

CDM-MP73-A15

Draft Guideline

Use of the CDM in the urban sectors

Version 01.0 - draft

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 ninetieth meeting considered the concept note on “Further development of the CDM in urban sectors” jointly prepared by the CDM Methodologies Panel (MP), Small-Scale Working Group (SSC WG), and the secretariat and requested the MP, in consultation with the SSC WG and the secretariat, to develop guidelines to facilitate the development of CDM projects and programmes in the urban context providing best practice examples in a PoA-DD template, for its consideration at a future meeting.
2. Also, at its ninety-fourth meeting, the Board requested the secretariat, the MP, and the SSC WG to explore tiered approaches in methodologies relevant to the urban context, when these methodologies are being revised.

2. Purpose

3. The purpose of this document is to develop guidelines to facilitate the development of CDM project activities and programme of activities (PoAs) in the urban context.

3. Key issues and proposed solutions

4. The MP, in consultation with the SSC WG and the secretariat prepared this draft guideline and is seeking public input on the document. The MP requested the public to provide their input in particular on the text highlighted in yellow.

4. Impacts

5. The proposed guideline, once approved, will facilitate the development of CDM project activities and PoAs in the urban sector.

5. Subsequent work and timelines

6. The MP, at its seventy-third meeting (MP73), agreed to launch a call for public input on the draft guideline. After receiving public inputs on the document, the MP will continue working on the document, at its next meeting, for recommendation to the Board at a future meeting of the Board.

6. Recommendations to the Board

7. Not applicable (call for public inputs).

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1. Introduction

1.1. Background

1. The Executive Board (hereinafter referred to as the Board) of the clean development mechanism (CDM) at its ninetieth meeting considered the concept note on “Further development of the CDM in urban sectors” jointly prepared by the CDM Methodologies Panel (MP), Small-Scale Working Group (SSC WG), and the secretariat and requested the MP, in consultation with the SSC WG and the secretariat, to develop guidelines to facilitate the development of CDM projects and programmes in the urban context providing best practice examples in a PoA-DD template, for its consideration at a future meeting. In addition, the Board provided the following guidance on further work on the development of CDM in the urban sectors:
 - (a) Work towards the standardization of parameters for the estimation of emission reductions in the context of improving of the relevant methodologies;
 - (b) Develop innovative methods for demonstrating additionality for urban sectors, provided that it is not already being addressed under existing work streams.
2. Also, at its ninety-fourth meeting, the Board requested the secretariat, the MP, and the SSC WG to explore tiered approaches in methodologies relevant to the urban context, when these methodologies are being revised.

2. Scope and applicability

3. These guidelines are applicable to project participants or coordinating/managing entities (CMEs) seeking to apply for CDM when implementing climate change mitigation projects in the urban context. The document provides guidance on the design of CDM project activities (PAs) and programme of activities (PoA) when combining multiple urban infrastructure projects.

3. Definitions

4. The definitions contained in the Glossary of CDM terms shall apply.
5. For the purpose of this guidelines, the following definitions apply

Urban infrastructure is defined as projects that fall within boundaries of an urban area or are designed to meet the needs of city dwellers and associated industries, including access to water, electricity and heat, and transport and disposal of waste (The Cities Climate Finance Leadership Alliance (CCFLA)).

4. Applying for CDM

4.1. CDM methodologies applicable to city-based mitigation programmes

6. Urban infrastructure mitigation projects may target buildings, transport, energy supply and demand, water supply and treatment, and waste management. To estimate effect of those projects, the CDM framework offers a wide range of the methodologies and tools.

7. Table 1 below shows the sectors within a city and the non-exhaustive list of methodologies applicable to those sectors.

Table 1. Sectorwise listing of methodologies

Sectors	Measures	Methodologies
Buildings	Appliances	AMS-II.C, AMS-II.E, AMS-II.J, AMS-III-M, AMS-II.N, AMS-II.O, AMS-II.Q, AMS-II.R, AMS-III-AV, AM0046, AM0070 ¹ , AM0091, AM0113, AM0060, AM0086
	Building efficiency/ Renewable energy	AMS-III.AE, AM0091
Transport	Fuel switch	AMS-III.C, AMS-III.S, AMS-III.T, AMS-III.AK, AMS-III-AQ, AMS-III-AY
	Modal shift	AMS-III.U, ACM0016, AM0031
	Vehicular efficiency	AMS-III.AA, AMS-III-AP, AMS-III-AY, AMS-III-BC
Energy	District heating	AMS-II.B, AM0044, AM0058, AM0072
	Heat for cooking, water and space (RE)	AMS-I.I, AMS-I.J, AMS-I.K, AMS-III-AC
	Heat for cooking, water and space (EE)	AMS-II.A, AMS-II.K,
	District cooling	AM0117
	Street lighting	AMS-II.L
Water/Waste management/treatment	Waste-water treatment	AMS-III.H, AMS-II.I, AM0080, ACM0014
	Water supply	AMS-II.AV, AM0020
	Reduce	AMS-III-AJ, AMS-III-BA
	Recycle	AMS-III-AJ
	Methane avoidance	AMS-III.E, AMS-III.F, AMS-III.G, AMS-III.O, AMS-III.AF, AMS-III-AO, AM0053, AM0057, AM0069, AM0083, AM0093, AM0112, ACM001, ACM0022, ACM0024

8. Short description of the methodologies listed in the table could be found in the CDM Methodologies Booklet, available at: <https://cdm.unfccc.int/methodologies/documentation/index.html>.

4.2. Double counting and interactive effects

9. Application of multiple methodologies listed in the table 1 above may result in overestimation of the emission reductions or double counting. To address the issue, the CME shall apply the 'Guidelines for the consideration of interactive effects for the application of multiple CDM methodologies for a programme of activities' https://cdm.unfccc.int/Reference/Guidclarif/meth/meth_guid49.pdf. Further, the combinations of methodologies that may result in cross-effects are provided in Appendix 1.

¹ AM0070 is for credits for manufacturers of efficient appliances. If the appliance is used in a building there could be a double crediting.

4.3. Additionality Demonstration

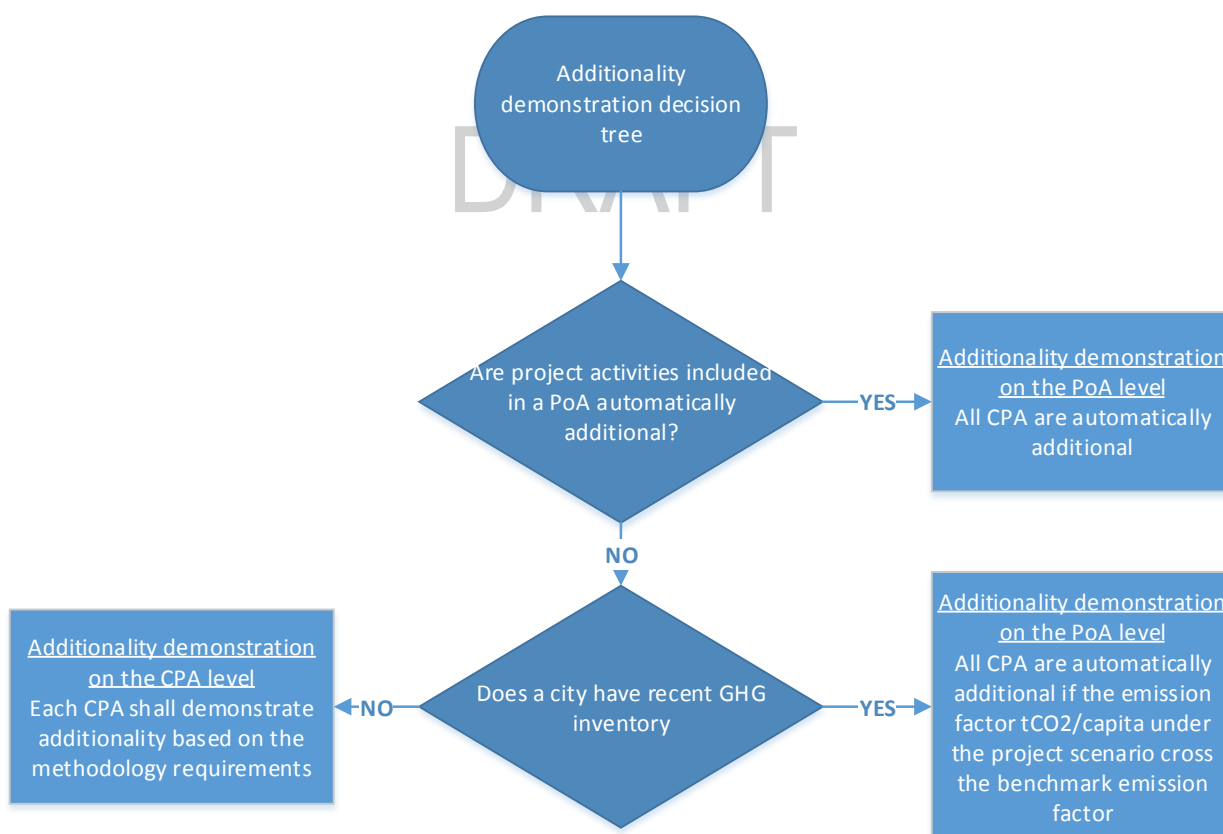
4.3.1. Innovative approaches

10. The Methodologies Panel (MP) is considering the use of the city-wide emission factor (CWEF) as an indicator for additionality demonstration (tCO₂/capita). The indicator can be derived, for example, from a city-wide GHG inventory. The following frameworks for the city-wide GHG inventory are being explored currently:

- (a) **Climate Action for Urban Sustainability** (The CURB tool) by the World Bank;
- (b) 'Global Protocol for Community-Scale Greenhouse Gas Emission Inventories' by the World Resource Institute;
- (c) Reporting Guidelines on SEAP and Monitoring by 'Covenant of Mayors for Climate and Energy';

11. The following decision tree is included to facilitate the choice between conventional and innovative approaches for additionality demonstration.

Figure 1. [Include title]



12. Recognizing the difficulty of deriving the benchmark CWEF, the MP is considering following approaches:

(a) The PoA is additional if the CWEF after implementation of the CPAs will cross the benchmark i.e. corresponds to the CWEF of the top-twenty cities (with similar GDP/capita) and similar climate conditions;

(b) The PoA is additional if the CWEF after implementation of the CPAs will demonstrate 20 per cent reduction of the carbon intensity, i.e. baseline CWEF is not less than 120 percent of project CWEF;

13. In case where the CME would use the benchmark approach, the project city-wide emission factor will be checked ex-post, and emission reductions can only be claimed if the benchmarked is crossed.

4.4. Standardization of Parameters

14. Applying the methodologies indicated in the Section 4.1 may entail undertaking a number of measurements or implementing a comprehensive monitoring programme to establish baseline and determine emission reductions that could be attributed to implementation of the project/programme. Although some of the methodologies include conservative default factors for some parameters, others do not include such tiered approaches potentially leading to high transaction cost. Therefore, it becomes important that there is access to tiered approaches including use for conservative default factors.

15. The MP is exploring the tools below to identify the default factors and conditions with which they will be applied.

16. **Excellence in Design for Greater Efficiency** (EDGE) by IFC <<https://www.edgebuildings.com/>>. The EDGE is a building design tool, a certification system, and a global green standard for nearly 100 emerging economies. EDGE is based on the following:

(a) Climatic conditions of the location;

(b) Building type and occupant use;

(c) Design and specifications;

(d) Building orientation (for select building types).

17. The location-specific information exists within EDGE for nearly 350 large cities in developing countries for the following building types:

(a) Homes: for both apartments and houses (assumptions for area and occupancy are based on income categories);

(b) Hotels: for both hotels and resorts (assumptions for area, occupancy and the type of support services are based on the star rating of the property);

(c) Offices: assumptions are based on occupancy density and hours of use

(d) Hospitals: assumptions are based on the type of hospital (i.e., nursing home, private or public hospital, clinic or diagnostic center);

(e) Retail: assumptions are based on the type of retail building (i.e., department store, mall or supermarket).

18. **Climate Action for Urban Sustainability** (The CURB tool) is an interactive scenario planning tool that helps cities take action on climate change <www.worldbank.org/curb>. The calculations made by the CURB tool are based on modelling approaches or assumptions developed by world-class engineers, economists, and urban planners. The accuracy of the calculations is, however, linked to the quality of the data used in the tool, which is why CURB consistently asks the user to provide locally relevant information. Since data gaps are a common problem in cities, CURB does provide city, national or regional proxy data that the user can rely on if local information is unavailable or considered unreliable.

19. **The Tool for Rapid Assessment of City Energy (TRACE)**. This is a decision-support tool designed to help cities quickly identify under-performing sectors, evaluate improvement and cost-saving potential, and prioritize sectors and actions for energy efficiency (EE) intervention. It covers six municipal sectors: passenger transport, municipal buildings, water and waste water, public lighting, solid waste, and power and heat.

20. TRACE consists of three modules: an energy benchmarking module which compares key performance indicators (KPIs) among peer cities, a sector prioritization module which identifies sectors that offer the greatest potential with respect to energy-cost savings, and an intervention selection module which functions like a “playbook” of tried-and-tested EE measures and helps select locally appropriate EE interventions.

5. Example

21. There are some international initiatives, such as the Covenant of Mayors for Climate and Energy, which bring together city authorities committed to reducing carbon dioxide emissions on their territory. Those commitments are supported by action plans where mitigation activities planned in a city are combined into programmes. Such programmes vary from city to city but have similar pillars, such as energy efficiency, transport and waste management. One of the most comprehensive action plans as submitted to the Covenant of Mayors is the ‘Yerevan City Sustainable Energy Action Plan’ <http://www.covenantofmayors.eu/about/signatories_en.html?city_id=7678&seap>. It is used as an example below of applying a city action plan for CDM.

5.1. Measures

22. The city is planning several measures in the sectors of transport, buildings, energy supply and waste management. The table 2 below provides the overview of the measures and the CDM methodologies applicable to those measures.

Table 2. Overview of measures and applicable methodologies

MEASURE	DESCRIPTION	METHODOLOGY
Transport		
Public Transport (PT) Optimization Program. PT park upgrades, route optimization, unified ticketing system	Modernization of Yerevan PT pool, optimization of the staff, increase of effectiveness of activities;	AMS-III.S. Introduction of low-emission vehicles/technologies to commercial vehicle fleets
		AMS-III.AA. Transportation energy efficiency activities using retrofit technologies
	Optimization of the PT routes network, transition to a common ticket system, installation of electronic schedules in PT stops, power supply of schedule boards and advertising boards by solar photovoltaic energy	AMS-III.AA. Transportation energy efficiency activities using retrofit technologies AMS-I.A. Electricity generation by the user
Public electric transport (trolley) park and infrastructure upgrade [SDMTable&BoxParaNotNumbered]	Modernization of the trolleybus pool. Currently the pool comprises 79 trolleybuses (9 Renault, 36 LiAZ and 34 Skoda models), from which 22 are out of order. Within the scope of the Activity 50 new trolleybuses are planned to be acquired instead of 43 trolleybuses with an approximate average price of 200 thousand Euros for one trolleybus.	AMS-III.S. Introduction of low-emission vehicles/technologies to commercial vehicle fleets
	Renovation and modernization of the overhead contact system. Out of 133,500 m of trolleybus overhead contact system, 66,750 m (50%) need capital repair; besides, 8 feeding stations are planned to be added as well.	AMS-II.C. Small-scale Methodology: Demand-side energy efficiency activities for specific technologies
	Modernization of traction substations. All the 24 traction substations in the system are subject to modernization	AMS-II.C. Small-scale Methodology: Demand-side energy efficiency activities for specific technologies
	Renovation and improvement of the cable network. The existing cable network measures 102,000 m in total from which ALS type cables, measuring 50,000 m, need to be replaced.	AMS-II.C. Small-scale Methodology: Demand-side energy efficiency activities for specific technologies

MEASURE	DESCRIPTION	METHODOLOGY
Public electric transport (Yerevan metro) refurbishment	Construction of a drainage tunnel measuring 932 m in length for the purpose of lowering the groundwater level that will provide for: Partial shutdown of pumping stations during 2018-2019; Shutdown of submersible pumps of the drainage system after the drainage tunnel is put into operation starting from 2019	N/A
	Modernization of 15 escalators	AMS-II.C. Small-scale Methodology: Demand-side energy efficiency activities for specific technologies
	Replacement of 6kW cable network measuring 35 km in length, re-equipment of substations, modernization of the lighting system in the station halls by installation of energy-efficient lamps	AMS-II.A.: Supply side energy efficiency improvements – transmission and distribution AMS-II.J. Demand-side activities for efficient lighting technologies
	Re-equipment, renovation of the rolling-stock depot, modernization of the rolling stock	AMS-II.C. Small-scale Methodology: Demand-side energy efficiency activities for specific technologies
Supporting the public and private transport's switching to CNG through allocation of places for CNG stations in city districts and formulation of safety requirements		N/A
Development of road infrastructure (new, including bypass roads and road junctions)		N/A
City transport optimization; management efficiency improvement (including waste disposal, sanitation and other machinery)		N/A

MEASURE	DESCRIPTION	METHODOLOGY
Modernization of the city transport fleet: Yerevan Municipality's strategic plan of dissemination of electric vehicles	The pilot phase will extend from 2017 to 2020. Under proper control and monitoring the first 72 EVs will be put into experimental operation. EV promotion incentives: Preferential or zero parking fees for EVs in the centre of Yerevan; prioritized and user-friendly parking lots; Allocation of accessible areas for charging stations; Introduction of a mandatory requirement in new construction authorizations requiring to provide for charging facilities for EVs; Engagement of EVs in municipal transport and so on.	AMS-III.C. Emission reductions by electric and hybrid vehicles
Public buildings (P)		
Introducing energy managers in municipal institutions.		N/A
Implementation of heat preservation measures in municipal buildings	installation of back reflectors for heaters of the building heating system; weatherization of external doors and windows with the help of widely used and easily accessible materials, such as silicone, polyurethane foam, insulating foam sealant, sponge rubber tape, foam rubber, etc.; thermal insulation of indoor heat pipes; installation of automatic door closers; constructing small sized vestibules for entrance doors.	AM0091 Energy efficiency technologies and fuel switching in new and existing buildings
		AMS-II.E. Energy efficiency and fuel switching measures for buildings.
		AMS-II.M. Demand-side energy efficiency activities for installation of low-flow hot water savings devices
		AMS-II.R. Energy efficiency space heating measures for residential buildings
Use of energy efficient luminaires for internal lighting systems in the administrative buildings		AM0046 Distribution of efficient light bulbs to households
		AM0113 Distribution of compact fluorescent lamps (CFL) and light-emitting diode (LED) lamps to households
		AMS-II.J. Demand-side activities for efficient lighting technologies
		AMS-II.N. Demand-side energy efficiency activities for installation of energy efficient lighting and/or controls in buildings

MEASURE	DESCRIPTION	METHODOLOGY
Targeted investments of energy savings in public buildings within the jurisdiction of Yerevan Municipality		AM0091 Energy efficiency technologies and fuel switching in new and existing buildings
Use of renewable energy in municipal buildings	Installation of solar water heaters in preschool institutions	AMS-I.C. Thermal energy production with or without electricity
	Installation of solar energy plants in healthcare institutions	AMS-I.A. Electricity generation by the user
	Installation of solar energy plants in sports schools and children and youth complex sports schools	
	Installation of solar energy plants in administrative buildings	
Investments in construction renovations of municipal buildings through energy efficiency measures		AM0091 Energy efficiency technologies and fuel switching in new and existing buildings
De-Risking and Scaling-up Investment in Energy Efficient Building Retrofits Project – Public Buildings	thermal insulation of building envelopes, installation of entrance doors in staircases, replacement of windows, reconstruction of heating/cooling, air ventilation and air conditioning systems and renewable energy sources integration components	AM0091 Energy efficiency technologies and fuel switching in new and existing buildings
		AMS-II.E. Energy efficiency and fuel switching measures for buildings
Modernization of energy-consuming appliances in kindergartens		AM0091 Energy efficiency technologies and fuel switching in new and existing buildings
		AMS-II.E. Energy efficiency and fuel switching measures for buildings
Public electric transport (trolley) park and infrastructure upgrade	Reduction of heat losses in buildings and premises of the system. For the purposes of achieving energy saving, out of buildings and premises with a total surface of 13,178 m ² , capital repair works will be carried out, as well as doors and windows will be replaced in premises with a surface of 7,200 m ²	AM0091 Energy efficiency technologies and fuel switching in new and existing buildings.
		AMS-II.E. Energy efficiency and fuel switching measures for buildings.
		AMS-II.M. Demand-side energy efficiency activities for installation of low-flow hot water savings devices
	AMS-II.R. Energy efficiency space heating measures for residential buildings	
	Improvement of the lighting system in production buildings	AM0046 Distribution of efficient light bulbs to households

MEASURE	DESCRIPTION	METHODOLOGY
	and premises of the system by installing energy-efficient lamps	AM0113 Distribution of compact fluorescent lamps (CFL) and light-emitting diode (LED) lamps to households AMS-II.J. Demand-side activities for efficient lighting technologies AMS-II.N. Demand-side energy efficiency activities for installation of energy efficient lighting and/or controls in buildings
Municipal solid waste (M)		
Methane capture and electric power generation from the Nubarashen urban MSW landfill	Project 0069: Nubarashen Landfill Gas Capture and Power Generation Project in Yerevan	AMS-I.D. ver. 5 ACM0001
Lighting		
Improving the energy efficiency in urban lighting systems	replacing the conventional light-bulbs in the street lighting system of Yerevan City with efficient LED luminaries	AM0113 Distribution of compact fluorescent lamps (CFL) and light-emitting diode (LED) lamps to households
		AMS-II.J. Demand-side activities for efficient lighting technologies
Improving the efficiency and reliability of Yerevan street-lighting	to introduce new energy-efficient LED lighting, a control and monitoring system, pole replacement and renovation as well as power cable replacement	AM0113 Distribution of compact fluorescent lamps (CFL) and light-emitting diode (LED) lamps to households
		AMS-II.J. Demand-side activities for efficient lighting technologies
Installation of photovoltaic luminaries in the lighting systems of yard areas and entrances of multi-apartment buildings		AMS-I.A. Electricity generation by the user
Green spaces and the municipal greenhouse (G)		
Application of modern EE technologies in municipal greenhouses.	improving the energy efficiency of the municipal greenhouse, particularly the introduction of efficient heating system	AMS-II.E. Energy efficiency and fuel switching measures for buildings
Water supply and water facilities (W)		

MEASURE	DESCRIPTION	METHODOLOGY
Refurbishment and renovation projects for drinking water supply systems in Yerevan	the replacement of 107,027 m of corroded distribution pipes and installation of 6,278 water-meter boxes in Noragavit, Shahumyan /Akhparashen/, Kilikia, Kanaker-Zeitun and Davtashen districts of Yerevan. installation of remote control temper-proof flow management system (SCADA) in the entire distribution network of the City; the purpose of the system is to prevent breakages and increase the reliability of the network by improving the pressure and flow management. replacement of around 152 km of network pipes, construction of 30 new booster pumping stations, and repair of individual connections and meter-boxes.	N/A
Water supply: measures of fountain lightings and EE of engines.		AMS-II.C. Demand-side energy efficiency activities for specific technologies

5.2. PoA structuring

23. After consideration of methodologies available, the following PoA outline is proposed to cover most of the measures.

Table 3. Proposed outline for the PoA structure

Item	Proposed approach
Project type	PoA framework
Scale	Small scale
CPA	For transport, energy and waste: <ul style="list-style-type: none"> • 1 measure per CPA • 1 methodology per measure For buildings: <ul style="list-style-type: none"> • Multiple measures per CPA • Multiple methodologies per CPA
Cross-cutting effects	'Guidelines for the consideration of interactive effects for the application of multiple CDM methodologies for a programme of activities' will be applied to analyzed cross-effects between methodologies combined.
Emission reductions	As per methodologies
Additionality	Automatic additionality, where available. Otherwise, follow tool or methodological approach.
Monitoring	Delayed Monitoring Plan
Measure	Methodology

1. Renewable power generation	AMS-I.A. Electricity generation by the user
2. Thermal energy generation	AMS-I.C. Thermal energy production with or without electricity
3. Energy efficiency and fuel switching measures for buildings	AMS-II.E. Energy efficiency and fuel switching measures for buildings
4. Energy efficiency measures	AMS-II.C. Small-scale Methodology: Demand-side energy efficiency activities for specific technologies
5. Transport	AMS-III.S. Introduction of low-emission vehicles/technologies to commercial vehicle fleets
6. Residential Lighting	AMS-II.J. Demand-side activities for efficient lighting technologies
7. Street lighting	AMS-II.L. Demand-side activities for efficient outdoor and street lighting technologies
8. Efficient lighting in buildings	AMS-II.N.: Demand-side energy efficiency activities for installation of energy efficient lighting and/or controls in buildings
9. Landfill gas recovery	AMS-III.G.: Landfill methane recovery
10. Wastewater	AMS-III.H.: Methane recovery in wastewater treatment

5.3. Interactive effects consideration

The section is work in progress

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Appendix 1. Available CDM methodologies and cross-effects

24. To identify whether the combination of methodologies could have cross-effects. The methodologies are grouped by measures and categories. Cross-marks on the right side of the table indicate whether different categories have cross-effects and whether the combination of the methodologies from those categories could result in double counting:
25. For example, the methodology 'AMS-II-Q. Energy efficiency and/or energy supply projects in commercial buildings' placed in the row 'Appliances' has the cross-mark in columns 8, 9(a), 9(b). These figures correspond to 'building efficiency', 'renewable energy', and 'fuel switch' in the column (c) 'Category'. In case a PoA allows the combination of any of the methodologies in these categories possible cross-effects shall be analysed applying the 'Guidelines for the consideration of interactive effects for the application of multiple CDM methodologies for a programme of activities' <https://cdm.unfccc.int/Reference/Guidclarif/meth/meth_guid49.pdf>.

Measures	Methodologies	Category	Category																						
			(a)	(b)	(c)	1	2a	2b	3a	3b	4	5	6	7	8	9a	9b	10	11	12	13	14	15	16	17
District heating	AMS-II.B, AM0044, AM0058, AM0072	1		x	x																				
Heat for cooking, water and space	AMS-I.I, AMS-I.J, AMS-I.K, AMS-III-AC	RE ² (2a)	x																						
	AMS-II.A, AMS-II.K,	EE (2b)																							
District cooling		RE (3a)																							
	AM0117	EE (3b)																							
	Methodologies		1	2a	2b	3a	3b	4	5	6	7	8	9a	9b	10	11	12	13	14	15	16	17			
Public utilities	AMS-II.L	Street lighting (4)																							
	AMS-III.H, AMS-II.I, AM0080, ACM0014	Waste-water treatment (5)																							
	AMS-II.AV, AM0020	Water supply (6)																							
Buildings	AMS-II.C, AMS-II.E, AMS-II.J, AMS-III-M, AMS-II.N, AMS-II.O, AMS-II.Q, AMS-II.R, AMS-III-AV, AM0046, AM0070 ³ , AM0091, AM0113, AM0060, AM0086	Appliances (7)											x	x	x										
	AMS-III.AE, AM0091	Building efficiency (8)																							
	AMS-III-AE, AM0091	Renewable energy (9a)											x												
		Fuel switch (9b)											x												
Transport sector	AMS-III.C, AMS-III.S, AMS-III.T, AMS-III.AK, AMS-III-AQ, AMS-III-AY	Fuel switch (10)															x								
	AMS-III.U, ACM0016, AM0031	Modal shift (11)																							
	AMS-III.AA, AMS-III-AP, AMS-III-AY, AMS-III-BC	Vehicular efficiency (12)															x								
		Urban design (13)															x								

		Non Motorized Ttransport (14)																					
	Methodologies		1	2a	2b	3a	3b	4	5	6	7	8	9a	9b	10	11	12	13	14	15	16	17	
Waste management	AMS-III-AJ, AMS-III-BA	Reduce (15)																			X	X	
	AMS-III-AJ	Recycle (16)																				X	
	AMS-III.E, AMS-III.F, AMS-III.G, AMS-III.O, AMS-III.AF, AMS-III-AO, AM0053, AM0057, AM0069, AM0083, AM0093, AM0112, ACM001, ACM0022, ACM0024	MA ⁴ /WTE (17)																					

² RE- renewable energy; EE – energy efficiency.

³ AM0070 is for credits for manufacturers of efficient appliances. If the appliance is used in a building there could be a double crediting.

⁴ MA - Methane avoidance.

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Document information

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