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TYPE III - OTHER PROJECT ACTIVITIES

Project participants shall take into account the general guidance to the methodologies, information on additionality, abbreviations and general guidance on leakage provided at: <http://cdm.unfccc.int/methodologies/SSCmethodologies/approved.html>.

III.B. Switching fossil fuels

Technology/measure

1. This methodology comprises fossil fuel switching in industrial, residential, commercial, institutional or electricity generation applications[1] (e.g. fuel switch from fuel oil to natural gas in an existing captive electricity generation, or replacement of a fuel oil boiler by a natural gas boiler).

2. Retrofit or replacement of existing installations are eligible under this methodology.

3. Fuel switching may also result in energy efficiency improvements. If the project activity primarily aims at reducing emissions through fuel switching, it falls into this methodology. If fuel switching is part of a project activity focussed primarily on energy efficiency, the project activity falls under AMS II.D or II.E.

4. New facilities (Greenfield projects) and project activities involving capacity additions compared to the baseline scenario are only eligible to apply this methodology if they comply with the requirements in the General Guidance for SSC methodologies[2] concerning these topics. In addition the requirements for demonstration of the remaining lifetime of the equipment replaced as described in the general guidance shall be followed.

5. This methodology is not applicable to project activities that propose switch from fossil fuel use in the baseline to renewable biomass, biofuel or renewable energy in the project scenario. A relevant Type I methodology shall be used for such project activities that generate renewable energy displacing fossil fuel use. This methodology is also not applicable to project activities involving the use of waste gas; these project activities might be eligible under AMS III.Q.

6. In case of existing facilities historical information (detailed records) on the use of fossil fuels and the plant output (e.g. heat or electricity) in the baseline captive energy generation plant from at least 3 years prior to project implementation shall be used in the baseline calculations, e.g. information on coal use and heat output by a district heating plant, liquid fuel oil use and electricity generated by a generating unit (records of fuel used and output can be used *in lieu* of actual collecting baseline validation data[3]). For facilities that are less than 3 years old, all historical data shall be available (a minimum of one year data would be required).

[1] Fuel switch in transportation technologies is not eligible under this methodology.

[2] Refer to: "General guidance to Indicative simplified baseline and monitoring methodologies for selected small-scale CDM project activity categories".

[3] In the case of coal, the emission coefficient shall be based on test results for periodic samples of the coal purchased if such tests are part of the normal practice for coal purchases.

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III.B. Switching fossil fuels (cont)

7. Multiple fossil fuel switching is not covered under this methodology.

8. Measures are limited to those that result in emission reductions of less than or equal to 60 kt CO_2 equivalent annually.

Boundary

9. The project boundary is the physical, geographical site where the fossil fuel switching takes place, and all installations affected by the switching.

Baseline

10. The emission baseline is the current emissions of the facility expressed as emissions per unit of output. Baseline emissions shall be determined as follows:

$$BE_y = EF_{BSL} * Q_y \quad \textbf{(1)}$$

Where:

BE_y Baseline emissions in the project activity in year y (tCO_{2e})

EF_{BSL} Emission factor for the baseline situation (tCO_2/MWh)

Q_y Net output in the project activity in year y (MWh)

11. The net output in the project activity (Q_y) is limited to the installed capacity in the baseline situation, unless it has been demonstrated in accordance with paragraph 4 that the new installation (Greenfield project) or the added capacity has the same baseline scenario.

12. The emission factor in the baseline situation (EF_{BSL}) is the coefficient for the fossil fuel used in the baseline expressed as emissions per unit of output (e.g. kg CO_2e/kWh).

$$EF_{BSL} = (FC_{BSL} * EF_{CO2} * NCV) / Q_{BSL} \quad \textbf{(2)}$$

Where:

FC_{BSL} Total amount of fossil fuel consumed for captive energy generation in the baseline situation in accordance with paragraph 6 (mass or volume unit)

EF_{CO2} CO_2 emission factor for the baseline fossil fuel[4] (tCO_2/TJ)

NCV Net calorific value for the baseline fossil fuel (TJ/ mass or volume unit)[5]

Q_{BSL} Net energy generated in the captive plant in the baseline situation during the corresponding period of time for which the total fuel consumption was taken, in accordance with paragraph 6 (MWh)

Project Activity Emissions

13. Project activity emissions consist of those emissions related with the use of fossil fuel after the fuel switch. Project emissions are determined as follows:

$$PE_y = FC_y * EF_{CO2} * NCV \quad \textbf{(3)}$$

Where:

PE_y Project emissions in the project activity in year y (tCO_{2e})

FC_y Amount of fossil fuel consumed for captive energy generation in the project activity in year y (mass or volume unit)

EF_{CO2} CO_2 emission factor for fossil fuel (tCO_2/TJ)[5]

NCV Net calorific value for the fossil fuel (TJ/mass or volume unit)[5]

Leakage

14. No leakage calculation is required.

Monitoring

15. The emission reduction achieved by the project activity will be calculated as the difference between the baseline emissions and the project emissions.

$$ER_y = BE_y - PE_y \quad \textbf{(4)}$$

Where:

ER_y Emission reductions in the year y (tCO_2e)

[4] Reliable local or national data for the emission factor and NCV shall be used; IPCC default values should be used only when country or project specific data are not available or difficult to obtain.

16. Monitoring shall include:

(a) Monitoring of the fossil fuel use (FC_y) and output after the project activity has been implemented (Q_y) - e.g. gas use and heat output by a district heating plant, gas use and electricity generated by a generating unit.[5]

Project activity under a programme of activities

The following conditions apply for use of this methodology in a project activity under a programme of activities:

17. Leakage emissions resulting from fuel extraction, processing, liquefaction, transportation, re-gasification and distribution of fossil fuels outside of the project boundary shall be considered, as per the guidance provided in the leakage section of ACM0009. In case leakage emissions in the baseline situation is higher than leakage emissions in the project situation, leakage emissions will be set to zero.

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History of the document *

Version	Date	Nature of revision
13	EB 41, Annex 18 02 August 2008	The applicability condition is expanded to new facilities and guidance on treatment of capacity expansions is included.
12	EB 35, Annex 33 19 October 2007	A Paragraph is added under technology/measures to provide clarity that the methodology is not applicable to project activities that generate renewable energy displacing fossil fuel use.
11	EB 33, Annex 30 27 July 2007	Revision of the approved small-scale methodology AMS III.B to allow for its application under a programme of activities (PoA).
10	EB 28, Meeting Report, Para. 54 15 December 2006	Removed the interim applicability condition i.e. 25 ktCO2e/yr limit from all Type III categories.
09	EB 25, Annex 31 21 July 2006	Introduce the limit of 15 kilo tonnes of CO2 equivalent as annual project activity direct emissions.
08	EB 24, Meeting Report, Para, 64 12 May 2006	Introduced the interim applicability condition i.e. 25ktCO2e/yr limit for all Type III categories.

* This document, together with the 'General Guidance' and all other approved SSC methodologies, was part of a single document entitled: Appendix B of the Simplified Modalities and Procedures for Small-Scale CDM project activities until version 07.

[5] The necessary data are probably readily available, but may need to be organized into appropriate records and be supported by receipts for fuel purchases.

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III.B. Switching fossil fuels (cont)

History of the document: Appendix B of the Simplified Modalities and Procedures for Small-Scale CDM project activities

Appendix B of the Simplified Modalities and Procedures for Small-Scale CDM project activities contained both the General Guidance and Approved Methodologies until version 07. After version 07 the document was divided into separate documents: 'General Guidance' and separate approved small-scale methodologies (AMS).		
Version	**Date**	**Nature of revision**
07	EB 22, Para. 59 25 November 2005	References to "non-renewable biomass" in Appendix B deleted.
06	EB 21, Annex 22 20 September 2005	Guidance on consideration of non-renewable biomass in Type I methodologies, thermal equivalence of Type II GWhe limits included.
05	EB 18, Annex 6 25 February 2005	Guidance on 'capacity addition' and 'cofiring' in Type I methodologies and monitoring of methane in AMS III.D included.
04	EB 16, Annex 2 22 October 2004	AMS II.F was adopted, leakage due to equipment transfer was included in all Type I and Type II methodologies.
03	EB 14, Annex 2 30 June 2004	New methodology AMS III.E was adopted.
02	EB 12, Annex 2 28 November 2003	Definition of build margin included in AMS I.D, minor revisions to AMS I.A, AMS III.D, AMS II.E.
01	EB 7, Annex 6 21 January 2003	Initial adoption. The Board at its seventh meeting noted the adoption by the Conference of the Parties (COP), by its decision 21/CP.8, of simplified modalities and procedures for small-scale CDM project activities (SSC M&P).