CLEAN DEVELOPMENT MECHANISM

CDM-MP75-A11

Information note

Analysis on methodologies for application of the proposed Combined Tool

Version 02.0

United Nations
Framework Convention on
Climate Change

COVER NOTE

1. Procedural background

1. The Executive Board of the Clean Development Mechanism (hereafter referred to as the Board) considered, at its ninety second meeting, a concept note on "Further elaboration on the proposed approach in expanding the application of the existing combined tool" and requested the Methodologies Panel (MP) to work on the revision of the "Combined tool to identify the baseline scenario and demonstrate additionality" (hereafter referred to as Combined Tool) by applying the approach included in the concept note.

2. In addition, the Board requested the MP to carefully analyse whether the application of the revised Combined tool conflicts with any of the existing applicability of methodologies.

2. Purpose

3. As a response to the Board's mandate above, this document presents the analysis on the methodologies in which "Tool for the demonstration and assessment of additionality" (hereafter referred to as Additionality tool) is currently referred to and the implication if the Additionality tool is displaced by the proposed revised Combined Tool after Board's approval.

4. The MP at its seventy-forth (hereafter referred as MP74) and seventy-fifth meeting (hereafter referred to as MP75) brainstormed on the advantages and disadvantages of replacing Additionality tool with Combined tool in the methodologies which refer Additionality tool.

3. Key issues and proposed solutions

5. Once approved by the Board, several methodologies that are currently referring to the Additionality Tool may change to the revised Combined Tool. Bearing this in mind, the MP analyzed 59 relevant methodologies for any potential conflicts, including 45 methodologies currently referring to the Additionality Tool, 7 methodologies currently referring to both Additionality Tool as well as Combined Tool, and 7 methodologies currently referring to neither Combined Tool nor the Additionality Tool. In summary, the findings were:

    (a) No conceptual issues/conflicts were identified for 45 methodologies;

    (b) Five Methodologies do not need to refer to either tool, since both baseline and additionality have been pre-defined by the methodology itself (e.g., AM0070);

    (c) Nine methodologies have provided pre-defined baseline, but referred to the Additionality tool for additionality demonstration purposes. Two options were discussed by the Panel:

        (i) Option 1: Maintain the current approach (i.e. keep referring to additionality tool);

(ii) Option 2: Change to Combined tool, but only for the purpose of additionality demonstration. Towards this end, guidance can be provided on how certain steps of the Combined tool (instead of its entire content) can be used in a similar way as the Additionality tool.

6. The MP discussed both the options in detail and acknowledge that there are pros and cons for either option above and presented in detail in the information note.

4. Impacts

7. Where possible, alignment with the proposed revised Combined tool after Board's approval will improve the clarify, consistency and environmental integrity in baseline identification and additionality demonstration.

5. Subsequent work and timelines

8. The document is recommended by the MP for consideration by the Board at its ninety-ninth meeting. Further work is based on guidance from the Board.

5. Recommendations to the Board

9. The Board may wish to take note of this information note and provide any further guidance.

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1. Introduction

1. The Executive Board of the Clean Development Mechanism (hereafter referred to as the Board), at its ninety second meeting, considered a concept note on “Further elaboration on the proposed approach in expanding the application of the existing combined tool” and requested the Methodologies Panel (MP) to work on the revision of the “Combined tool to identify the baseline scenario and demonstrate additionality” (hereafter referred to as Combined Tool) by applying the approach included in the concept note.

2. In addition, the Board requested the MP to carefully analyse whether the application of the revised Combined tool conflicts with any of the existing applicability of methodologies.

2. Purpose

3. In response to the Board’s mandate above, this document presented the analysis on the methodologies in which “Tool for the demonstration and assessment of additionality” (hereafter referred to as Additionality tool) is currently referred to and the potential conflicts if the Additionality tool is displaced by the proposed revised Combined tool after Board’s approval.

4. The MP at its seventy-forth (hereafter referred as MP74) and seventy-fifth meeting (hereafter referred to as MP75) brainstormed on the advantages and disadvantages of replacing Additionality tool with Combined tool in the methodologies which refer Additionality tool.

3. Key issues and proposed solutions

5. Analysis has been conducted to look into the possible issues if Additionality tool currently referred in those relevant methodologies is displaced by the revised Combined tool after Board’s approval. In total, it was identified that 45 methodologies are currently referring to Additionality tool and 7 methodologies are currently referring to both Additionality tool and Combined tool. In addition, another 7 methodologies have neither Additionality tool nor Combined tool referred.

6. While conducting the analysis, possible issues that may limit the application of Combined tool discussed previously have been taken into consideration (see Annex 18 of MP70, Annex 12 of MP72 considered by the Board at EB90 and EB92, respectively). The findings are presented below, as well as at the Appendixes.

3.1. Methodologies currently referring to Additionality tool

7. No conceptual conflicts have been identified in the 36 (out of 45) methodologies if Additionality tool referred therein is replaced by the Combined tool, once a revision to the Combined tool is approved by the Board, though additional changes will be required for the purpose of consistency. Detailed information is provided in the Appendixes.

8. Nine (out of 45) methodologies (AM0020, AM0031, AM0046, AM0086, AM0091, AM0101, AM0113, ACM0013, ACM0016) have applied a mixed approach, i.e., the methodology provides a pre-defined baseline and additionality is demonstrated through the Additionality tool. For example, ACM0013 provides a pre-defined baseline (the technology at the 80th

percentile of the cohort of selected power plants), and refers to Investment comparison in Step 2 of the Additionality tool for additionality demonstration. For this group of methodologies, two options have been considered by the MP:

(a) Option 1: Maintain the current approach (i.e. keep referring to additionality tool);

(b) Option 2: Change to Combined tool but only for the purpose of additionality demonstration. Towards this end, guidance can be provided on how certain steps of the Combined tool (instead of its entire content) can be used in a similar way as the Additionality tool.

9. For the Option 2 above, the following initial guidance was explored:

(a) In case barrier analysis in Additionality tool is referred, it corresponds to the steps up to Step 2.3 of the revised Combined tool (see Figure 1 below). And when the answer to Step 2.3 is “No”, then move directly to Step 3.3 and subsequent steps;

(b) In case Investment Analysis in Additionality tool is referred, it corresponds to steps up to Step 3.1 of the revised Combined tool (see Figure 1 below). And when the answer to Step 3.1 is “Yes”, then skip Step 3.2 and move directly to Step 3.3 and subsequent steps.

10. The MP discussed both the options in detail and ~~prefers Option 1. However, the Panel do~~ acknowledge that there are ~~both~~ pros and cons for either option above, as follows: ~~Specifically, Option 1 is beneficial to practitioners who have already developed institutional memory about CDM. It permits that users of existing or future methodologies with a pre-defined baseline may apply a streamlined standard for additionality demonstration. In terms of cons, Option 1 will create burdens in terms of documentation control, i.e., whenever the Combined Tool is revised in the future, the Additionality Tool will also need revision since the key content of the two tool are same. Whereas, Option 2 would allow the CT to be applied in almost all methodologies, which ensures the consistency among different methodologies.~~

(a) Option 1

(i) Pros -

a. Beneficial to practitioners who have already developed institutional memory about the additionality tool;

b. May permit the users of existing or future methodologies with a pre-defined baseline to apply a streamlined standard for additionality demonstration; and

c. Other carbon market mechanism use CDM Additionality tool for demonstration of additionality;

(ii) Cons -

a. Create burdens in terms of documentation control (i.e., whenever Combined tool is revised in the future, Additionality tool will also need revision since the key content of the two tool are same);

b. Perception of complexity by having more than one additionality standard; and

c. No potential benefits of keeping Additionality tool as only 32 projects have been registered applying one of these nine methodologies, therefore reducing the potential benefits of keeping Additionality tool;

(b) Option 2

(i) Pros –

a. Allows the Combined tool to be applied in almost all methodologies, which ensures the consistency among different methodologies;

b. Leading to reduced burdens in terms of documentation control; and

c. Simplifying and streamlining the CDM by having one main additionality standard instead of two;

(ii) Cons - Revision to all 45 methodologies which refer to additionality tool is needed to include reference to Combined tool.

11. If the Board selects option 2 as mentioned under para 8(b) above, then MP suggests the Board to maintain the Additionality tool so that other carbon markets can still refer to it.

3.2. Methodologies currently referring to both Additionality tool and Combined tool

12. Reference to the Additionality tool in those 6 (out of 7) methodologies (AM0009, AM0063, AM0069, AM0077, AM0084 and ACM0002) can be removed and only keep reference to Combined tool therein. Additionality tool was referred to cover the situation when some of the baseline alternatives are out of control of the PP or service/product can also be provided by party(ies) other than the PP. Since such a scenario has been covered in the revised Combined tool, reference to Additionality tool becomes unnecessary.

13. One of the methodology in this group (i.e., ACM0011) requires that the selection of emission factor (EF) depends on the project power generation (EG), by comparing against historical average EG and maximum EG, if baseline equipment would have operated at the full capacity.

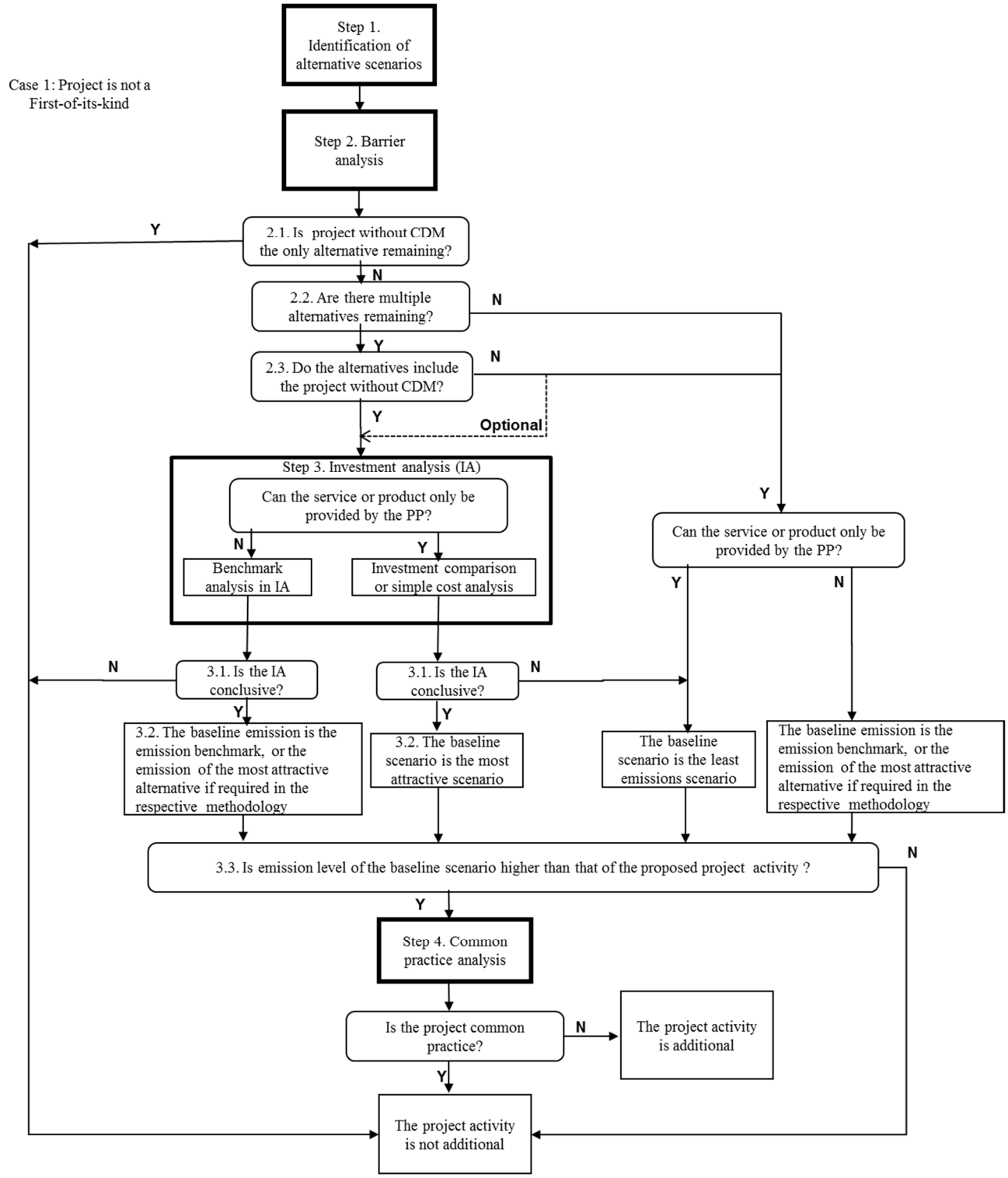
14. However, the MP is of the view that the revised Combined Tool could still be referred to with additional guidance to be provided in the methodology itself.

3.3. Methodologies currently referring neither Combined tool nor Additionality tool

15. Five (out of seven) methodologies in this group (AM0001, AM0070, AM0116, ACM0018 and ACM0019) are going to maintain its current requirements. That is, referring to either Combined tool or Additionality tool is not necessary, since these methodologies provided meth-specific approach for baseline and additionally. For example, both baseline identification and additionality demonstration will be done through comparing the established performance benchmark in AM0070.

16. Nevertheless, two (out of seven) methodologies (AM0007 and AM0017) can still make reference to the Combined tool. Additionality tool or Combined tool was not previously considered since their latest versions of these methodologies were dated back to 2004, which is even before the creation of both Additionality tool and Combined tool. Although it is possible to make reference to the Combined tool, some additional outdated requirement therein also needs to be updated, e.g., AM0007 making reference to the grid emission factor for baseline calculation.

Figure 1 Step-wise approach for baseline identification and additionality demonstration



Appendix 1. Analysis of methodologies currently referring to the Additionality tool

CDM methodology		CDM M&P	Greenfield possible?	Baseline identification	Additionality Demonstration	Note for baseline emissions calculation	Remark
AM0019	Renewable energy projects replacing part of the electricity production of one single fossil fuel fired power plant that stands alone or supplies to a grid, excluding biomass projects --- Version 2.0	48(a)		Based on the project brief to demonstrate that only power from the identified individual plant is displaced	Additionality tool	EF factor corresponding to the fuel used in the identified plant that will be displaced	No conceptual conflict found if changed to Combined tool; Latest version approved in 05. 2006
AM0020	Baseline methodology for water pumping efficiency improvements --- Version 2.0	48(a)		Pre-defined performance benchmark, i.e., pump with pre-project efficiency	Additionality tool	Capped to existing capacity	Option 1 or 2 in para 8 of the main content
AM0021	Baseline Methodology for decomposition of N2O from existing adipic acid production plants --- Version 3.0	48(a)		By applying Additionality tool steps	Additionality tool		No conceptual conflict found if changed to Combined tool
AM0026	Methodology for zero-emissions grid-connected electricity generation from renewable sources in Chile or in countries with merit order based dispatch grid --- Version 3.0	48(b)		Pre-defined (i.e., the grid)	Additionality tool		No conceptual conflict found if changed to Combined tool

CDM methodology		CDM M&P	Greenfield possible?	Baseline identification	Additionality Demonstration	Note for baseline emissions calculation	Remark
AM0027	Substitution of CO2 from fossil or mineral origin by CO2 from renewable sources in the production of inorganic compounds --- Version 2.1	48(b)		By applying the Additionality tool steps, then choose the alternative with the least emissions	Additionality tool		No conceptual conflict found if changed to Combined tool; Latest version approved in 2006
AM0028	N2O destruction in the tail gas of Caprolactam production plants --- Version 6.0	n.a		By applying Additionality tool steps	Additionality tool		No conceptual conflict found if changed to Combined tool
AM0030	PFC emission reductions from anode effect mitigation at primary aluminium smelting facilities --- Version 4.0.0	48(a)		Pre-defined: continuation of aluminum production by the same technology	Based on performance, i.e., project emissions is less than baseline emissions		No need to refer to any tool
AM0031	Bus rapid transit projects --- Version 6.0	48(a)	Y	Pre-project situation	First penetration (<3 MRT system, <20 motorization), then investment analysis (financial benchmark is required) or performance benchmark	BE mainly determined through survey	Option 1 or 2 in para 8 of the main content

CDM methodology		CDM M&P	Greenfield possible?	Baseline identification	Additionality Demonstration	Note for baseline emissions calculation	Remark
AM0035	SF6 emission reductions in electrical grids --- Version 2.0.0	48(a)		As a result of barrier analysis (i.e., regulatory requirement and SF6 recycling practice in existing electrical grid) of two pre-defined alternative (i.e., project without CDM and continuation of current practice)	Additionality tool, with barrier analysis required		No conceptual conflict found if changed to Combined tool
AM0036	Fuel switch from fossil fuels to biomass residues in heat generation equipment --- Version 4.0.0	48(a)		By applying Additionality tool steps	Additionality tool		No conceptual conflict found if changed to Combined tool
AM0037	Flare (or vent) reduction and utilization of gas from oil wells as a feedstock --- Version 3.0	48(a)	Y	As a result of barrier analysis, i.e., the alternative with least emissions	Additionality tool	Benchmark approach in case of the useful product is produced somewhere else	No conceptual conflict found if changed to Combined tool

CDM methodology		CDM M&P	Greenfield possible?	Baseline identification	Additionality Demonstration	Note for baseline emissions calculation	Remark
AM0038	Methodology for improved electrical energy efficiency of an existing submerged electric arc furnace used for the production of silicon and ferro alloys --- Version 3.0.0	48(a)		By applying Additionality tool steps	Additionality tool, with Investment analysis required. The outdated step of assessing impact of CDM registration still included.	Production capacity is unchanged	No conceptual conflict found if changed to Combined tool
AM0042	Grid-connected electricity generation using biomass from newly developed dedicated plantations --- Version 2.1	48(b)	Y	By applying Additionality tool steps	Additionality tool		No conceptual conflict found if changed to Combined tool
AM0043	Leak reduction from a natural gas distribution grid by replacing old cast iron pipes or steel pipes without cathodic protection with polyethylene pipes --- Version 2.0	48(a)		Pre-defined in the meth	Additionality tool with Investment Analysis required for two pre-defined alternatives (i.e., project without CDM and continuation of current practice)		No conceptual conflict found if changed to Combined tool; Latest version approved in 2007

CDM methodology		CDM M&P	Greenfield possible?	Baseline identification	Additionality Demonstration	Note for baseline emissions calculation	Remark
AM0044	Energy efficiency improvement projects - boiler rehabilitation or replacement in industrial and district heating sectors --- Version 2.0.0	48(a)		By applying Additionality tool steps	Additionality tool with Investment Analysis (benchmark analysis in particular) required only if the project activity is to be implemented by a third party	Installed capacity is capped to the baseline level.	No conceptual conflict found if changed to Combined tool
AM0045	Grid connection of isolated electricity systems --- Version 3.0	48(a)		By applying Additionality tool steps	Additionality tool		No conceptual conflict found if changed to Combined tool
AM0046	Distribution of efficient light bulbs to households --- Version 2.0	48(a)		By setting and observing a control group	Additionality tool with Investment Analysis required		Option 1 or 2 in para 8 of the main content
AM0049	Methodology for gas based energy generation in an industrial facility --- Version 3.0	48(b)		By applying Additionality tool steps	Additionality tool with Investment Analysis required		No conceptual conflict found if changed to Combined tool
AM0052	Increased electricity generation from existing hydropower stations through Decision Support System optimization --- Version 3.0	48(a)		By applying Additionality tool steps	Additionality tool		No conceptual conflict found if changed to Combined tool

CDM methodology		CDM M&P	Greenfield possible?	Baseline identification	Additionality Demonstration	Note for baseline emissions calculation	Remark
AM0057	Avoided emissions from biomass wastes through use as feed stock in pulp and paper, cardboard, fibreboard or bio-oil production --- Version 3.0.1	48(b)	Y	By applying Additionality tool steps	Additionality tool	BE covers only avoided decomposition of biomass for conservativeness	No conceptual conflict found if changed to Combined tool
AM0073	GHG emission reductions through multi-site manure collection and treatment in a central plant --- Version 1.0	48(b)		By applying Additionality tool steps	Additionality tool		No conceptual conflict found if changed to Combined tool
AM0074	Methodology for new grid connected power plants using permeate gas previously flared and/or vented --- Version 3.0.0	48(b)	Y	By applying Additionality tool steps for the baseline use of permeate gas	Additionality tool, and where the lower heating value of the permeate gas is above 30,000kJ/Nm3, Investment Analysis (financial benchmark) is required		No conceptual conflict found if changed to Combined tool
AM0075	Methodology for collection, processing and supply of biogas to end-users for production of heat --- Version 1.0	48(a)		By applying Additionality tool steps	Additionality tool		No conceptual conflict found if changed to Combined tool

CDM methodology		CDM M&P	Greenfield possible?	Baseline identification	Additionality Demonstration	Note for baseline emissions calculation	Remark
AM0081	Flare or vent reduction at coke plants through the conversion of their waste gas into dimethyl ether for use as a fuel --- Version 1.0	48(a)		By applying Additionality tool steps	Additionality tool		No conceptual conflict found if changed to Combined tool
AM0083	Avoidance of landfill gas emissions by in-situ aeration of landfills --- Version 1.0.1	48(a) or 48(b)		By applying Additionality tool steps	Additionality tool		No conceptual conflict found if changed to Combined tool
AM0086	Distribution of zero energy water purification systems for safe drinking water --- Version 4.0	48(a)		Pre-defined as the pre-project situation	Penetration rate or Additionality tool		Option 1 or 2 in para 8 of the main content
AM0089	Production of diesel using a mixed feedstock of gasoil and vegetable oil --- Version 2.0	48(a)		By applying Additionality tool steps	Additionality tool		No conceptual conflict found if changed to Combined tool
AM0091	Energy efficiency technologies and fuel switching in new and existing buildings --- Version 3.0	48(c)	Y	By applying Additionality tool steps	Compared against the performance benchmark or Additionality tool (in case of modelling)		Option 1 or 2 in para 8 of the main content

CDM methodology		CDM M&P	Greenfield possible?	Baseline identification	Additionality Demonstration	Note for baseline emissions calculation	Remark
AM0093	Avoidance of landfill gas emissions by passive aeration of landfills --- Version 1.0.1	48(a) or 48(b)		By applying Additionality tool steps	Additionality tool and indicator of NPV is required in Investment Analysis if land generates economic values		No conceptual conflict found if changed to Combined tool
AM0095	Waste gas based combined cycle power plant in a Greenfield iron and steel plant --- Version 1.0.0	48(b)	Y	By applying Additionality tool steps	Additionality tool		No conceptual conflict found if changed to Combined tool
AM0099	Installation of a new natural gas fired gas turbine to an existing CHP plant --- Version 1.0.0	48(a) or 48(b)		By applying Additionality tool steps	Additionality tool with benchmark analysis in case of Investment Analysis is applied	EF based on the minimum of [BM, CM, that of the most attractive alternative identified]	Possible to change to Combined tool, with additional guidance on baseline emissions calculation

CDM methodology		CDM M&P	Greenfield possible?	Baseline identification	Additionality Demonstration	Note for baseline emissions calculation	Remark
AM0101	High speed passenger rail systems --- Version 2.0	48(a)	Y	Based on current passenger transport modes	LDC qualification; penetration based, i.e., project pkm<20% country pkm in combination with investment analysis (financial benchmark) or performance benchmark (0.08 kwh/pkm)	Emission factor derived based on current passenger transport modes	Option 1 or 2 in para 8 of the main content
AM0104	Interconnection of electricity grids in countries with economic merit order dispatch --- Version 2.0.0	48(a)		By applying Additionality tool steps	Additionality tool	Based on EF of the interconnected previously isolated grid	No conceptual conflict found if changed to Combined tool
AM0108	Interconnection between electricity systems for energy exchange --- Version 1.0.0	48(a)		By applying Additionality tool steps	Additionality tool with benchmark analysis in case of Investment Analysis is applied		No conceptual conflict found if changed to Combined tool

CDM methodology		CDM M&P	Greenfield possible?	Baseline identification	Additionality Demonstration	Note for baseline emissions calculation	Remark
AM0113	Distribution of compact fluorescent lamps (CFL) and light-emitting diode (LED) lamps to households --- Version 1.0	48(a)		Pre-defined as the lamp collected and replaced on site;	LED automatically additional; CFL additional based on availability of EE regulation or Investment analysis in Additionality tool + market penetration <20%		Option 1 or 2 in para 8 of the main content
ACM0005	Increasing the blend in cement production --- Version 7.1.0	48(a)	Y	By applying Additionality tool steps	Additionality tool	Based on the benchmark of share of clinker in the blended cement types produced in the host country	No conceptual conflict found if changed to Combined tool
ACM0009	Fuel switching from coal or petroleum fuel to natural gas --- Version 5.0	48(a)		By applying Additionality tool steps	Additionality tool with NPV specified for IA		No conceptual conflict found if changed to Combined tool
ACM0012	Waste energy recovery --- Version 6.0	48(a) or 48(b)	Y	By applying Additionality tool steps	Additionality tool with NPV specified for IA		No conceptual conflict found if changed to Combined tool

CDM methodology		CDM M&P	Greenfield possible?	Baseline identification	Additionality Demonstration	Note for baseline emissions calculation	Remark
ACM0013	Construction and operation of new grid connected fossil fuel fired power plants using a less GHG intensive technology --- Version 5.0.0	48(b) or 48(c)	Y	The technology at the 80th percentile of the cohort of selected power plants	Two alternatives are pre-defined (i.e, project without CDM and the identified baseline technology), and investment comparison (levellized cost) is required for Investment Analysis		Option 1 or 2 in para 8 of the main content
ACM0014	Treatment of wastewater --- Version 7.0	48(a) or 48(b)	Y	Pre-defined or by applying Additionality tool steps	Simplified additionality procedure or Additionality tool		No conceptual conflict found if changed to Combined tool

CDM methodology		CDM M&P	Greenfield possible?	Baseline identification	Additionality Demonstration	Note for baseline emissions calculation	Remark
ACM0015	Emission reductions from raw material switch in clinker production --- Version 4.0	48(b) or 48(c)	Y	By applying Additionality tool steps. For Greenfield, a reference plant is established as one of the alternatives	Additionality tool. If energy efficiency is excluded, indicator of NPV is required for Investment Analysis; in case of Greenfield, only FoiK or Investment Analysis is allowed		No conceptual conflict found if changed to Combined tool

CDM methodology		CDM M&P	Greenfield possible?	Baseline identification	Additionality Demonstration	Note for baseline emissions calculation	Remark
ACM0016	Mass Rapid Transit Projects --- Version 4.0	48(a)	Y	Pre-defined as the pre-project traditional urban public transport system	LDC qualification; penetration based, i.e., <3 cities with MRTS in host country, existing motorized trips <20% total in the host city, and investment analysis (financial benchmark) or performance benchmark (e.g., 50gCO2/pkm)	BE mainly determined through survey	Option 1 or 2 in para 8 of the main content
ACM0017	Production of biodiesel for use as fuel --- Version 3.1	48(a)	Y	By applying Additionality tool steps	Additionality tool		No conceptual conflict found if changed to Combined tool
ACM0023	Introduction of an efficiency improvement technology in a boiler --- Version 1.0	48(a)		By applying Additionality tool steps	Additionality tool		No conceptual conflict found if changed to Combined tool

CDM methodology		CDM M&P	Greenfield possible?	Baseline identification	Additionality Demonstration	Note for baseline emissions calculation	Remark
ACM0025	Construction of a new natural gas power plant --- Version 2.0	48(b)	Y	By applying Additionality tool steps	Additionality tool and barrier analysis is not allowed,	EF based on the minimum of BM, CM and that of the most attractive alternative identified	Possible to change to Combined tool, with additional guidance on baseline emissions calculation

Appendix 2. Analysis of methodologies referring to both the Additionality tool and the Combined tool

CDM methodology		CDM M&P	Greenfield possible?	Baseline identification	Additionality Demonstration	Note for baseline emissions calculation	Remark
AM0009	Recovery and utilization of gas from oil fields that would otherwise be flared or vented --- Version 7.0	48(a) or 48(b)		Combined tool. However, for applying the Investment Analysis, Additionality tool is referred in case of venting			Reference to Additionality tool may be removed as the methodology is not using any elements from Additionality tool.
AM0063	Recovery of CO2 from tail gas in industrial facilities to substitute the use of fossil fuels for production of CO2 --- Version 1.2.0	48(a)		Combined tool	Additionality tool	Emission benchmark is derived for scenarios in which CO2 would have been produced off site	Reference to Additionality tool may be removed. The reasons why Additionality tool was referred is not clear. One reason may be that the baseline alternatives involve CO_2 that would have been produced off site (market). However, it has been now covered in the newly revised Combined tool.

	CDM methodology	CDM M&P	Greenfield possible?	Baseline identification	Additionality Demonstration	Note for baseline emissions calculation	Remark
AM0069	Biogenic methane use as feedstock and fuel for town gas production --- Version 2.0	48(a)		Combined tool	Additionality tool		Reference to Additionality tool may be removed. The reasons why Additionality tool was referred is not clear. One reason may be that some of the baseline alternatives may not be under the control of the PP, e.g., on alternative provided by the meth is "Town gas is produced using biogas, delivered from sites not included in the project activity". However, it has been now covered in the newly revised Combined tool.
AM0077	Recovery of gas from oil wells that would otherwise be vented or flared and its delivery to specific end-users --- Version 1.0	48(a)		Additionality tool	Additionality tool		May change Additionality tool to Combined tool. Combined tool (the Step for common practice in particular) was only referred in the section "Changes required for methodology implementation in 2nd and 3rd crediting periods". No conceptual conflict was found if changed to Combined tool.
AM0084	Installation of cogeneration system supplying electricity and chilled water to new and existing consumers --- Version 3.0	48(b)	Y	Combined tool	Combined tool		Reference to Additionality tool may be removed as the methodology is not using any elements from Additionality tool.

CDM methodology		CDM M&P	Greenfield possible?	Baseline identification	Additionality Demonstration	Note for baseline emissions calculation	Remark
ACM0002	Grid-connected electricity generation from renewable sources --- Version 17.0	48(a) or 48(b)	Y	Pre-defined or Combined tool. Additionality tool is referred for applying the financial benchmark analysis	Simplified procedure or Additionality tool		Reference to Additionality tool may be removed. Financial benchmark approach and its applicable conditions has been included in the revised Combined tool.
ACM0011	Fuel switching from coal and/or petroleum fuels to natural gas in existing power plants for electricity generation --- Version 3.0	48(a)		Combined tool (in case Investment analysis is applied, indicator of NPV is required)	Additionality tool	Emission factor depends on the project power generation (EG), compared against baseline historical EG, and max. EG if baseline equipment operated at full capacity.	Possible to change to Combined tool, with additional guidance on baseline emissions calculation

Appendix 3. Analysis of methodologies referring to neither the Additionality tool nor Combined tool

CDM methodology		CDM M&P	Greenfield possible?	Baseline identification	Additionality Demonstration	Note for baseline emissions calculation	Remark
AM0001	Decomposition of fluoroform (HFC-23) waste streams --- Version 6.0.0	48(a)		Pre-defined, based on the availability of regulation	Based on level of project emissions, i.e., as long as it is lower than the baseline emissions level		Maintain current approach, i.e., referring to Combined tool or Additionality tool is not necessary.
AM0007	Analysis of the least-cost fuel option for seasonally-operating biomass cogeneration plants --- Version 1.0	48(b)		The least cost fuel use during the off-season, after conducting investment comparison analysis;	Result from investment comparison analysis	Despite of the grid-connected nature, grid emission factor is not used in calculation in the meth.	Combined tool may be applied. It is still the 1st version from 13/06/2004, before the creation of both Additionality tool and Combined tool.
AM0017	Steam system efficiency improvements by replacing steam traps and returning condensate --- Version 2.0	48(a)		Pre-defined in the meth, i.e., pre-project situation with historical emissions	Result from barrier analysis		Combined tool may be applied. It is still the 2nd version from 21/06/2005.
AM0070	Manufacturing of energy efficient domestic refrigerators --- Version 3.1.0	48(a)		Pre-defined performance benchmark	Based on performance benchmark		Maintain current approach, i.e., referring to Combined tool or Additionality tool is not necessary.

CDM methodology		CDM M&P	Greenfield possible?	Baseline identification	Additionality Demonstration	Note for baseline emissions calculation	Remark
AM0116	Electric taxiing systems for airplanes --- Version 2.0	48(a)		Pre-defined in the meth	Automatic additional		Maintain current approach, i.e., referring to Combined tool or Additionality tool is not needed.
ACM0018	Electricity generation from biomass residues in power-only plants --- Version 3.0	48(a) or 48(b)	Y	Applying similar steps from the Combined tool	Applying similar steps from the Combined tool		Combined tool may be applied. The relevant procedures for baseline identification and additionality seem to have fully followed the Combined tool.
ACM0019	N2O abatement from nitric acid production --- Version 3.0	48(a)		Pre-defined, i.e., N_2O emission to atmosphere if no regulation	Based on the existence of regulation		Maintain current approach, i.e., referring to Combined tool or Additionality tool is not necessary.

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Document information

Version	*Date*	*Description*
02.0	28 March 2018	MP 75, Annex 11 To be considered by the Board at EB 99. This revised version further elaborates the advantages and disadvantages of the two options presented in CDM-MP73-A07 based on guidance from the Board (EB96).
01.0	28 July 2017	MP 73, Annex 7 To be considered by the Board at EB 96.

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