



**Approved baseline and monitoring methodology/  
methodological tool clarification response form  
(Version 02.0)**

**INFORMATION TO BE COMPLETED BY THE SECRETARIAT OR PANEL/ WG**

<b>Date and number of Panel/ WG meeting:</b>	3–5 February 2014, SSC WG 43
<b>Title/Subject of the request for clarification:</b>	Applicability of AMS-III.AQ and AMS-III.S to project producing bio-CNG for displacement of CNG from fossil origin and use in freight transportation
<b>Reference number of the request for clarification:</b>	SSC_698
<b>Exact reference (number, title and version) of the methodology or methodological tool to which the request for clarification applies:</b>	AMS-III.AQ Introduction of Bio-CNG in transportation applications Version 1.0  AMS-III.S Introduction of low-emission vehicles/technologies to commercial vehicle fleets Version 4.0
<b>Fast track or Regular track:</b>	<input type="checkbox"/> Fast track <input checked="" type="checkbox"/> Regular track

**Summary of the request for clarification**

Original text from Stakeholder:

EQAO is involved in a replicable project idea (in advanced stage of development) to produce biogenic natural gas from renewable biomass (contained in waste organic matters, either solid or effluent, of agro-industrial plants). The final objective is to compress the biogenic natural gas and supply it to final users (using either pipelines or cylinders) –or- to use it in the plant own freight transportation fleet (mainly not limited to trucks using diesel).

In the case of bio-CNG gas for the plant own fleet, heavy-duty (HD) diesel engine will run on methane either by changing the combustion system from the Diesel-cycle to the Otto-cycle or using the Diesel Dual Fuel (DDF) cycle which used a Diesel-like cycle.

While evaluating applicable small-scale methodologies, we found two partially applicable, namely AMS-III.AQ (Introduction of Bio-CNG in transportation applications) and AMS-III.S (Introduction of low-emission vehicles/technologies to commercial vehicle fleets).

A possible application of the methodologies to our situation would involve the subdivision of the project activity in two parts, as follows:

- AMS-III.AQ (case 1) for the production of bio-CNG displacing CNG from fossil origin, with the producer of the bio-CNG being the only one to claim emissions reductions. The final users of the bio-CNG, being a third party or the company's own fleet, will consider the supplied compressed natural gas as if it was from fossil origin.
- AMS-III.S for the introduction of CNG to run either dedicated or DDF truck for project activity own freight transport.

Although the above mentioned approach seems reasonable to us, there is to the best of our understanding only one problem in the application of the methodologies, namely, case 1 of AMS-III.AQ is to be used in "cases where the vehicles are not included in the project boundary," which will very likely not be possible.

For that reason we seek your guidance to check if the proposed approach – with a request for deviation (vehicles included in the project boundary) – is acceptable. If not, could you please indicate issues to take into account and the best possible alternatives to apply the methodologies to the project idea?

Thank you very much.

#### Clarification by the secretariat or Panel/ WG

The Small-Scale Working Group (SSC WG) of the Executive Board (hereinafter referred to as the Board) of the clean development mechanism (CDM) would like to thank the author for the submission.

In response to the clarification sought on whether a combination of AMS-III.AQ and AMS-III.S is applicable to the project activity for the components of production of bio-CNG displacing CNG from fossil origin and for displacement of diesel consumption by captive diesel vehicles fleet respectively, the SSC WG agreed to clarify as follows:

- (a) A combination of AMS-III.AQ and AMS-III.S is not applicable; both these methodologies are limited to only transportation applications and not designed for supply of bio-CNG to (a) non-transport consumers directly; and (b) distribution through the natural gas pipelines.
- (b) Further to that, AMS-III.S does not cover project emissions associated with the production of the bio-CNG which is required for the underlying project activity which produces, purifies and compresses bio-CNG from organic matter, where physical leakage may occur.
- (c) AMS-III.AQ is not applicable to cases where existing diesel vehicles are converted into bio-CNG vehicles because case 2 of the methodology only accounts for displacement of gasoline in transportation applications.

The SSC WG agreed to encourage the project proponent to explore revising AMS-III.AQ considering the following:

- (a) Under case 1 of the methodology displacement of CNG from fossil origin could be expanded to include other uses besides transportation vehicles. The submitter may explore the opportunity to integrate provisions from AMS III H for biogas purification and use, wherein the methodology allows supply of upgraded biogas (i) directly to natural gas pipeline, (ii) direct supply to consumers etc.;
- (b) Under case 2 an additional scenario for displacement of diesel use in transportation could be included, taking into account conservatively the drop in energy efficiency due to conversion of diesel vehicles to bio-CNG vehicles.

- - - - -

**Document information**

<i>Version</i>	<i>Date</i>	<i>Description</i>
02.0	18 July 2013	Revised to remove the row "Date and signature of the chair and vice chair of Panel/WG (in case of clarification by Panel/WG)"
01.0	4 July 2013	Initial publication. This document supersedes and replaces the following documents: <ul style="list-style-type: none"><li>• Recommendation Form for Small Scale Methodologies (F-CDM-SSCwg) (Version 01.1)</li><li>• Recommendation Form for Small Scale A/R Methodologies and Procedures (F-CDM-SSC-AR) (Version 01.1)</li></ul>
Decision Class: Regulatory Document Type: Form, Clarification Business Function: Methodology Keywords: applying methodologies and tools		