



Indicative simplified baseline and monitoring methodologies
for selected small-scale CDM project activity categories

General Guidelines to SSC CDM methodologies

(Version 16)

1. This document provides general guidelines¹ for applying small-scale CDM methodologies <<http://cdm.unfccc.int/methodologies/SSCmethodologies/index.html>>. The requirements and procedures specified in the methodology have precedence over the requirements specified here.
2. A revision of a small-scale methodology or a clarification on a small-scale methodology may be requested following the procedures specified at:
<<http://cdm.unfccc.int/methodologies/SSCmethodologies/clarifications>>.
3. Eligibility of project activities as small-scale CDM project activities:
 - (a) The Board at its twentieth meeting² considered implications for the eligibility of project activities as small-scale project activities in cases where emissions of a proposed project activity are increasing during the crediting period and agreed that:
 - (i) Small-scale CDM project activities shall remain under the limits for small-scale CDM project activities types, as stipulated in paragraph 6 (c) of the CDM modalities and procedures, every year during the crediting period;
 - (ii) If a project activity goes beyond the limit of its type in any year of the crediting period, the emission reduction that can be claimed by the project activity during this particular year will be capped by the maximum emission reduction estimated in the CDM-SSC-PDD by the project participant for that year during the crediting period;
 - (iii) Project participants shall demonstrate in the CDM-SSC-PDD that the project activity characteristics are defined in a way that precludes project activities to go beyond the limits:³
 - For Type I: project participants shall provide proof that the installed capacity of the proposed project activity will not increase beyond 15 megawatt (MW);
 - For Type II: project participants shall provide proof that the efficiency improvements do not exceed the equivalent of 60 gigawatt hours (GWh) per year every year throughout the crediting period;

¹ See EB 53, Annex 38 “CDM Executive Board decision framework: Decision hierarchy and document types issued by the Board” or its update at:

<<http://cdm.unfccc.int/Reference/Notes/index.html>> for the definition of the general guidelines.

² See paragraph 58 of EB 20 <<http://cdm.unfccc.int/EB/020/eb20rep.pdf>>.

³ Changed limits currently applicable as per paragraph 28 of Decision 1/CMP.2 are mentioned here as opposed to limits that were applicable at the time EB 20 took place

<<http://unfccc.int/resource/docs/2006/cmp2/eng/10a01.pdf#page=3>>.



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- For Type III: project participants shall provide an estimation of emission reductions by the project activity over the crediting period and proof that the emission reductions every year will not go beyond the limits of 60 ktCO₂e/y over the entire crediting period.
 - (b) The three types of project activities outlined above, are mutually exclusive. In a project activity with more than one component that will benefit from simplified CDM modalities and procedures, each component shall meet the threshold criterion of each applicable type, e.g. for a project with both a renewable energy and an energy efficiency component, the renewable energy component shall meet the criterion for “renewable energy” and the energy efficiency component that for “energy efficiency”;⁴
 - (c) The sum of the size of components of a project activity belonging to the same type (capacity for Type I, energy savings for Type II and emission reductions for Type III) should not exceed the limits for small-scale CDM project activities (e.g. the limit for methane recovery component is 60 ktCO₂e/yr and the limit for the electricity production component is 15 MW output capacity).⁵
4. Output capacity of renewable energy equipment: Definition of “maximum output capacity equivalent of up to 15 MW (or an appropriate equivalent)”:
- (a) Definition of “maximum output”: “output” is the installed/rated capacity as indicated by the manufacturer of the equipment or plant,⁶ disregarding the actual load factor of the plant;
 - (b) Definition of “appropriate equivalent” of 15 MW: whereas decision 17/CP.7, paragraph 6 (c) (i), refers to MW, project proposals may refer to MW(p),⁷ MW(e) or MW(th). As MW(e) is the most common denomination, the CDM Executive Board (the Board) has agreed to define MW as MW(e) and otherwise to apply an appropriate conversion factor;
 - (c) For biomass, biofuel and biogas project activities, the maximal limit of 15 MW(e) is equivalent to 45 MW thermal output of the equipment or the plant (e.g. boilers). For thermal applications of biomass, biofuels or biogas (e.g. the cookstoves), the limit of 45 MWth is the installed/rated capacity of the thermal application equipment or device/s (e.g. biogas stoves). For electrical or mechanical applications, the limit of 15 MW installed/rated output shall be used. In case of

⁴ See Annex II paragraph 7 of Decision 4/CMP.1
<<http://unfccc.int/resource/docs/2005/cmp1/eng/08a01.pdf#page=30>>.

⁵ See paragraph 56 of EB 28 <<http://cdm.unfccc.int/EB/028/eb28rep.pdf>>.

⁶ The rated/installed capacity for renewable electricity generating units that involve turbine-generator systems shall be based on the installed/rated capacity of generator.

⁷ For solar photovoltaic applications 15 MW(p) may be defined by manufacturers specifications under testing conditions of 1000 W/m² & 25 deg C or 600 W/m² & 35 deg C.



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cofiring renewable and fossil fuels, the rated capacity of the system when using fossil fuel shall apply;

- (d) For thermal applications of solar energy projects,⁸ ‘maximum output’ shall be calculated using a conversion factor of 700 Wth/m² of aperture area of glazed flat plate or evacuated tubular collector i.e. eligibility limit in terms of aperture area is 64000 m² of the collector. Project participants may also use other conversion factors determined as per the procedures prescribed for ‘equipment performance’ under paragraph 9 below, however it shall be justified why the chosen conversion factor is more appropriate to the project activity.

5. In accordance with paragraph 28 of the simplified modalities and procedures for small-scale CDM project activities, a simplified baseline and monitoring methodology may be used for a small-scale CDM project activity if project participants are able to demonstrate to a designated operational entity that the project activity would otherwise not be implemented due to the existence of one or more barrier(s) listed in attachment A of Appendix B of 4/CMP.1 Annex II <http://cdm.unfccc.int/Reference/Guidclarif/ssc/index_guid.html>.

6. For project activities up to five MW that employ renewable energy as their primary technology and for energy efficiency project activities that aim to achieve energy savings at a scale of no more than 20 GWh per year, simplified modalities for demonstrating additionality has been approved by the Board.⁹

7. For demonstration of additionality, the following documents provide additional guidance or guidelines.

- (a) EB 35, Annex 34 “Non-binding best practice examples to demonstrate additionality for SSC project activities” or its update <http://cdm.unfccc.int/Reference/Guidclarif/ssc/index_guid.html>;
- (b) EB 50, Annex 13 “Guidelines for objective demonstration and assessment of barriers” or its update <http://cdm.unfccc.int/Reference/Guidclarif/meth/index_guid.html>.

8. Debundling is defined as the fragmentation of a large project activity into smaller parts. A small-scale project activity that is part of a large project activity is not eligible to use the simplified modalities and procedures for small-scale CDM project activities. Refer to EB 54, Annex 13 “Guidelines on assessment of de-bundling for SSC project activities” or its update <http://cdm.unfccc.int/Reference/Guidclarif/ssc/index_guid.html>.

⁸ This conversion is not applicable for solar thermal parabolic and trough type collectors used for high grade solar thermal energy applications.

⁹ See EB 54, Annex 15 “Guidelines for demonstrating additionality of renewable energy projects =< 5 MW and energy efficiency projects with energy savings <= 20 GWh per year or its update <http://cdm.unfccc.int/Reference/Guidclarif/ssc/index_guid.html>.



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9. Equipment performance: To determine equipment performance, project participants shall use:
- (a) The appropriate value specified in the methodology that is being applied;
 - (b) If the value specified in sub-paragraph (a) is not available, the national standard for the performance of the equipment type (project participants shall identify the standard used);
 - (c) If the value specified in sub-paragraph (b) is not available, an international standard for the performance of the equipment type, such as International Organization for Standardization (ISO) and International Electrotechnical Commission (IEC) standards (project participants shall identify the standard used);
 - (d) If a value specified in sub-paragraph (c) is not available, the manufacturer's specifications provided that they are tested and certified by national or international certifiers.
10. Project participants have the option of using performance data from test results conducted by an independent entity for equipment installed under the project activity.
11. Application of multiple methodologies for a programme of activities (PoA):
- (a) The Board at its fifty-third meeting approved the combination of approved methodologies AMS-III.R with AMS-I.C for application in CPAs of a PoA. Furthermore, the Board at its fifty-sixth meeting approved the combination of any one of the Type III methodologies where activities lead to generation of methane, i.e. AMS-III.H, AMS-III.D, AMS-III.F and AMS-III.G, with any one of the Type I methodologies for utilising the methane generated for generation of renewable energy, i.e. AMS-I.A, AMS-I.C, AMS-I.D and AMS-I.F. These combinations can be applied in PoAs without each PoA specifically requesting the approval of the combination of the Board;
 - (b) The Board at its fifty eighth meeting agreed that any combination of SSC methodologies that has been applied in a registered project may also be applied in the context of PoAs without the preapproval of combinations as long as the project proponent is able to demonstrate that there are no interactive or cross effects between the measures applied in respective component methodologies or that if there are such cross effects they are conservatively accounted for in the calculation of CERs. For example, if under a CPA, a lighting energy efficiency project is achieved under one component/methodology and a lighting control efficiency project is achieved in the same buildings under another methodology/component then the reduced energy consumption of the lights should be taken into account when determining savings from the lighting controls project.
12. Project boundary: The project boundary shall be limited to the physical project activity. Project activities that displace energy supplied by external sources shall earn certified emission reductions (CERs) for the emission reductions associated with the reduced supply of energy by those external sources.



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13. Biomass projects: In the case of project activities using biomass, emission reductions may only be accounted for the combustion of “renewable biomass”. Refer to EB 23, Annex 18 “Definition of Renewable Biomass” or its update
<http://cdm.unfccc.int/EB/023/eb23_repan18.pdf>.
14. Leakage in biomass project activities: Refer to EB 47, Annex 28 “General guidance on leakage in biomass project activities” or its update
<http://cdm.unfccc.int/Reference/Guidclarif/ssc/index_guid.html>.
15. In the cases where leakage is to be considered, it shall be considered only within the boundaries of non-Annex I Parties.
16. In the case of project participants using IPCC default values for emission coefficients, these shall be the most up-to-date values available in the “2006 IPCC Guidelines for National Greenhouse Gas Inventories” and the “Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories”.
17. Monitoring: while monitoring the emission reductions from the small-scale project activity, project participants shall:
- (a) Electronically archive all data collected as part of monitoring for a period of two years from the end of the crediting period;
 - (b) Data variables that are most directly related to the emission reductions (e.g. quantity of the fuel inputs, the amount of heat or electricity produced, gas captured) should be measured continuously. Data elements that are generally constant and indirectly related to the emission reductions (e.g. emission factors, calorific value, system efficiencies) should be measured or calculated at least once a year, unless detailed specifications are provided as part of the indicated methodology;
 - (c) Measuring equipment should be certified to national or IEC standards and calibrated according to the national standards and reference points or IEC standards and recalibrated at appropriate intervals according to manufacturer specifications, but at least once in three years;
 - (d) The measured data with high levels of uncertainty or without adequate calibration should be compared with location/national data and commercial data to ensure consistency;
 - (e) Wherever a statistical sample is proposed for monitoring, the “General guidelines for sampling and surveys for small-scale CDM project activities”
<http://cdm.unfccc.int/Reference/Guidclarif/ssc/index_guid.html> shall be referred.
18. The revision of an approved SSC methodology or tool referred to in a SSC methodology shall not affect: (i) Registered CDM project activities during their crediting period; and (ii) Project activities that have been published for public comments for validation using the previously approved methodology or tool, so long as the project activity is submitted for registration within eight months of the date when the revision became effective. (See EB 34, Annex 7 “Revision of an



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approved small scale methodology by the Executive Board”
<<http://cdm.unfccc.int/Reference/Procedures/index.html>>).

19. Type II and III Greenfield projects (new facilities): may use a Type II and Type III small-scale methodology provided that they can demonstrate that the most plausible baseline scenario for this project activity is the baseline provided in the respective Type II and Type III small-scale methodology.¹⁰ The demonstration should include the assessment of the alternatives of the project activity using the following steps:

Step 1:

Identify the various alternatives available to the project proponent that deliver comparable level of service including the proposed project activity undertaken without being registered as a CDM project activity.

Step 2:

List the alternatives identified per Step 1 in compliance with the local regulations (if any of the identified baseline is not in compliance with the local regulations, then exclude the same from further consideration).

Step 3:

Eliminate and rank the alternatives identified in Step 2 taking into account barrier tests specified in attachment A to Appendix B of the simplified modalities and procedures of SSC CDM.

Step 4:

If only one alternative remains that is:

- Not the proposed project activity undertaken without being registered as a CDM project activity; and
- It corresponds to one of the baseline scenarios provided in the methodology; then the project activity is eligible under the methodology.

If more than one alternatives remain that correspond to the baseline scenarios provided in the methodology, choose the alternative with the least emissions as the baseline.

20. Retrofit: For project activities that seek to retrofit or modify an existing unit or equipment, the baseline may refer to the characteristics (i.e. emissions) of the existing unit or equipment only to the extent that the project activity does not increase capacity or output or level of service unless detailed specifications are provided as part of the indicated methodology. For any increase of capacity or output or level of service beyond this range, which is due to the project activity, a different baseline shall apply.

¹⁰ This paragraph is not applicable to methodologies that only cover existing facilities. Specific procedures for Greenfield project activities provided in the respective methodology have precedence.



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21. Capacity increase: Type II and III project activities involving capacity increase may use a Type II and Type III SSC methodology provided that they can demonstrate that the most plausible baseline scenario for the additional (incremental) capacity is the baseline provided in the respective Type II and III small-scale methodology.¹¹ The demonstration should include the assessment of the alternatives of the project activity using the steps described in paragraph 19 above.
22. Lifetime of existing equipments: In case of replacement of existing equipment, project participants shall estimate the point in time where the existing equipment would be replaced in the absence of the project activity in accordance with the latest version of “Tool to determine the remaining lifetime of equipment”.
23. For household devices/appliances, the remaining lifetime may be disregarded.
24. For guidance on consideration of national policies and circumstances in baseline scenarios EB 22, Annex 3 “Additional clarifications regarding the treatment of national/sectoral policies and circumstances” or its update shall be referred to.
25. Definition of Natural Gas: For the methodologies involving use of natural gas the following definition of natural gas applies: “Natural gas is defined as a gas which consists primarily of methane and which is generated from: (i) Natural gas fields (non-associated gas); and (ii) Associated gas found in oil fields. It may be blended up to 1% on a volume basis with gas from other sources, such as, *inter alia*, biogas generated in biodigesters, gas from coal mines, gas which is gasified from solid fossil fuels, etc.
26. Norms, Specifications, Standards and Test Procedures cited in the SSC methodologies refer to the latest version of the documentation available at the time of submission of the CDM-SSC-PDD to the DOE for validation.
27. For CDM-related terminology, see CDM Glossary of Terms
<http://cdm.unfccc.int/Reference/Guidclarif/glos_CDM.pdf>.

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¹¹ The requirements specified in the methodology have precedence.



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History of the document

Version	Date	Nature of revision
16	EB 59, Annex 9 18 February 2011	To clarify the rated/installed capacity of renewable electricity generating unit involving turbine-generator systems and applicable test procedures cited in SSC CDM methodologies.
15	EB 58, Annex 23 26 November 2010	(i) Editorial revision to include combination of any of the Type III methodologies where activities lead to generation of methane, with any of the Type I methodologies for utilising the methane generated for generation of renewable energy can be applied in PoAs; (ii) Revision to include any combination of SSC methodologies that has been applied in a registered project may also be applied in the context of PoAs.
14.1	03 August 2010	Modifying the title from “Guidelines to SSC CDM methodologies” back to its original title “General Guidelines to SSC CDM methodologies”.
14	EB 55, Annex 35 30 July 2010	To update the document to reflect the latest decisions of the Board including; <ul style="list-style-type: none"> • Eligibility of SSC CDM project activities; • Simplified modalities for demonstrating additionality for very small CDM project activities; • Non-binding best practice examples to demonstrate additionality for SSC project activities; • Guidelines for objective demonstration and assessment of barriers; • Guidelines on assessment of de-bundling for SSC project activities; • Application of multiple methodologies for a PoA; • Definition of Renewable Biomass; • Effect of the revision of an approved SSC methodology or tool (corrected); • Definition of Natural Gas; • Reference to CDM Glossary of Terms.
13	EB 54, Annex 14 28 May 2010	Revised guidelines for Type II and Type III Greenfield and capacity addition projects; Guidelines on lifetime of equipment revised to refer to Tool to determine the remaining lifetime of equipment.
12.1	EB 50, para. 51 16 October 2009	The Board agreed to approve the general guidelines for sampling and surveys for SSC project activities. The Board requested the secretariat to update the relevant sections of general guidance to SSC methodologies to reflect the approval of this guideline. As a consequence the following sentence on page 3 was deleted: “12. (e) the sample should be representative of the population and should have a minimum level of confidence of one times the standard deviation (one sigma), unless detailed specifications are provided as part of the indicated methodology.”
12	EB 41, Annex 20 02 August 2008	Additional guidance on baseline for Type II Greenfield projects (new facilities), retrofit of existing equipment and capacity increase, consideration of lifetime of existing equipment, consideration of national policies in the baseline added.
11	EB 35, Annex 35 19 October 2007	Additional guidance to expand the applicability of all approved Type III methodologies to include Greenfield projects (new facilities).
10	EB 26, Annex 27 29 September 2006	General guidance on conversion factor for solar collectors to calculate output capacity from the area.



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09	EB 25, Annex 32 21 July 2006	Revised general guidance on output capacity of renewable based energy generating equipment.
08	EB 23, Annex 33 24 February 2006	General guidance on monitoring from the simplified modalities and procedures for small-scale CDM project activities.
Decision Class: Regulatory Document Type: Guideline Business Function: Methodology		

* This document, together with all 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.

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 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).
Decision Class: Regulatory Document Type: Guideline Business Function: Methodology		