the renewable component. If the unit added co-fires fossil fuel, the capacity of the entire unit shall not exceed the limit of 15MW.”

The electricity generation unit will only use eucalyptus based charcoal and the limit of 15MW is not exceeded.

3. “Combined heat and power (co-generation) systems are not eligible under this category”;

Not applicable as the project activity purpose aims only to the power generation.

4. “In the case of project activities that involve the addition of renewable energy generation units at an existing renewable power generation facility, the added capacity of the units added by the project should be lower than 15 MW and should be physically distinct² from the existing units”;

Not applicable as the project consists of the installation of a new power generation. No previous generation units were installed at the plant.

5. “Project activities that seek to retrofit or modify an existing facility for renewable energy generation are included in this category. To qualify as a small-scale project, the total output of the modified or retrofitted unit shall not exceed the limit of 15 MW”.

Not applicable as the project consists of the installation of a new power generation. No previous generation units were installed at the plant.

The UTE Siderpita project at the top of chain uses wood from planted forests (renewable biomass) that is burned to generate the blast furnace gas, being the same combustible utilised in the UTE Barreiro project.

This set out the line of work to follow and the PPs forward with the PDD preparation, making use of version 13 of methodology AMS I.D. during 2007 and 2008 (June).

This step completed, the TÜV NORD was hired as the DOE responsible for the CDM project activity validation. The initial step was performed publishing the PDD for global stakeholder's comments on the UNFCCC website in 28/06/2008.

Project Activity Timeline (in the light of the methodology applicability):

Date Event	January 2006 UTE Barreiro SA Renewable Electricity Generation Project - reference 0143 approved by the Executive Board with the methodology AMS I.D. version 6
March 2007	UTE Siderpita PDD started with the AMS I.D. version 13
March 2007	Brazilian stakeholder consultation about the UTE Siderpita CDM Project activity validation
June 2008	DOE contracted
June 2008	PDD publication for Global stakeholders comments (in the UNFCCC website)
July 2008	DOE Site Visit
October 2008	AMS III.Q. version 2 is approved (now the meth baseline become applicable for this kind of project activity)

Chronology of investigations concerning the Applicability of the Methodology:

On 15/03/2007 an E-Mail to the UNFCCC Secretariat (CDM Team) has been sent in order to investigate

a suitable methodology applicable for this type of project activity (see Annex 1).

The UNFCCC secretariat responded that it is not in a position to advise in this regard as it cannot provide consultancy services for any given project.

Though the methodology AMS III. Q. version 1 was valid from 19.10.2007 its restrictions concerning the baseline definition lead to the exclusion of this methodology.

At the time version 2 of AMS III.Q. came into effect in which the revised baseline definition suitable for the UTE Siderpita project was taken into account, i.e. 10/10/2008, the Global Stakeholder commenting process was already completed and the start of the PDD preparation was almost two years ago.

In light of the above we hope that the Executive Board will decide in favour of the application of AMS.I.D and all the efforts made for the UTE Siderpita to be registered as a CDM project activity in its rightful historical conceptuality.

Recommendation by the SSC WG:

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

Please refer to paragraph 27 of the meeting report of the SSC WG 30
<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 waste energy (by-product gas/heat/pressure) resulting from an industrial processes with potential to provide useful energy, but it is wasted in the baseline situation, can be eligible under SSC Type III category, and not under Type I, even if the industrial process is exclusively based on renewable sources of energy. The group is also of the opinion that AMS-I.D is intended for production of electricity by directly utilizing primary energy sources such as wind, solar, hydro and a direct combustion of biomass to produce electricity. The underlying project utilizes secondary source of energy (i.e. waste energy generated in blast furnace producing pig iron).

It is to be noted that the electricity generated by a project activity utilizing waste energy (Type III) requires no consideration of leakage associated with the production and use of the renewable biomass. In other words, the emissions associated with the use of biomass source are totally attributed to the main industrial product (e.g. pig iron). In the case of the described project activity, though the waste gas has no embedded emissions, the most of the carbon content of biomass (used as reducing agent) are embedded in the pig iron (unlike the case of landfill gas recovery (Type III component) and utilization for energy production (Type I component)).

The author of the submission also may wish to refer to previous clarifications provided by the SSC WG on the subject issues such as:

- In response to SSC_417 requesting clarification on the applicability of Type I versus Type III category for project involving fossil fuel switch to biomass in an industrial process“, the SSC WG states “..... The project activities where the fuel input is utilized as both energy source as well as feedstock (e.g. reducing agent), Type-III methodology would be required.”
<<http://cdm.unfccc.int/methodologies/SSCmethodologies/clarifications/32477>>;
- In response to SSC_264 requesting clarification on the applicability of AMS-I.C for project activity consists of metal production where the “carbon source” switches from fossil fuel (for example, coke) to renewable charcoal, the SSC WG stated “In the case of metal ore reduction process, the input energy source (charcoal) is utilized as both energy as well as reducing agent. It may be difficult to apportion the charcoal energy input between energy and ore-reduction use; as such, the specification of the installed thermal capacity limit of the project when developed in AMS-I.C may be quite challenging. The SSC WG is of the opinion that a Type III methodology

should be proposed in accordance with the procedures including appropriate monitoring guidance;

- In response to CLA_286 requesting clarification on the applicability of AMS-I.D for project activity involving the replacement of pressure reducing valve with back pressure turbine in existing cogeneration facility, one of the opinions from the SSC WG states “.....The SSC WG is of the opinion that the project cannot be considered under Type I (renewable energy) as the project activity is the installation of a new electricity generation unit, which will not result in the direct conversion of energy from a renewable source. It should be noted that the same amount of biomass is used before and after project activity.”
<<http://cdm.unfccc.int/methodologies/SSCmethodologies/clarifications/95783>>.

Signed by the Chair, Ms. Fatou Gaye

Date: 18/03/2011

Signed by the Vice-Chair, Mr. Peer Stiansen

Date: 18/03/2011

Information to be completed by the secretariat

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