Annex 26

GUIDELINES FOR COMPLETING THE PROPOSED NEW SMALL SCALE BASELINE AND MONITORING METHODOLOGY FORM

(Version 01.0)

CONTENTS

PART I

General information on completing the form for proposed new small scale methodologies

These guidelines are intended to assist project participants in completing the "CDM proposed new small scale methodologies from" (hereafter referred to as F-CDM-SSC-NM).

The F-CDM-SSC-NM was developed by the CDM Executive Board in conformity with the relevant simplified modalities and procedures for the Project Design Document for small-scale CDM project activities as defined in Appendix A "Project Design Document" to the simplified modalities and procedures for small-scale CDM project activities (Annex II to 4/CMP.1 contained in document FCCC/KP/CMP/2005/8/Add.1).

1. Submissions requesting the creation of a new small scale methodology shall complete and submit the "Project design document form for small-scale CDM project activities" (hereafter referred to as F-CDM-SSC-PDD) with only sections A-C filled along with completed "CDM submissions on small-scale methodologies and procedures" (hereafter referred to as F-CDM-SSC-Subm) and F-CDM-SSC-NM.

2. The F-CDM-SSC-NM may be obtained electronically from the UNFCCC CDM web site (http://unfccc.int/cdm) or by e-mail (cdm-info@unfccc.int) or in printed format from the UNFCCC secretariat (Fax: +49-228-815 1999).

3. Project participants should also consult the section "Guidance – clarifications-tools" available on the UNFCCC CDM website (http.cdm.unfccc.int/Reference/Guidclarif) or available from the UNFCCC secretariat by e-mail (cdm-info@unfccc.int) or in print via fax (+49-228-815 1999).

4. The Executive Board may revise the F-CDM-SSC-Subm, if necessary.

5. Revisions come into effect, once adopted by the Executive Board.

6. In accordance with the simplified modalities and procedures for small-scale CDM project activities and CDM modalities and procedures, the working language of the Board is English. F-CDM-SSC-NM shall therefore be completed and submitted in English language to the Executive Board.

7. F-CDM-SSC-NM templates shall not be altered, that is, shall be completed using the same font without modifying its format, font, headings or logo.

8. Tables and their columns shall not be modified or deleted. Rows may be added, as needed.

9. The F-CDM-SSC-NM is not applicable to small-scale afforestation and reforestation CDM project activities. Please consult the UNFCCC CDM web site (http://cdm.unfccc.int and go to CDM: guidance - clarifications - tools) for obtaining information regarding the CDM-PDD documentations for small-scale afforestation and reforestation CDM project activities.

PART II

Technical guideline for the development of proposed new small scale methodologies

1. This guideline is intended to assist project participants in completing the F-CDM-SSC-NM.

2. Project participants requesting the creation of a new small scale methodology shall complete and submit the F-CDM-SSC-PDD with only sections A-C filled along with completed F-CDM-SSC-Subm and F-CDM-SSC-NM.

3. All sections in the form F-CDM-SSC-NM shall be completed, which are outlined below.

4. Use of variables in equations: use the nomenclature of variables contained in Annex 1 to these guidelines.

NOTE: The document is prepared with the aim to facilitate the development of new small scale methodologies and as such is a guidance document. The decisions/guidance provided by either by the Board or COP are legally valid and this document does not replace such decisions or guidance provided. The document is a living document and shall be revised, as and when required, to accommodate EB and/or COP/MOP decisions.

SECTION A: GENERAL GUIDANCE ON PROPOSED NEW SMALL SCALE METHODOLOGIES

(1) Technology/measure: please specify and provide reference to the exact technology/measure the proposed small scale methodology is applicable to and describe in detail the applicability conditions of the proposed methodology.

Specify and provide reference to the exact technology/measure the proposed small scale methodology is applicable. Provide conditions under which the methodology is applicable to CDM project activities: (e.g. circumstances, region, data availability, resource availability).

(2) Boundary: please specify the project boundary of the proposed methodology.

Please describe and justify the project boundary bearing in mind that it shall encompass all anthropogenic emissions by sources of greenhouse gases under the control of the project participants that are significant and reasonably attributable to the project activity.

(3) Baseline: please specify the baseline scenario and the way baseline emissions are calculated.

Paragraph 43 of the CDM modalities and procedures stipulates that a CDM project activity is additional if its emissions are below those of its baseline (see guidance by the EB at its fifth meeting). "The baseline for a CDM project activity is the scenario that reasonably represents the anthropogenic emissions by sources of greenhouse gases that would occur in the absence of the proposed project activity" (paragraph 44 CDM modalities and procedures). Please specify the baseline scenario and the way the baseline emissions are calculated. Please also include information on algorithms and formulae, if used.

(4) Leakage: please specify if leakage emissions can occur and how they should be calculated.

Leakage is defined as the net change of anthropogenic emissions by sources of greenhouse gases which occurs outside the project boundary and which is measurable and attributable to the CDM project activity. Please explain how leakage is to be estimated and indicate in monitoring section (see below) how it is to be monitored ex-post, if applicable. Please describe algorithms, data, information and assumptions and provide the total estimate of leakage.

(5) Project activity emissions: please specify possible project activity emissions and how they should be calculated.

For some project activities, emission reductions are calculated as the difference between the project activity and the baseline emissions. For others emission reductions are monitored directly. Please clarify which option is applicable. Please describe the data and information that will be collected in order to monitor the emissions in the project scenario and how the project emissions are calculated. Please also include information on algorithms and formulae, if used.

(6) Monitoring: Please specify which parameters should be monitored and how they should be monitored

Describe the data and information that will be collected in order to monitor and calculate the baseline emissions, the project emissions and the emission reductions from the project activity. Please also include information on algorithms and formulae, if used

(7) Project activity under a programme of activities: if the proposed methodology is also intended for application to a project activity under a programme of activities (CPA of PoA) guidance on consideration of leakage when applying to the CPA of PoA shall be provided.

If the proposed methodology is also intended for application to a project activity under a programme of activities (CPA of PoA), please specify how leakage shall be considered. Please also include information on algorithms and formulae, if used.

Annex 1. List of standard variables

THIS ANNEX CONTAINS STANDARD VARIABLE NAMES DRAWN FROM APPROVED METHODOLOGIES AND IPCC GUIDELINES THAT SHOULD BE USED FOR ALL NEW SMALL SCALE METHODOLOGIES. FOR EASE OF EVALUATION AND USE OF METHODOLOGIES, THESE NAMES SHOULD BE USED WHEREVER POSSIBLE, UNLESS THERE ARE SPECIFIC REASONS THAT A DIFFERENT DESIGNATION IS REQUIRED. ISO OR OTHER STANDARDS COULD ALSO BE A REFERENCE, WHERE APPROPRIATE.

1. Use of variables in equations: Use the nomenclature of variables described below. Variables not contained in the standard nomenclature should be named with two or three upper case letters that are first letters of each key word describing variable (e.g. stack height = SH).

2. All variables that are reported or estimated annually should have a y subscript for year (e.g. BEy)

3. Variables should use the i subscript to denote multiple pieces of equipment, fuel types, processes, sites or measuring locations (e.g. Fi = flow rate at different measuring points i). If two summations are required (e.g. fuel type and equipment piece), the subscripts i and j should be used.

4. No name should be used more than once for different variables in the same methodology.

5. Where necessary, the subscripts BL and PJ should be used to distinguish between the project and the baseline (e.g. EGBL, EGPJ).

6. Where a variable refers to a gases, the formula of the gas should be indicated as a subscript (e.g. BECO2,y)

Emissions, emission factors and global warming potentials

Variable	Symbol	Units	Comment
Baseline emissions (total)	BEy	tCO2e	
Component of baseline emissions	BEXX,y	tCO2e	XX should be 2-3 letters or a word signifying the source of emissions (e.g. BELW,y = baseline emission from land-filled waste)
Component and specific gas of baseline emissions	BEGHG,XX,y	tCO2e	GHG should be gas name; XX should be 2-3 letters or a word signifying the source of emissions
Project emissions	PEy	tCO2e	
Component of project emissions	PEXX,y	tCO2e	XX should be 2-3 letters or a word signifying the source of emissions
Component and specific gas of project emissions	PEGHG,XX,y	tCO2e	GHG should be gas name; XX should be 2-3 letters or a word signifying the source of emissions
Leakage emissions	LEy	tCO2e	
Component of leakage	LEXX,y	tCO2e	XX should be 2-3 letters or a word

Variable	Symbol	Units	Comment
emissions			signifying the source of emissions (e.g. LEVH.y = leakage emissions from vehicles)
Component and specific gas of leakage emissions	LEGHG,XX,y	tCO2e	GHG should be gas name; XX should be 2-3 letters or a word signifying the source of emissions
Carbon dioxide emission factor	EFCO2,XX	tCO2/TJ	XX should refer to fuel type, and could be i to signify several possible fuel types (e.g. EFCO2,i or EFCO2,coal, EFCO2,NG, EFCO2,oil)
Methane emission factor	EFCH4,XX	tCH4/TJ	XX should refer to fuel type or process
Nitrous oxide emission factor	EFN2O,XX	tN2O/TJ	XX should refer to fuel type or process
Carbon dioxide equivalent emission factor	EFCO2e,XX	tCO2e/TJ	XX should refer to fuel type or process
CO2 emission factor for electricity	EFCO2,ELEC,y	tCO2/MWh	
Global warming potential	GWPXX	tCO2e/t gas	XX should denote the gas (CH4, N2O)
Other emission factors	EFXX,YY	tGHG/unit of output	XX should specify the gas (where necessary), YY is product output or service (e.g. EFCO2,clinker: emissions factor for clinker in tCO2/t clinker; EFN2O,NA: emissions factor for nitric acid in tN2O/t nitric acid)

Note that standard IPCC emissions factors refer to emissions per unit of *energy*. If the methodology also uses emission per unit of mass, then different variable names should be used for this, or the equation should include the net calorific value to convert to energy units. If the methodology refers to emissions per unit of production or service, this should be indicated as described above under "Other emission factors".

General

Variable	Symbol	Units	Comment
Production output (project or baseline)	Pxx,zz,y	tonnes or m3	XX indicates the product, y is year. ZZ represents baseline and project production of same product, if needed, use subscripts BL and PJ for baseline and project respectively (e.g. PNH3,PJ,y = production of ammonia in the project activity)
Density	ρx	t/m3	e.g. ρCH4 = density of methane
weight fraction or weight concentration	wGHG,XX	volume or mass %	GHG is the gas; XX indicates where concentration sample is taken and/or

Variable	Symbol	Units	Comment
			substance measured (e.g. wCH4,PJ = concentration of methane in project gas stream)
Flow rate	FRXX,YY	m3/time	XX should denote the gas, YY the type of flow stream (e.g. FRCH4,flare)
Days	d	days	
Hour, year	h, y		

Energy

Variable	Symbol	Units	Comment
Energy efficiency	ηXX	%	useful energy output/total energy input, also used for power plants and all boilers (e.g. ηBL = energy efficiency of piece of equipment in the baseline)
Electricity generation	EGy	MWh	Project and baseline generation should include subscripts (e.g. EGPJ,y)
Heat production	HGy	GJ	Project and baseline generation should include subscripts (e.g. HGBL,y)
Electricity consumption	ECy	MWh	
Heat consumption	HCy	GJ	
Net calorific value	NCVXX	GJ/t	XX is the fuel or oxidized substance; XX could be i if there are many alternatives; standardised to lower heating value (e.g. NCVNG = net calorific value of natural gas)
Fuel quantity combusted	FCXX	t or m3	XX is the fuel type (e.g. FCBiomass = quantity biomass combusted, FCNG = quantity natural gas combusted)
Oxidation factor for fuel combustion	OXIDXX	%	XX is the fuel type, e.g. OXIDNG = oxidation factor for natural gas
Specific energy consumption	SECXX	GJ/tonne production	e.g. SECclinker = energy consumption per tonne of clinker produced
Specific fuel consumption	SFCXX	tonne fuel/tonne production	e.g. SFCOPC = fuel consumption per tonne of ordinary Portland cement production
Specific energy consumption in transport	SECYY,XX	GJ/t-km or passenger-km	YY is transport mode and XX is fuel
Weighting of operating margin	wOM	-	
Weighting of build margin	wBM	-	

Variable	Symbol	Units	Comment
Electricity generated by plant i on grid	EGGRID,i,y	MWh	i is plant, y is year
Load factor	LFx	%	x is plant identification
Operating hours	Tx	hours	annual operating hours for plant/equipment x
Enthalpy	h	kJ/kg	used in particular for steam

Financial/economic

Variable	Symbol	Units	Comment
Internal Rate of Return	IRR	%	
Discount rate	dr	%	
Net Present Value	NPV	$ or LCU	

Agriculture, waste and fugitive methane emissions

Variable	Symbol	Units	Comment
Methane gas destroyed in baseline	GDCH4,BL,y	tCH4	
Methane gas destroyed in project scenario	GDCH4,PJ,y	tCH4	
Flare efficiency	ηflare,t	%	this may have a time or period component t, if efficiency is measured and varies over time
Fraction of methane destroyed in baseline	FDCH4,BL,y	%	Used if the baseline specifies a percentage rather than absolute baseline estimate
Methane Conversion Factor	MCF	%	for landfill site or wastewater treatment plant
Chemical oxygen demand	CODy	t COD	for effluent stream
Biological oxygen demand	BODi.y	t BOD	i is stage of treatment
Maximum methane production capacity	B0	tCH4/t input	"input" could be COD, or mass of waste stream (e.g. manure)
Degradable Organic Carbon	DOCj	Fraction	j is part of waste stream (e.g. slow vs fast degrading materials)
Fraction of DOC dissimilated	DOCF	Fraction	
Methane conversion factor for treatment of manure	MCFmanure,i	%	i is stage of treatment
Volatile solid excretion rate	VSp	kg dry matter/animal-day	p is the population targeted

Industrial production

Variable	Symbol	Units	Comment
Weight fraction of CaO or MgO	wCaO,x/ wMgO,x	fraction	x can indicate clinker or raw material

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History of the document

Version	Date	Nature of revision
01.0	EB 66, Annex 26 2 March 2012	Initial adoption. This guideline, along with the *Guidelines for completing the project design document form for small-scale CDM project activities* (version 01.0, EB 66, Annex 9), replaces the *Guidelines for completing the simplified project design document (CDM-SSC-PDD) and the form for proposed new small scale methodologies (CDM-SSC-NM)* (version 05, EB 34, Annex 9). The revision includes removing requirements that have been incorporated into the CDM Project Standard as referenced in Appendix 1, *Implementation plan for the CDM Project Standard, Validation and Verification Standard and Project Cycle Procedure* (EB 65 report, annex 6, appendix 1)
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