

CDM-SSCWG49-EC01-A04

Draft Methodological tool

Demonstrating of additionality of microscale project activities

Version 07.0

DRAFT



United Nations
Framework Convention on
Climate Change

COVER NOTE

1. Procedural background

1. The Executive Board (hereinafter referred to as the Board) of the clean development mechanism (CDM), at its eighty-fifth meeting (EB 85), considered a concept note on the thresholds for microscale activities under programmes of activities (PoAs) as contained in annex 9 of EB 85 annotated agenda, in the context of paragraph 12 of decision 3/CMP.9 and paragraph 18(a) of decision 4/CMP.10.
2. The Board, at EB 85, requested the secretariat to start implementing Option 1 and Option 3 as recommended in the concept note mentioned above, to enable applying microscale thresholds at the unit level, which are copied below:
 - (a) **“Option 1:** One option for the Board would be to approve the application of the existing microscale thresholds at the unit level instead of the aggregate component project activity (CPA) level. PoAs already registered, PoAs undergoing validation as well as new PoAs that will be submitted in the future will be covered irrespective of whether a small-scale or large-scale methodology is applied. This would imply:
 - (i) When large-scale methodologies are applied, the intermediary microscale threshold at the CPA level (e.g. 5 MW aggregate installed capacity) is not applied; and
 - (ii) When small-scale methodologies are applied, the intermediary microscale and small-scale threshold at the CPA level (e.g. 5 MW or 15 MW aggregate installed capacity) is not applied”;
 - (b) **“Option 3:** Another option would be to develop new PoA-specific methodologies where the application of microscale thresholds to the unit level would be introduced.”
3. The implementation of Option 1 would benefit already registered PoAs and PoAs undergoing validation, as well as new PoAs that will be submitted in the future. To operationalize Option 1, revision to regulatory documents is required. On the other hand, Option 3 is related to the development of new PoA specific methodologies and would need to be implemented through the work program of the Small-Scale Working Group (SSC WG) (e.g. recommendation of new methodologies and/or revision to existing methodologies) and will not require revision of existing regulatory documents.
4. Consequently, the recommendations contained in this concept note are pertaining only to Option 1.

2. Purpose

5. The purpose of this document is to recommend revisions to the relevant regulatory requirements to operationalize the Board decision at EB 85 to allow application of microscale thresholds at the unit level rather than at the aggregate level of a CPA.

6. In addition, guidance on the validity period of the monitoring surveys for distributed units has also been included under the “General guidelines for SSC CDM methodologies” based on clarifications that were already provided by the Board.

3. Key issues and proposed solutions

7. The Board, at EB 85, had agreed that, to be eligible for applying microscale thresholds at the unit level, a CPA should consists of;
- (a) Units of capacity up to 5 MW that employ renewable energy technology or that achieve energy savings at a scale of no more than 20 GWh per year or that achieve emission reductions at a scale of no more than 20 ktCO₂e per year, located in LDCs or SIDS or special underdeveloped zones (SUZs) of non-Annex I countries; or
 - (b) Units of capacity up to 5 MW that employ off-grid renewable energy technology for household/community applications or specific grid-connected renewable energy technologies recommended by the DNAs and approved by the Board in accordance with the “Procedure: Submission and consideration of microscale renewable energy technologies for automatic additionality”; or
 - (c) Units of capacity up to 1,500 kW that employ distributed renewable energy generation technology or that achieve energy savings at a scale of no more than 600 MWh per year or that achieve emission reductions at a scale of no more than 600 t CO₂ per year for household/community/SME applications.
8. Furthermore, the Board also agreed that 95/10¹ precision shall be applied for sampling surveys to apply the microscale thresholds at the unit level.
9. To implement the Board decision referred to in paragraphs 7–8 above, the following potential solutions were considered with regard to small-scale methodologies:
- (a) **Solution 1:** Revision of the “General guidelines for SSC CDM methodologies” and the methodological tool for “Demonstrating additionality of microscale activities” to include the related guidance.
 - (b) **Solution 2:** Revision of all small-scale methodologies to include the related guidance through version change.
10. Of these, Solution 1 was found to be more practical and an elegant solution, as the general guidelines are an integral part of each of the small-scale methodologies and it would not cause much inconvenience to the project proponents due to version changes of the methodologies.
11. With regard to large-scale methodologies, the issue of intermediary microscale thresholds referred in paragraph 2(a) above can be addressed by including guidance in the methodological tool “Demonstration of additionality of microscale project activities”.

¹ CDM sampling standard typically requires higher level of precision of 95/10 for large scale CDM projects and surveys at PoA level while 90/10 is specified for small-scale projects and surveys done at CPA level.

12. For registered PoAs, a request for post-registration changes (PRCs) would be required to enable the application of microscale thresholds at the unit level. As the current versions of the “CDM project standard” (PS), and the “CDM project cycle procedure” (PCP) do not include explicit language to allow this type of PRC, there is a need to expand the scope of the PRC defined in these documents. The other provisions in these documents that deal with small-scale thresholds would also need to be amended accordingly.
13. It is proposed to effect the changes mentioned above through issuing an amendment to the PS, the PCP and the “Standard: Demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programmes of activities” (PoA standard) and revision to “General guidelines for SSC CDM methodologies” and methodological tool “Demonstration of additionality of microscale project activities”.
14. The proposed revision to “General guidelines for SSC CDM methodologies” is presented as annex 3 to the Board as the outcome of the SSC WG 49-EC01.
15. The proposed revisions to the PS, the PCP and the PoA standard will be presented to the Board at a future meeting as annexes to the annotations to agenda of the meeting of the Board.

4. Impacts

16. The proposed changes to enable the application of the microscale thresholds at the unit level would provide more flexibility to coordinating/managing entities, resulting in reduced transaction costs for the implementation of PoAs, particularly for distributed small activities such as cook-stoves, solar home systems, efficient lighting and distributed energy generation.

5. Subsequent work and timelines

17. No further work is envisaged.

6. Recommendations to the Board

18. The SSC WG recommends the Board approve the revised draft methodological tool “Demonstration of additionality of microscale activities” and it comes into effect on 16/10/2015.

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1. Introduction

1. The Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (CMP), at its fifth¹ and sixth session² established simplified modalities for demonstrating additionality for project activities up to 5 megawatts 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 gigawatt hours per year. This methodological tool provides a general framework to demonstrate and assess the additionality of these project activities.

The following paragraphs are quoted from decision 2/CMP.5 and 3/CMP.6. Further guidance relating to the clean development mechanism:

"24. Requests the Executive Board, starting at its next meeting, to further work and report to the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol on the enhancement of objectivity and transparency in the approaches for demonstration and assessment of additionality and selection of the baseline scenario by means of the following activities:

(...)

(c) Establishment of simplified modalities for demonstrating additionality for project activities up to 5 megawatts 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 gigawatt hours per year;"

"38. Welcomes the work of the CDM Executive Board on the establishment of simplified modalities for demonstrating additionality for project activities up to five megawatts 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 gigawatt hours per year."

"39. Requests the Board to continue to simplifying these modalities based on experience gained and to expand, as appropriate, their applicability to Type III projects that reduce emissions by less than 20,000 tonnes of carbon dioxide equivalent per annum and to report back to the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol at its seventh session on the experience gained including the appropriateness of the threshold."

2. Scope, applicability, and entry into force

2.1. Scope

2. This methodological tool provides simplified modalities for demonstrating additionality for the project activity which meets one of the following criteria:

¹ Refer to decision 2/CMP.5, paragraph 24

² Refer to decision 3/CMP.6, paragraphs 38 and 39

- (a) Type I: Project activities up to 5 MW that employ renewable energy as their primary technology;
- (b) Type II: Energy efficiency project activities that aim to achieve energy savings at a scale of no more than 20 GWh per year; or
- (c) Type III: Other project activities not included in Type I or Type II that aim to achieve GHG emissions reductions at a scale of no more than 20 kt CO₂e per year.

2.2. Applicability

- 3. Please refer to paragraphs 8, 9 and 10.

2.3. Entry into force

- 4. The date of entry into force is the date of the publication of the EB 86 meeting report on 16 October 2015.

3. Normative references

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

4. Definitions

- 6. The definitions contained in the Glossary of CDM terms shall apply.
- 7. The definitions of SUZ provided in paragraph 8 and its footnote shall apply.

5. Methodology procedure³

- 8. Project activities up to five megawatts that employ renewable energy technology⁴ are additional if any one of the conditions below is satisfied:⁵
 - (a) The geographic location of the project activity is in one of the least developed countries or the small island developing States (LDCs/SIDS) or in a special underdeveloped zone (SUZ) of the host country;

³ A positive list of technologies that are automatically defined as additional are included in the methodological tool "Demonstration of additionality of small-scale project activities" for which it is not required to satisfy the conditions indicated here.

⁴ All technologies/measures included in approved Type I small-scale CDM methodologies are eligible to be considered. Furthermore at its fifty-seventh meeting the Board clarified that all CDM project activities that meet the criteria specified in this methodological tool are eligible to apply the methodological tool irrespective of the scale of the approved CDM methodology applied to the project activity.

⁵ Otherwise other means for demonstrating additionality shall be used (e.g. the tool "Tool for demonstration of additionality", or the methodological tool "Demonstration of additionality of small-scale project activities").

- (i) SUZ is a region in the host country (zone, municipality or any other designated official administrative unit) identified by the government in official notifications for development assistance including for planning, management, and investment satisfying any one of the following conditions using most recent available data:
 - a. The proportion of population with income less than USD 2 per day (PPP)⁶ in the region is greater than 50 per cent;
 - b. The GNI per capita in the country is less than USD 3000⁷ and the population of the region is among the poorest 20 per cent in the poverty ranking of the host country as per the applicable national policies and procedures;⁸
- (ii) In cases where, based on the recommendation of the designated national authority of the host country,⁹ the SUZ in the host country has been approved by Executive Board (hereinafter referred to as the Board) of the clean development mechanism (CDM), the list of such SUZ shall be maintained on the UNFCCC website (e.g. at <<http://cdm.unfccc.int/DNA/submissions/index.html>>). In the case of these SUZ listed on the CDM website there is no need for the project proponents to provide proofs as indicated in paragraph 8(a) above;¹⁰
- (b) The project activity is an off-grid activity supplying energy to households/communities (less than 12 hours grid availability per 24 hours is also considered “off-grid” for this assessment);
- (c) The project activity is designed for distributed energy generation (not connected to a national or regional grid)¹¹ with both conditions (i) and (ii) satisfied;
 - (i) Each of the independent subsystems/measures in the project activity is smaller than or equal to 1500 kW electrical installed capacity;
 - (ii) End users of the subsystems or measures are households/communities/small and medium enterprises (SMEs);¹²

⁶ Purchasing power parity.

⁷ PPP or the World Bank atlas method or another comparable method.

⁸ Information on per capita income or other economic indicators used for the ranking purposes shall be provided in USD.

⁹ DNA recommendations will be based on conditions indicated in paragraph 8(a)(i).

¹⁰ The process for the Board to consider and approve the SUZs proposed by DNAs is established in the procedure for “Submission and consideration of microscale renewable energy technologies for automatic additionality”.

¹¹ This means that projects applying “AMS-I.D: Grid connected renewable electricity generation” are not eligible. However, project activities generating thermal energy such as solar water heaters displacing grid-connected electric heaters can apply paragraph 8(c).

¹² “Communities” of consumers may for example include households, commercial facilities such as shops, public services/buildings and small, medium and micro enterprises (SMMEs); Applications may include lighting (interior, public street lighting), electrical appliances such as refrigerators, agricultural water pumps”.

- (d) The project activity employs specific renewable energy technologies/measures recommended by the host country designated national authority (DNA) and approved by the Board to be additional in the host country. The following conditions shall apply for DNA recommendations:
 - (i) “Specific renewable energy technologies/measures” refers to grid connected renewable energy technologies¹³ of installed capacity equal to or smaller than 5 MW;
 - (ii) The ratio of installed capacity of the specific grid connected renewable energy technology in the total installed grid connected power generation capacity in the host country shall be equal to or less than three per cent;¹⁴
 - (iii) Most recent available data on the percentage of contributions of specific renewable energy technologies shall be provided to demonstrate compliance with the three per cent threshold. In no case shall data older than three years from the date of submission be used;
 - (iv) Technologies/measures recommended by DNAs and approved by the Board to be additional in the host country remain valid for three years from the date of approval. However, additionality of eligible project activities applying the methodological tool remains valid for the entire crediting period;
 - (v) DNA submissions shall include the specific grid connected renewable electricity generation technologies that are being recommended and provide the required data as indicated above (e.g. wind power, biomass power, geothermal power, hydropower).
- 9. Energy efficiency project activities¹⁵ that aim to achieve energy savings at a scale of no more than 20 gigawatt hours per year are additional if any one of the conditions below is satisfied:
 - (a) The geographic location of the project activity is in an LDC/SIDS or SUZ of the host country identified by the government in accordance with the paragraph 8(a)(i) above;
 - (b) The project activity is an energy efficiency activity with both conditions (i) and (ii) below satisfied:

¹³ Renewable technologies that do not generate electricity, such as heating and cooling technologies, are not eligible.

¹⁴ For example, if the ratio of total installed capacity of all grid-connected hydropower plants with the capacity equal to or smaller than 5 MW and the national grid-connected installed electricity generation capacity is less than three per cent in a host country then microscale hydropower is eligible for DNA recommendation in that host country.

¹⁵ All technologies/measures included in approved Type II small-scale CDM methodologies are eligible to be considered. Further, the Board at its fifty-seventh meeting clarified that all CDM project activities that meet the criteria specified in this methodological tool are eligible to apply the methodological tool irrespective of the scale of the approved CDM methodology applied to the project.

- (i) Each of the independent subsystems/measures in the project activity achieves an estimated annual energy savings equal to or smaller than 600 megawatt hours;
 - (ii) End users of the subsystems or measures are households/communities/SMEs.
- 10. Other project activities not included in paragraphs 8 or 9 above, that is Type III project activities¹⁶ that aim to achieve emission reductions at a scale of no more than 20 ktCO₂e per year, are additional if any one of the following conditions is satisfied:
 - (a) The geographic location of the project activity is an LDC/SIDS or SUZ of the host country as identified by the government in accordance with the paragraph 8(a)(i) above;
 - (b) The project activity is an emission reduction activity with both conditions (i) and (ii) below satisfied:
 - (i) Each of the independent subsystems/measures in the project activity achieves an estimated annual emission reduction equal to or less than 600 tCO₂e per year; and
 - (ii) End users of the subsystems or measures are households/communities/SMEs.
- 11. Project activities that meet the requirements specified in paragraph 8 or paragraph 9 or paragraph 10 above are termed “Microscale CDM project activities”.
- 12. “Project activity” in paragraphs 8–10 means a small-scale or large-scale clean development mechanism (CDM) project activity or a project activity under a programme of activities (CPA of a PoA).
- 13. In the case of bundled projects, “Project activity” in paragraphs 8–10 refers to individual projects within the bundle and this methodological tool are applied in conjunction with the methodological tool “Assessment of debundling for SSC project activities” excluding paragraph 7¹⁷ of the latter methodological tool.
- 14. The eligibility of project activities as microscale CDM project activities will be determined in accordance with the principles laid out in paragraph 3 and paragraph 4 of the “General Guidelines for SSC CDM methodologies” (version 16 or its update), that is:

¹⁶ All technologies/measures included in approved Type III small-scale CDM methodologies are currently eligible to be considered, except for “AMS-III.V: Decrease of coke consumption in blast furnace by installing dust/sludge recycling system in steel works”, “AMS-III.P: Recovery and utilization of waste gas in refinery facilities”, “AMS-III.Q: Waste Energy Recovery (gas/heat/pressure) Projects” and “AMS-III.W: Methane capture and destruction in non-hydrocarbon mining activities”. In the latter cases further analysis is required.

¹⁷ This means that the following paragraph of the debundling methodological tool is not applicable: “If a proposed small-scale project activity is deemed to be a debundled component in accordance with paragraph 2 above, but total size of such an activity combined with the previous registered small-scale CDM project activity does not exceed the limits for small-scale CDM project activities as set in paragraph 6(c) of the decision 17/CP.7,3 the project activity can qualify to use simplified modalities and procedures for small-scale CDM project activities”.

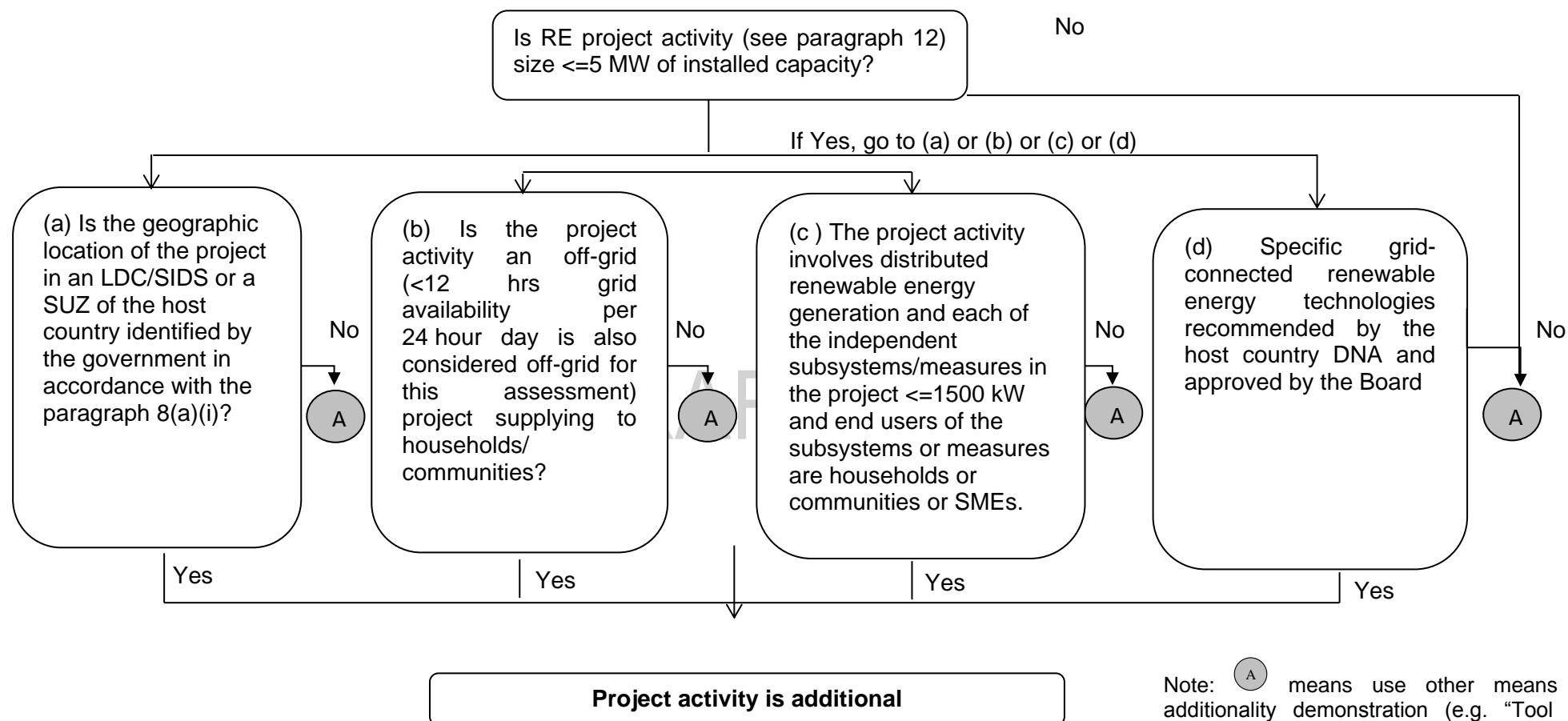
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- (a) Project activities remain under the thresholds defined above during each year of the crediting period and in cases where ex ante projected emissions reductions show an increase during the crediting period; project activities that go beyond the microscale limits in any year of the crediting period are not eligible;
 - (b) Renewable energy projects that produce electrical, thermal and mechanical energy, and cogeneration projects are covered. Definitions provided for output capacity and guidelines provided for conversion from electrical to thermal units¹⁸ in the most recent version of “General Guidelines for SSC CDM methodologies” shall be used. Where applicable, additional guidelines provided in relevant methodologies shall be followed for example eligibility of cogeneration projects as currently defined in “AMS I.C: Thermal energy production with or without electricity”;
 - (c) A project activity with more than one component, where each component meets the microscale threshold, is eligible. 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) shall not exceed the limits for microscale project activities (e.g. the limit for the methane recovery component is 20 ktCO₂e/yr and the limit for the electricity production component is 5 MW output capacity).
15. Microscale CDM project activities shall follow the applicable provisions for demonstration of prior consideration of the CDM in the CDM Project Standard.
 16. Microscale CDM project activities shall demonstrate that they are not a debundled component of a small-scale (SSC) CDM project activity by applying the criteria in the methodological tool “Assessment of debundling for SSC project activities”, for example by suitably considering microscale thresholds in the place of SSC thresholds (EB 62, para 48).

5.1. Application of microscale thresholds at unit level of CPAs

- 16^{bis} For CPAs applying microscale thresholds at the unit level rather than at the aggregate level of the CPA, the term ‘project activities’ in paragraphs 8 - 12 and 14 above shall be read as ‘units’^{18bis}. If each of the units contained in the CPA satisfies the condition to qualify as a ‘microscale CDM unit’, then the coordinating/managing entity is not required to demonstrate compliance of the CPA with the microscale or small-scale thresholds at the aggregate level of the CPA. In such cases, the requirements related to debundling stated in paragraphs 13 and 16 above do not apply either.

¹⁸ That is multiply by three to derive thermal units from electrical units irrespective of the type of project or methodology applied.

^{18bis} Units are also referred to as “independent subsystems” or “technology/measures” in CDM regulatory documents

Figure 1. Microscale additionality test for RE project activities

Note: (A) means use other means of additionality demonstration (e.g. “Tool for demonstration of additionality”, methodological tool “Demonstration of additionality of small-scale project activities”)

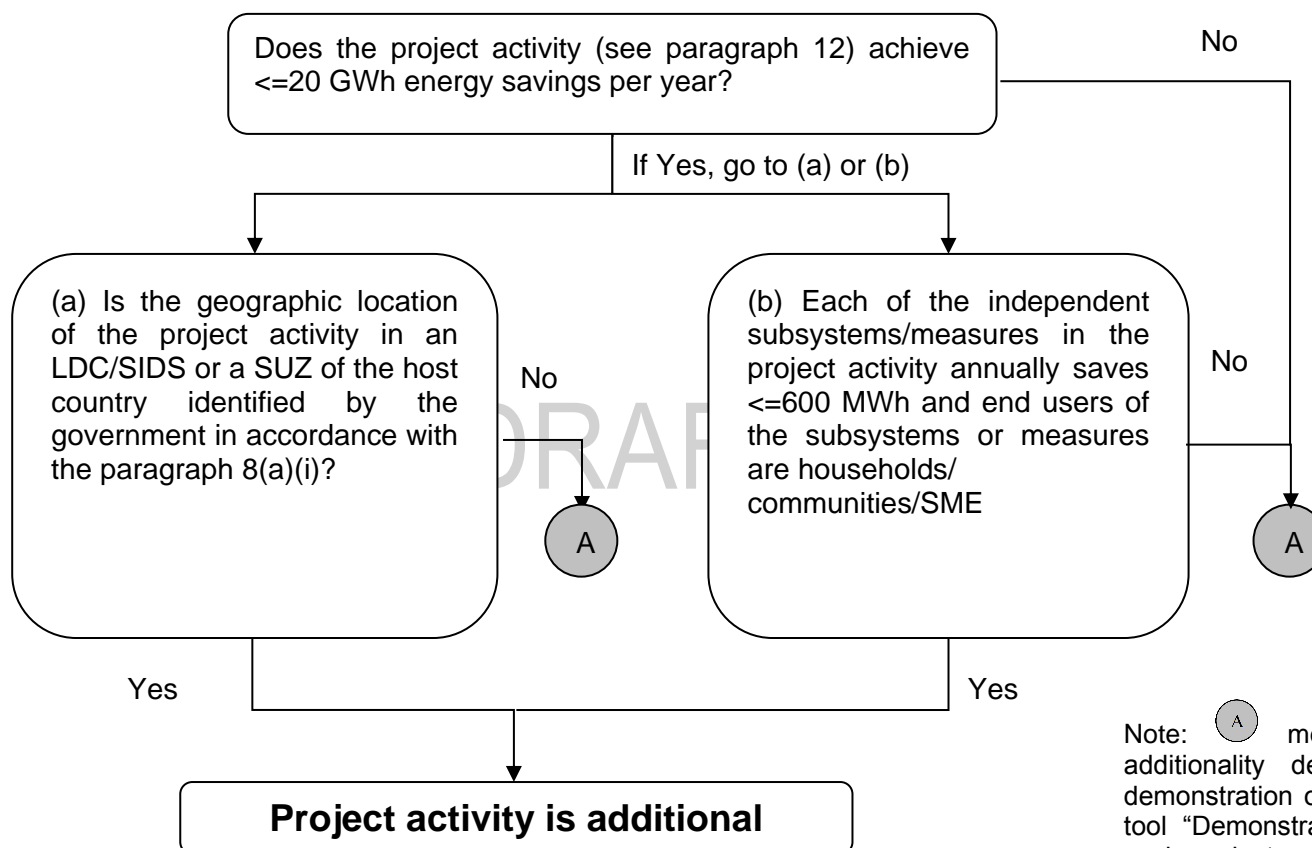
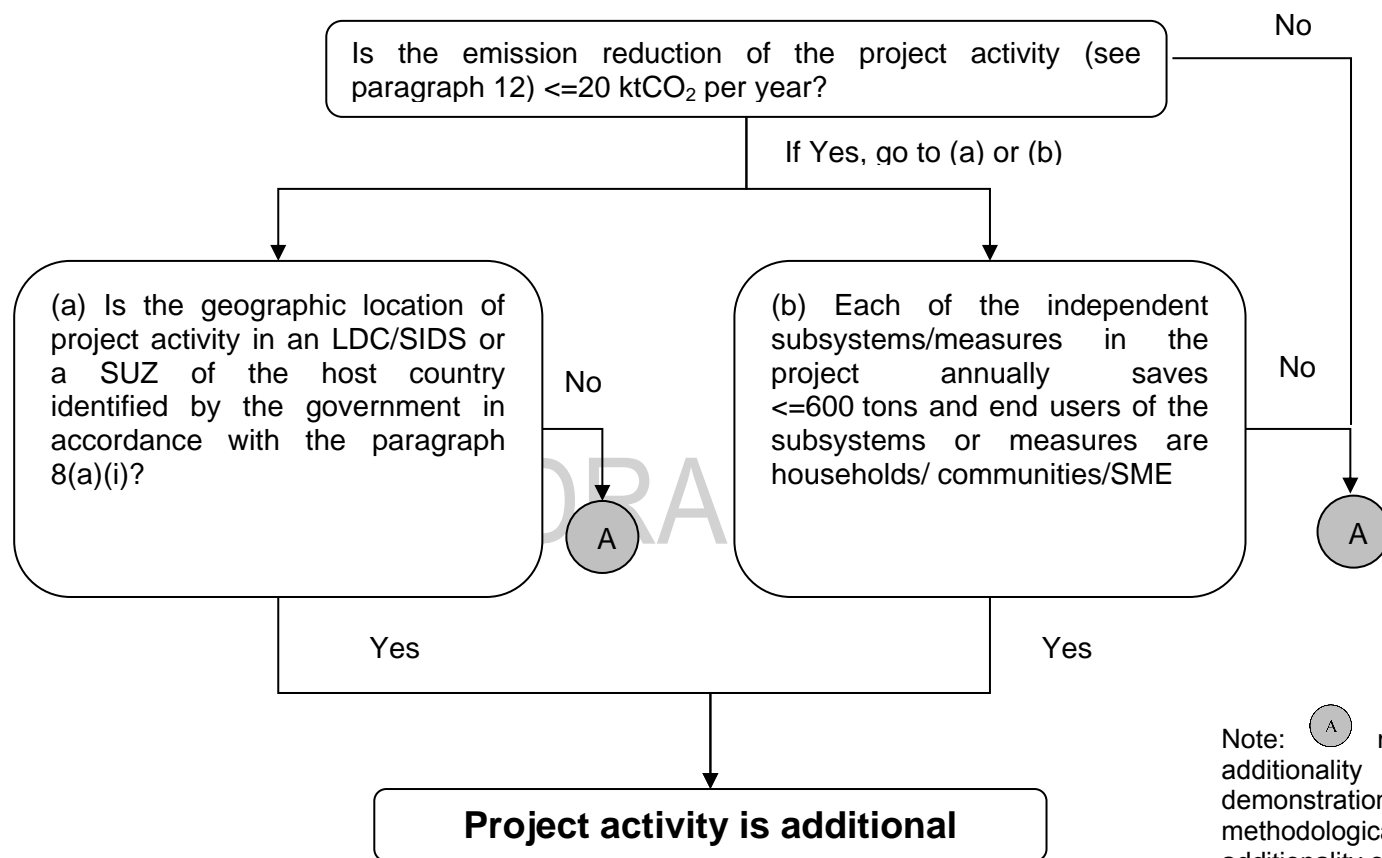
Figure 2. Microscale additionality test for EE project activities

Figure 3. Microscale additionality test for project activities ≤ 20 ktCO₂/y

Document information

<i>Version</i>	<i>Date</i>	<i>Description</i>
07.0	18 September 2015	SSC WG 49 electronic consultation report, Annex 04. To be considered by the Board at EB86 meeting. Revision to implement EB 85 decision related to application of microscale thresholds at unit level. Change in the name of the document as “Demonstration of additionality of microscale project activities”.
06.0	16 April 2015	EB 83, Annex 12 Revision to reclassify this document from a guideline to a tool.
05.0	31 May 2013	EB 73, Annex 13 - The revision updates a reference to the procedure “Submission and consideration of microscale renewable technologies for automatic additionality”.
04.0	20 July 2012	EB 68, Annex 26 Includes options to define the special underdeveloped zones in a host country; Clarifies the eligibility for project activities generating thermal energy such as solar water heaters displacing grid-connected electric heaters; Provides an example for the definition of “communities”.
03	29 September 2011	EB 63, Annex 23 Header removed that was inadvertently added to version 02; Provision of additional guidance on paragraph 2(d), specifically on the definition of the applicable threshold.
02	15 April 2011	EB 60, Annex 25 Title of document has been changed; Inclusion of Type III projects, CPAs, project activities with more than one component.
01	28 May 2010	EB 54, Annex 15 Initial adoption.

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