Methodological tool

Demonstration of additionality of small-scale project activities

Version 12.0
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. INTRODUCTION</td>
<td>3</td>
</tr>
<tr>
<td>2. SCOPE, APPLICABILITY, AND ENTRY INTO FORCE</td>
<td>3</td>
</tr>
<tr>
<td>2.1. Scope</td>
<td>3</td>
</tr>
<tr>
<td>2.2. Applicability</td>
<td>3</td>
</tr>
<tr>
<td>2.3. Entry into force</td>
<td>3</td>
</tr>
<tr>
<td>3. NORMATIVE REFERENCES</td>
<td>3</td>
</tr>
<tr>
<td>4. DEFINITIONS</td>
<td>3</td>
</tr>
<tr>
<td>5. METHODOLOGY PROCEDURE</td>
<td>4</td>
</tr>
<tr>
<td>APPENDIX. PROVISIONS OF SMALL-SCALE AND MICROSCALE TOOLS FOR ADDITIONALITY</td>
<td>7</td>
</tr>
</tbody>
</table>
1. **Introduction**

1. This methodological tool provides:

   (a) A general framework to demonstrate and assess the additionality of small-scale project activity and component project activity (CPA) of the programme of activities; and

   (b) A positive list of technology and project activity types that are defined as automatically additional.

2. **Scope, applicability, and entry into force**

2.1. **Scope**

2. This methodological tool provides a general framework for demonstrating and assessing additionality and is applicable to a wide range of project types.

3. In validating the application of this methodological tool, Designated Operation Entities (DOEs) shall carefully assess and verify the reliability and creditability of all data, rationales, assumptions, justifications and documentation provided by project participants to support the demonstration of additionality. The elements checked during this assessment and the conclusions shall be documented transparently in the validation report.

2.2. **Applicability**

4. The use of the methodological tool “Demonstration of additionality of small-scale project activities” is not mandatory for project participants when proposing new methodologies. Project participants and coordinating/managing entities may propose alternative methods to demonstrate additionality for consideration by the Executive Board.

5. Project participants and coordinating/managing entities may also apply “Tool for Demonstration of additionality of microscale project” as applicable.

2.3. **Entry into force**

6. The date of entry into force is the date of the publication of the EB 99 meeting report on 26 April 2018.

3. **Normative references**

7. Project participants shall follow the applicable provisions for the demonstration of additionality in the CDM Project Standard.

8. This methodological tool refers to the following document: “Non-binding best practice examples to demonstrate additionality for SSC project activities” (EB 35 Annex 34).

4. **Definitions**

9. The definitions contained in the Glossary of CDM terms shall apply.
5. **Methodology procedure**

10. Project participants shall provide an explanation to show that the project activity would not have occurred anyway due to at least one of the following barriers:

   (a) Investment barrier: a financially more viable alternative to the project activity would have led to higher emissions;

   (b) Technological barrier: a less technologically advanced alternative to the project activity involves lower risks due to the performance uncertainty or low market share of the new technology adopted for the project activity and so would have led to higher emissions;

   (c) Barrier due to prevailing practice: prevailing practice or existing regulatory or policy requirements would have led to implementation of a technology with higher emissions;

   (d) Other barriers: without the project activity, for another specific reason identified by the project participant, such as institutional barriers or limited information, managerial resources, organizational capacity, financial resources, or capacity to absorb new technologies, emissions would have been higher.

11. Documentation of barriers, as per paragraph 10 above, is not required for the positive list of technologies and project activity types that are defined as automatically additional\(^1\) for project sizes up to and including the small-scale CDM thresholds (e.g. installed capacity up to 15 MW). The positive list comprises of:

   (a) The following grid-connected and off-grid renewable electricity generation technologies:

      (i) Solar technologies (photovoltaic and solar thermal electricity generation);

      (ii) Off-shore wind technologies;

      (iii) Marine technologies (wave, tidal);

      (iv) Building-integrated wind turbines or household rooftop wind turbines of a size up to 100 kW;

      (v) Biomass internal gasification combined cycle (BIGCC);

   (b) The following off-grid electricity generation technologies where the individual units do not exceed the thresholds indicated in parentheses with the aggregate project installed capacity not exceeding the 15 MW threshold:

      (i) Micro/pico-hydro (with power plant size up to 100 kW);

      (ii) Micro/pico-wind turbine (up to 100 kW);

      (iii) PV-wind hybrid (up to 100 kW);

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\(^1\) Appendix provides a flow chart to guide the users to help navigate provisions for automatic additionality across “Tool for Demonstration of additionality of small-scale project activities” and “Tool for Demonstration of additionality of microscale project”.

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4 of 9
(iv) Geothermal (up to 200 kW);
(v) Biomass gasification/biogas (up to 100 kW);

(c) The following technologies where the users of the technology/measure are households or communities or Small and Medium Enterprises (SMEs):

(i) Biogas digesters for cooking: Digesters used in biogas generation from anaerobic treatment wastes (e.g., kitchen, vegetable, animal and farm) where the resulting biogas is used for heat production for cooking purpose as eligible under the approved CDM methodologies for example AMS-I.C, AMS-I.E or AMS-I.I

(ii) Micro-irrigation: Application of optimum quantify of water at low hourly flow rates directly to the root zone of plants (such as drip irrigation, micro-sprinklers), which results in avoidance of water losses attributed to the traditional flooded irrigation systems as eligible under the approved CDM methodology for example AMS-II.F.;

(iii) Energy efficient pump-set for agriculture: Energy efficient pump and motor assembly together with starter and other electrical accessories/devices to deliver water for irrigation, as eligible under the approved CDM methodology for example AMS-II.P. Only pump-sets belonging to the highest efficiency class in the national standards and labelling (S & L) programme (e.g. five-star energy efficiency rating) are eligible. Where such S&L programme are not in place, it shall be demonstrated that the efficiency of project pump-sets is at least 10 percent (in relative terms) higher than the average efficiency of the pump sets in the market to be eligible.

(d) Rural electrification project activities using renewable energy sources in countries with rural electrification rates less than 50 per cent; the most recent available data on the electrification rates shall be used to demonstrate compliance with the 50 per cent threshold. In no case, shall data be used if older than three years from the date of commencement of validation of the project activity;

(e) Rural electrification project activities by grid extension when all the following criteria are met:

(i) Rural electrification rate in the country is below 50 per cent;
(ii) Geography: Least developed countries (LDCs), Small Island Developing States (SIDS), Special Under Developed Zone (SUZ);³

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² Rural electrification for the purpose of this document is defined as a project activity for supplying renewable electricity to facilities and energy consumers that do not have access to any electricity distribution system/network such as a national grid or regional grid. Such electricity end-use facilities may include but are not limited to households, public buildings, and/or small, medium and micro enterprises. Electricity uses may include but are not limited to interior lighting, street lighting, refrigeration, or agricultural water pumps. Rural electrification rate is the percentage of rural population having access to electricity.

³ SUZ as defined under the micro-scale additionality tool.
(iii) Recent trends: rural electrification rate has increased by less than 20 per cent over the past 10 years;

(iv) The extension of a grid for rural electrification of a community involves at least a distance of 3 km from the point of grid extension to the rural community at which the CDM project is implemented.
Appendix. Provisions of small-scale and microscale tools for automatic additionality

Figure 1. Criteria for automatic additionality using provisions of small-scale (SSC) or microscale (MSC) additionally tools

- Is PA aggregate size <= SSC thresholds (15MW, 60GWh/y, 60ktCO2e/y)?
- Is CPA aggregate size <= SSC thresholds (15MW, 60GWh/y, 60ktCO2e/y)_YES/NO?
- Is PA/CPA comprised of one or more technologies from the positive list under SSC additionality Tool21? _YES/NO_
- Is CPA comprised of only units of size <= MSC thresholds (5MW, 20GWh/y, 20ktCO2e/y) as specified under MSC additionality Tool19? _YES/NO_
- Does it meet one of the below conditions defined under tool19?
  i) Is it implemented in an LDC/SIDS or a SUZ?
  ii) Does it involve distributed units (=< 1500kW or =< 600 MWh/y or =< 600 tCO2e/y and end users are Households/communities/SMEs?
  iii) Does it comprise of specific grid connected renewable energy technologies recommended by the host country and approved by the Board?
  iv) Is it implemented in an off-grid area (=<12 hrs/day grid availability) supplying to households /communities?
- PA/CPA is automatically additional _YES/NO_
- Use regular additionality procedure

TOOL21
Methodological tool: Demonstration of additionality of small-scale project activities
Version 12.0
1. Note:
   (a) SSC: Small-scale; MSC: Microscale;
   (b) SSC Additionality Tool: TOOL21 - Demonstration of additionality of small-scale project activities;
   (c) MSC Additionality Tool: TOOL19 - Demonstration of additionality of microscale project activities;
   (d) MSC thresholds: ≤ 5MW capacity or 20 GWh energy savings per year or 20 ktCO$_2$ emission reductions per year;
   (e) SSC thresholds, i.e. equal to or less than 15 MW capacity or 60 GWh energy savings per year or 60 ktCO$_2$ emission reductions per year;
   (f) Positive list: It refers to the list of technologies under the SSC additionality tool that are deemed automatically additional.

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**Document information**

<table>
<thead>
<tr>
<th>Version</th>
<th>Date</th>
<th>Description</th>
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<tbody>
<tr>
<td>12.0</td>
<td>26 April 2018</td>
<td>EB 99, Annex 3 Revision to replace the unit size criterion in the positive list.</td>
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<tr>
<td>11.0</td>
<td>4 May 2017</td>
<td>EB 94, Annex 11 Revision to amend the unit-size threshold (paragraph 11(c)), rural electrification threshold (paragraph 11(d)), and to expand the positive list of technologies (paragraph 11(a)(v) and paragraph 11(e)).</td>
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<tr>
<td>10.0</td>
<td>16 April 2015</td>
<td>EB 83, Annex 14 Revision to reclassify this document from a guideline to a tool.</td>
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<tr>
<td>09.0</td>
<td>20 July 2012</td>
<td>EB 68, Annex 27 -Title changed from Attachment A of Appendix B to “Guidelines on the demonstration of additionality of small-scale project activities”; -Expanded positive list to include isolated units (5% of SSC threshold), renewable electrification in countries with &lt;20% electrification rate, selected off-grid technologies.</td>
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<tr>
<td>08.0</td>
<td>29 September 2011</td>
<td>EB 63, Annex 24 To include guidelines on positive list of grid-connected renewable electricity generation technologies that are automatically defined as additional.</td>
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</table>
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.

**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 and ‘Attachment A to Appendix B’ until version 07. After version 07 the document was divided into separate documents: ‘Attachment A to Appendix B’, ‘General Guidance’, and separate approved small-scale methodologies (AMS).

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<td>07.0</td>
<td>25 November 2005</td>
<td>EB 22, Para. 59 References to “non-renewable biomass” in Appendix B deleted.</td>
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<tr>
<td>06.0</td>
<td>20 September 2005</td>
<td>EB 21, Annex 22 Guidance on consideration of non-renewable biomass in Type I methodologies, thermal equivalence of Type II GWhe limits included.</td>
</tr>
<tr>
<td>05.0</td>
<td>25 February 2005</td>
<td>EB 18, Annex 6 Guidance on ‘capacity addition’ and ‘cofiring’ in Type I methodologies and monitoring of methane in AMS-III.D included.</td>
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<tr>
<td>04.0</td>
<td>22 October 2004</td>
<td>EB 16, Annex 2 AMS-II.F was adopted, leakage due to equipment transfer was included in all Type I and Type II methodologies.</td>
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<tr>
<td>03.0</td>
<td>30 June 2004</td>
<td>EB 14, Annex 2 New methodology AMS-III.E was adopted.</td>
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<tr>
<td>02.0</td>
<td>28 November 2003</td>
<td>EB 12, Annex 2 Definition of build margin included in AMS-I.D, minor revisions to AMS-I.A, AMS-III.D, AMS-II.E.</td>
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<td>01.0</td>
<td>21 January 2003</td>
<td>EB 7, Annex 6 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&amp;P).</td>
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