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

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**INDICATIVE SIMPLIFIED BASELINE AND MONITORING METHODOLOGIES FOR  
SELECTED SMALL-SCALE CDM PROJECT ACTIVITY CATEGORIES**

**A. General guidance**

1. This appendix contains indicative simplified baseline and monitoring methodologies for selected small-scale CDM project activity categories, including recommendations for determining the project boundary, leakage, baseline and monitoring.
2. In accordance with paragraphs 15 and 16 of the simplified modalities and procedures for small-scale CDM project activities (annex II to decision 21/CP.8 contained in document FCCC/CP/2002/7/Add.3), project participants involved in small-scale CDM project activities may propose changes to the simplified baseline and monitoring methodologies specified in this appendix or propose additional project categories for consideration by the Executive Board. Project participants willing to submit a new small-scale project activity category or revisions to a methodology shall make a request in writing to the Board providing information about the technology/activity and proposals on how a simplified baseline and monitoring methodology would be applied to this category. The Board may draw on expertise, as appropriate, in considering new project activity categories and/or revisions of and amendments to simplified methodologies. The Executive Board shall expeditiously, if possible at its next meeting, review the proposed methodology. Once approved, the Executive Board shall amend appendix B.
3. In accordance with paragraph 28 of the simplified modalities and procedures for small-scale CDM project activities, a simplified baseline and monitoring methodology listed in this appendix 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 this appendix.
4. The appendix reflects the following guidance regarding equipment performance, project boundary, biomass projects, leakage and use of Intergovernmental Panel on Climate Change (IPCC) default values for emission coefficients.
5. Equipment performance: To determine equipment performance, project participants shall use:
  - (a) The appropriate value specified in appendix B;
  - (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.



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6. Project participants have the option of using performance data from test results conducted by an independent entity for equipment installed under the project activity.
7. Output capacity of renewable energy equipment: Definition of “maximum output capacity equivalent of up to 15 megawatts (or an appropriate equivalent)”:
- (a) Definition of “maximum output”: “output” is the installed/rated capacity, as indicated by the manufacturer of the equipment<sup>1</sup> or plant, disregarding the actual load factor of the plant;
- (b) Definition of “appropriate equivalent” of 15 megawatts: Whereas decision 17/CP.7, paragraph 6 (c) (i), refers to megawatts (MW), project proposals may refer to MW(p)<sup>2</sup>, MW(e) or MW(th). As MW(e) is the most common denomination, the Executive 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 15MW(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 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, “maximum output” shall be calculated based on a conversion factor of 0.7 kWth/m<sup>2</sup> of aperture area<sup>2</sup> of the collector or a maximal limit of 64000 m<sup>2</sup> collector aperture area shall be used.
8. 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.
9. Biomass projects: In the case of project activities using biomass, emission reductions may only be accounted for the combustion of “renewable biomass”.
10. In the cases where leakage is to be considered, it shall be considered only within the boundaries of non-Annex I Parties.
11. 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 “IPCC Good Practice and Guidance and Uncertainty Management in National Greenhouse Gas Inventories” and the “Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories”. A link providing more updated information on IPCC default

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<sup>1</sup> For solar photovoltaic applications 15 MW(p) may be defined by manufacturers specifications under testing conditions of 1000 W/ m<sup>2</sup> & 25 deg C or 600 W/m<sup>2</sup> & 35 deg C.

<sup>2</sup> aperture area is the area in which the solar radiation enters the collector



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values for emission coefficients is available on the page for small-scale CDM project activities on the UNFCCC CDM web site: <http://unfccc.int/cdm>

12. **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 2 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 in an 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 3 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) Where ever a statistical sample is proposed for monitoring , 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.

13. In relation to **revisions and amendments** to simplified baseline and monitoring methodologies contained in appendix B, revisions shall not affect (a) registered CDM project activities during their crediting period; and (b) project activities that use the previously approved methodology for which requests for registration are submitted before or within eight (8) weeks after the methodology was revised.