



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:	16–19 February 2010, SSC WG 24
Title/Subject (give a small title or specify the subject of your submission, maximum 200 characters):	Applicability of AMS-II.D to energy efficiency measures in gas manufacturing facility
Indicative methodology to which your submission relates (refer the items of Appendix B of the Simplified Modalities and Procedures), if applicable.	AMS-II.D, ver. 11
Name of the authors of the query:	M.V.S. Ramakrishna Institution: Praxair India Private Limited MVS_Ramakrishna@praxair.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.

Original text from PP:

We refer to the small scale methodology AMS II.D. As per the methodology, any measure that may replace, modify or retrofit existing facilities or be installed in a new facility falls into this category. We seek a clarification of the same for our project activity. The project activity involves energy efficiency measures in an industrial gas manufacturing facility in India (the detailed description of the energy efficiency measures have been provided in Annexure 1 (sent as an attachment along with the e-mail) and the applicability has been justified as below.

Applicability Criteria

This category comprises any energy efficiency and fuel switching measure implemented at a single industrial or mining and mineral production facility. This category covers project activities aimed primarily at energy efficiency; a project activity that involves primarily fuel switching falls into category III.B.1 Examples include energy efficiency measures (such as efficient motors), fuel switching measures (such as switching from steam or compressed air to electricity) and efficiency measures for specific industrial or mining and mineral production processes (such as steel furnaces, paper drying, tobacco curing, etc.). The measures may replace, modify or retrofit existing facilities or be installed in a new facility. The aggregate energy savings of a single project may not exceed the equivalent of 60 GWhe per year. A total saving of 60 GWhe per year is equivalent to a maximal saving of 180 GWhth per year in fuel input.

Justification

Project-1 (Reduction in specific energy consumption through increased main air compressor pressure) – this measure meets this applicability criteria since it is a modification of the pressure in the main air compressor. Increase of pressure from 8.4 bar (g) to 9.8 bar (g) which results in reduced specific energy consumption.

Project 2 (Model Predictive Controller) – This is a retrofit measure wherein the earlier manual control of product (gaseous oxygen / nitrogen / argon) venting to the customer is changed to an automated control through a customised software.

Project 3 (Reduction in heating time for regeneration in Pre Purifier) – The air flow into the pre purifier is not as always at full load. The project activity is a modification where, depending on the air flow, the heating time will vary which leads to reduced specific energy consumption.

Project 4 (Low Medium Pressure Liquefier optimization) – This measure involves a modification in the discharge pressure of the feed gas compressor. The pressure is increased from 5.55 to 5.9 bar(g) which leads to a reduced specific power consumption.

Project 5 (Tank Medium TM1 and TM2 loss reduction) – This measure involves a modification in the baseline, wherein evaporation losses of the product gases are minimized leading to savings in product gases which in turn lead to savings in energy consumption.

The data recording and monitoring at the manufacturing facility are state of the art and robust. Currently, the I-Historian records continuously CDM related parameters. At a given point in time, it is possible to obtain data through this online system. With this system, it is possible to accurately measure the reduction in specific energy consumption and thereby the energy savings. Further, energy meters which will be installed at the respective project measure locations make it possible to directly measure and record the energy use within the project boundary.

It can be seen from the above table that the measures are a form of modification, retrofit or replacement of a higher energy consumption activity. The reduction in specific energy consumption will be measured directly through the installation of energy meters. In the business as usual scenario (in the other plant locations of Praxair), the proponent could have carried out the production process without any of these measures but leading to a higher energy consumption.

We humbly request the small scale working group to provide a clarification on the above applicability criteria of the methodology. We also request the members to please confirm if the above listed project activity measures (given the detailed description and monitoring procedures) satisfies the requirements to be considered under the Clean Development Mechanism.

Recommendation by the SSC WG:

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

Please refer to paragraph 26 of the meeting report of the SSC WG 24 (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.

Regarding the applicability of AMS-II.D for energy efficiency improvement measures such as process optimization (loss reduction and pressure optimization) and controlled process automation in an industrial gas manufacturing facility, the SSC WG agreed to clarify that the methodology is in general applicable to industrial energy efficiency project activities. However, whether the project activity described by the author of the submission complies with all the requirements of AMS II D is to be determined during the validation by a DOE based on the information presented in the project design document and in accordance with the procedures agreed by the Board. Should a specific question arise during any stage regarding a specific requirement in AMS-II.D a clarification request may be sent or even a modification to the methodology may be proposed, the SSC would be in a better position to review any such requests for clarifications or modifications. However, the SSC WG agreed to point out that the following may be further considered by the submission author:

- The EB, at its 47 meeting, expressed some concern about complex industrial measures applying SSC methodologies and further criteria for definition of what a complex measure is, EB 47,

paragraph 58 that states "...a simplified small scale methodology may not provide the right framework for the kind of technology/measure being addressed by the methodology."

- Any change in one aspect of the process may affect energy consumption in other parts of a facility and the PDD must show that either that is not the case or that any increases in energy use in other parts of the facility are accounted for in the analyses of emission reductions.
- The submission author may take note of the provision of AMS-II.D:
 "3. This category is applicable to project activities where the impact of the measures implemented (improvements in energy efficiency) by the project activity can be clearly distinguished from changes in energy use due to other variables not influenced by the project activity (signal to noise ratio)."
- While as it is claimed by the submission author per calculations and spreadsheets provided that "reduction in specific energy consumption will be measured directly through the installation of energy meters" energy savings cannot be measured – only a comparison can be made between baseline and project energy use and this would typically imply that metering must be in place during the baseline defining period, that is pre-project installation.



Signature of SSC WG Chair

(Peer Stiansen)

Date: 19/02/2010



Signature of SSC WG Vice-Chair

(Hugh Sealy)

Date: 19/02/2010

Information to be completed by the secretariat

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