CDM in CHARTS

Updated to the EB80 Ver. 26.0 (Nov 2014)







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This document aims to provide a comprehensive and easy-to-understand description of the clean development mechanism (CDM). It should be noted that this document does not replicate in the exact manner all the texts agreed upon in the international negotiations. Also, there are issues yet to be settled in the international negotiations regarding detailed interpretations and processes. As for the details and exact expressions in the agreed texts, please refer to the respective documents available on the website of the United Nations Framework Convention on Climate Change http://unfccc.int/.

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Other CDM-related publications can be downloaded from http://www.iges.or.jp/en/cdm/report.html.

For any queries relating to this document, please contact <mm-info@iges.or.jp>.

Important changes from previous version (Ver. 25.0/March 2013)

Page	Chapter	Changes	
12	4-5. Designated Operating Entity	Revised the procedure for accrediting the OEs Added the procedure for performance monitoring of the DOE	
17	5. Conditions for CDM projects	Added CDM sustainable development co-benefit description tool	
17	5. Conditions for CDM projects	Added "Guideline for letter of approval for carbon dioxide capture and storage project activities"	
24	7-5. Procedure for the submission and consideration of SBs	Added a letter of approval from the DNA	
40	14-1. Submission for request for approval of changes	Added a specific CPA-DD for each of the additionaly included host Parties in the CDM PoA	

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Abbreviations and Acronyms

AAU	Assigned amount unit
ACM	Approved consolidated methodology
AE	Applicant entity
AM	Approved methodology
AMS	Approved small-scales methodologies
A/R	Afforestation and Reforestation
ccs	Carbon dioxide capture and storage
CDM	clean development mechanism
CDM-AP	CDM Accreditation Panel
CEF	Carbon emission factor
CER	Certified emission reduction
CME	Coordinating/managing entity
CMP	Conference of the Parties serving as the meeting of the
(COP/MOP)	Parties to the Kyoto Protocol
COP	Conference of the Parties (to the UNFCCC)
CPA	CDM programme activity (Component project activity)
CPA-DD	Component project activity design document
CPR	Commitment period reserve
DNA	Designated national authority
DOE	Designated operational entity
EB	Executive Board of the clean development mechanism
DSB	Draft standardized baseline
EIT	Economies in Transition
ER	Emission Reduction
ERT	Expert Review Team
ERU	Emission Reduction Unit
GHG	Greenhouse gas
GWP	Global Warming Potential
HFCs	Hydro fluorocarbons
I-CER	Long-term certified emission reduction
LDC	Least developed country
IET	International emissions trading under the Kyoto Protocol
IPCC	Intergovernmental Panel on Climate Change

ITL	International Transaction Log
JI	Joint Implementation
KP	Kyoto Protocol
LULUCF	Land Use, Land-Use Change and Forestry
Meth Panel	Methodologies Panel (MP)
MoC	Modalities of communication
MP	Methodologies Panel
MR	Monitoring Report
NM	New Methodology
OE	Operational Entity
Party	Country or regional integration organization which has ratified the KP, unless otherwise specified
PCP	Project Cycle Procedure
PDD	Project design document
PFCs	Per fluorocarbons
PoA	Programme of activities
PoA-DD	Programme of activities design document
PP	Project Participant
PS	Project Standard
RIT	Registration and issuance team
RMU	Removal Unit
SAR	(the IPCC) 2nd Assessment Report
SB	Standardized baseline
SBI	Subsidiary Body for Implementation
SBSTA	Subsidiary Body for Scientific and Technological Advice
SF ₆	Sulfur Hexafluoride
SIDs	Small Island Developing states
SOP	Share of Proceeds
SSC	Small-Scale
SSC-WG	Small-scale Working Group
t-CER	Temporary certified emission reduction
UNFCCC	United Nations Framework Convention on Climate Change
VR	Verification Report
VVS	Validation and Verification Standard

1. The Kyoto Protocol

- ♦ The Kyoto Protocol was adopted at the 3rd session of the Conference of the Parties (COP3) to the United Nations Framework Convention on Climate Change (UNFCCC) held in Kyoto, Japan, in December 1997.
- ◆ The Protocol defines quantified greenhouse gas (GHG) emissions reduction targets for Annex I Parties. [KP Art.3 para1]

GHGs defined by the Protocol are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), HFCs, NF₃, PFCs, and SF₆.

Annex I Parties means those listed in Annex I of the UNFCCC. They are developed countries including Economies in Transitions, e.g. Russia and Eastern Europe.

Annex I Parties have different GHG emission ceilings for the 5-year period of 2008-2012 (1st commitment period).

- Emission ceiling which is called 'assigned amounts' for each Party is calculated as follows.
- "The base-year emissions" x "emission reduction target" x five [KP Art.3 para7]
- The base-year emissions are basically a Party's aggregate GHG emissions in 1990 (whereas, countries may use 1995 as its base year for HFCs, PFCs, and SF₆). [KP Art.3 para1&8]
- ◆ The Protocol introduces 3 market mechanisms, namely the Kyoto Mechanisms. Annex I Parties would be able to achieve their emission reduction targets cost-effectively, by using these mechanisms.

Joint Implementation (JI) <Article 6 of the Protocol>

Clean Development Mechanism (CDM)
<Article 12 of the Protocol>

International Emissions Trading

Article 17 of the Protocol>

♦ Besides Parties, private firms may use the Kyoto Mechanisms. [CMP/2005/8/Ad2, p7 para29][CMP/2005/8/Ad1, p13 para33][CMP/2005/8/Ad2, p19 para5]
□ Provided the Parties meet eligibility requirements for using the Kyoto Mechanisms.

BOX: Entry into force of the Kyoto Protocol

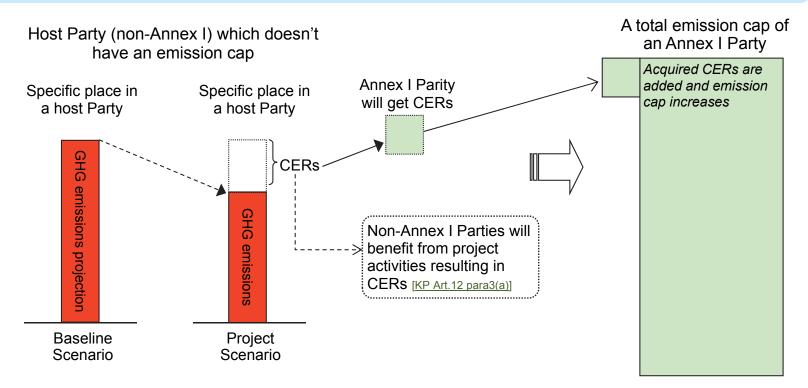
The Kyoto Protocol shall enter into force on the 90th day after the date on which not less than 55 Parties to the UNFCCC, incorporating Annex I Parties which accounted in total for at least 55% of the total CO₂ emissions for 1990 of the Annex I Parties, have deposited their instruments of ratification, acceptance, approval or accession. [KP Art.25 para1]

- © Currently, 190 countries and 1 regional economic integration organization (the EEC) have deposited instruments of ratifications, accessions, approvals or acceptances.
- ₹55% of the total CO₂ emissions for 1990 of the Annex I Parties have ratified the Protocol.
 - ⇒The Protocol entered into force on 16 February 2005.

2. The Kyoto Mechanisms

2-1. The Clean Development Mechanism (CDM)

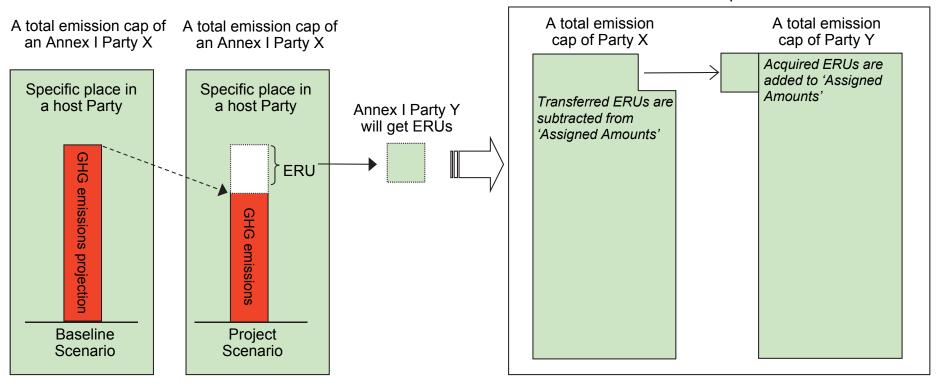
- ♦ Annex I Parties which have ceilings for GHG emissions (emission caps), assist non-Annex I Parties which don't have emission caps, to implement project activities to reduce GHG emissions (or remove by sinks), and credits will be issued based on emission reductions (or removals by sinks) achieved by the project activities.
 - A Party where CDM project is implemented, is called a host Party.
 - The credit from the CDM is called certified emission reduction (CER). [CMP/2005/8/Ad1, p7 para1(b)]
 - Reductions in emissions shall be additional to any that would occur in the absence of the certified project activity. [KP Art.12 para5(c)]
- ◆ Annex I Parties can use CERs to contribute to compliance of their quantified GHG emissions reduction targets of the Kyoto Protocol. [KP Art.12 para3(b)]
 - As a result, the amount of emission cap of Annex I Parties will increase.
- ♦ The CDM will issue CERs before the 1st commitment period.
 - □ CERs issued based on activities during the period from the year 2000 up to 2012 can be used in achieving compliance of Annex I Parties in the 1st commitment period. [KP Art.12 para10]



2-2. Joint Implementation (JI)

- ♦ Annex I Parties which have ceilings for GHG emissions (emission caps), assist other Annex I Parties to implement project activities to reduce GHG emissions (or remove by sinks), and credits will be issued based on amount of emission reductions (or removals by sinks) achieved by the project activities.
 - A Party where JI project is implemented, is called a host Party.
 - The credit from the JI is called emission reduction unit (ERU). [CMP/2005/8/Ad1, p7 para1(a)]
 - Any such project shall provide a GHG emission reductions, or removals by sinks, that is additional to any that would otherwise occur. [KP Art.6 para1(b)]
- ♦ Annex I Parties can use ERUs to contribute to compliance of their quantified GHG emissions reduction targets of the Kyoto Protocol. [KP Art.6 para1]
 - The total amount of emission cap of Annex I Parties will not change, because JI is credits transfer between the Parties both of which have emission caps.
- ◆ ERUs will be issued only after 2008. [CMP/2005/8/Ad2, p2 para5]

The total amount of emission cap of Annex I Parties is same



2-3. International Emissions Trading (IET)

- ♦ International Emissions Trading is to trade Kyoto Protocol units (KP units) including part of assigned amounts, CERs, ERUs and etc, between Annex I Parties.
 - The total amount of emission cap of Annex I Parties will not change.
 - Only Annex B Parties of the Kyoto Protocol can participate International Emissions Trading.
 - Solution Similar Strategies

 Solution Strategies

 Minimum trading unit is 1t-CO₂ equivalent.

 Solution Strategies

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 Solution Strategies

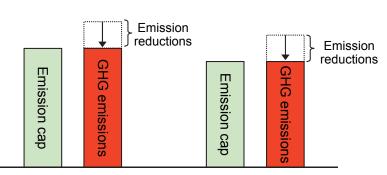
 Minimum trading unit is 1t-CO₂ equivalent.

 Solution Strategies

 Minimum trading unit is 1t-CO₂ equivalent.

 Minimum trading unit
- ◆ Through market mechanism, International Emissions Trading can decrease total cost of Annex I Parties to achieve their collective emission reduction targets.

Without International Emissions Trading

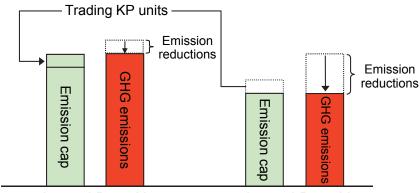


Annex I Party X

Annex I Party Y

	Party X	Party Y	Total
Before ET: Emission cap	10	8	18
Trading a KP unit	-	-	-
After ET: Emission cap	10	8	18
GHG emissions	12	10	22
Necessary reduction	2	2	4
Unit cost of reduction	\$200	\$100	-
Total cost of reduction	\$400	\$200	\$600
Trading cost	-	-	-
Total compliance cost	\$400	\$200	\$600

With International Emissions Trading



Annex I Party X

Annex I Party Y

	Party X	Party Y	Total
Before ET: Emission cap	10	8	18
Trading a KP units	1	-1	0
After ET: Emission cap	11	7	18
GHG emissions	12	10	22
Necessary reduction	1	3	4
Unit cost of reduction	\$200	\$100	-
Total cost of reduction	\$200	\$300	\$500
Trading cost	150	-150	0
Total compliance cost	\$350	\$150	\$500

Note: Party Y sold a KP unit to Party X at \$150.

2-3. International Emissions Trading

- ♦ Annex I Parties can trade following types of Kyoto Protocol units.
 - SAssigned amount unit (AAU) [CMP/2005/8/Ad1, p7 para1(c)]
 - ⇒ Total amount of AAUs of an Annex I Party is calculated from its base year emissions and emission reduction target
 - Removal unit (RMU) [CMP/2005/8/Ad1, p7 para1(d)]
 - ⇒ Total amount of RMU of an Annex I Party is calculated from net removal of GHGs by afforestation and reforestation (A/R) activities [CMP/2005/8/Ad3, p5 para1(a)-(d)] and additional activities related to GHG removals by sinks [CMP/2005/8/Ad3, p5 para1(e)-(h)]
 - **☞ Emission reduction unit (ERU)** from JI
 - □ Certified emission reduction (CER) from the CDM
 - Temporary CER (tCER) and long-term CER (ICER)
 - ⇒ tCER and ICER are issued from afforestation and reforestation (A/R) CDM project activities. [CMP/2005/8/Ad1, p62 para1(g)-(h)]

BOX: Compliance assessment

GHG emission cap of an Annex I Party at the end of the 1st commitment period is as follows.

Carry-over

If an emission cap of an Annex I Party is more than its GHG emissions during the 1st commitment period, the surplus can be carried over to the subsequent commitment period. [CMP/2005/8/Ad2, p27 para15] [CMP/2005/8/Ad2, p30 para36]

- The end of additional period is the 100th day after the date set by the CMP. [CMP/2005/8/Ad3, p101 XIII]
- There are several restrictions for carry-over depending on the type of KP units.

Consequence of non compliance

- ♦If GHG emissions during the 1st commitment period of an Annex I Party is more than its emission cap, the Annex I Party will be deemed to be non compliance to the Kyoto Protocol.
- ◆The Party not in compliance shall be applied the following consequences. [CMP/2005/8/Ad3, p102 para5]
 - Deduction from the Party's assigned amount for the 2nd commitment period of a number of tonnes equal to 1.3 times the amount in tonnes of excess emissions;
 - Development of a compliance action plan; and
 - Suspension of the eligibility to make transfers under Article 17 of the Protocol until the Party is reinstated.

3. CDM project cycle

- (1)Planning a CDM project activity
- (2)Making the project design document (PDD)
- (3)Getting
 approval from
 each Party
 involved

(4)Validation

(5)Registration

- ◆ CDM project participants (PPs) plan a CDM project activity. (<u>chap.5</u>)
 - There are several conditions in order to be registered as a CDM project activity, and PPs should consider those conditions from a planning stage.
- ◆ PPs make the project design document (F-CDM-PDD) for a CDM project activity. (chap.6)
 - The F-CDM-PDD presents information on the essential technical and organizational aspects of the project activity and is a key input into the validation, registration, and verification of the project.
 - The F-CDM-PDD contains information on the project activity, the approved baseline methodology applied to the project activity, and the approved monitoring methodology applied to the project.
- ◆ PPs shall get written approvals of voluntary participation from the designated national authority (DNA) of each Party involved, including host Party. (chap.10)
 - The written authorization of an entity(ies) participation in a CDM project activity or PoA and written approval of voluntary participation from the DNA of each Party involved. [Glos ver.7, p5]
 - The registration of a project activity can take place without an Annex I Party being involved at the stage of registration. [EB18 Rep, para57]
 - The details of approval procedure is up to each Party.
- ♦ PPs may get written approvals in step (1), (2) or even (4).
 - But PPs must get written approvals at least from the host Party before a request for registration.
- ◆ Validation is the process of independent evaluation of a project activity against the requirements of the CDM on the basis of the PDD. [CMP/2005/8/Ad1, p14 para35]
 - ☞ Validation is carried out by a designated operational entity (DOE).
 - There is a formal procedure for validation. (chap.12)
- ◆ Registration is the formal acceptance of a validated project as a CDM project activity. [CMP/2005/8/Ad1, p14 para36]
 - Registration is done by the CDM executive board (EB).
 - There is a formal procedure for reguest for registration. (chap.13)
 - PPs shall pay registration fee at registration stage.
- ♦ If there are changes from the project activity as described in the registered PDD, PPs can notify and request approval of such changes. (chap.14)

(6)Monitoring a CDM project activity

♦ PPs collect and archive all relevant data necessary for calculating GHG emission reductions by a CDM project activity, in accordance with the monitoring plan written in the PDD.

[CMP/2005/8/Ad1, p18 para56][CMP/2005/8/Ad1, p18 para58]

Monitoring plan can be revised. (chap.14)

(7)Verification and certification

- ◆ Verification is the periodic independent review and *ex post* determination of the monitored GHG emission reductions. [CMP/2005/8/Ad1, p18 para61]
 - ☞ Verification is carried out by a designated operational entity (DOE).
 - There is a formal procedure for verification. (chap.15)
- ◆ Certification is the written assurance by a DOE that a project activity achieved the reductions in GHG emissions as verified. [CMP/2005/8/Ad1, p18 para61]
 - Certification is also done by a DOE.

(8)Issuance of CERs

- ◆ The EB will issue certified emission reductions (CERs) equal to the verified amount of GHG emission reductions. [CMP/2005/8/Ad1, p19 para64]
 - There is a formal procedure for issuance of CERs. (chap.16)
 - The issuance of CERs, in accordance with the distribution agreement, shall be effected only when the share of proceeds to cover administrative expenses (SOP-Admin) of the CDM has been received. [CMP/2005/8/Ad1, p98 para37]
- ◆ Among issued CERs, 2% of those will be deducted for the share of proceeds to assist developing Parties that are particularly vulnerable to the adverse effects of climate change to meet the costs of adaptation (SOP-Adaptation). [CP/2001/13/Ad2, p23 para15(a)]

(9)Distribution of CERs

- ◆ CERs will be distributed among PPs. (chap.17)
 - © CERs are forwarded to the registry accounts of Parties and PPs involved, in accordance with their request. [CMP/2005/8/Ad1., p20, para66, (b)]

BOX: CDM project cycle procedure (PCP) version 07.0 [PCP ver.7]

This procedure describes the administrative steps to follow for PPs, CME for PoAs, DOEs, other stakeholders, the EB and the secretariat for registration of a CDM project activity or PoA, issuance of CERs and related actions.

4. CDM-related bodies

4-1. CMP

- ◆ The Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (CMP) is the ultimate decision-making body of the CDM. [EB67 Anx4 para5]
 - This body has authority over, and provides guidance to, the EB through the adoption of decisions and resolutions, published in reports of the CMP. The decisions of the CMP outline formal expectations with respect to the CDM.
- They set direction and establish precedents which serve as reference for future decision making and basis for operating procedures. CMP decisions are treated as mandatory requirements or rules intended to ensure the successful implementation of the KP.
- All decisions taken by the EB must be consistent with and not contradict decisions of the CMP.
- ◆ The CMP: [CMP/2005/8/Ad1, p7 para2-4]
 - Has authority over and provides guidance to the CDM;
 - Decides on the recommendations made by the EB on its rules of procedure, and in accordance with provisions of decision 17/CP.7 [CP/2001/13/Ad2 p20-49], the present annex and relevant decisions of the CMP;
- ☐ Decides on the designation of operational entities (OEs) accredited by the EB;
- Reviews annual reports of the EB;
- Reviews the regional and subregional distribution of designated operational entities (DOEs) and CDM project activities.

4-2. Designated National Authority (DNA)

- ◆ Parties participating in the CDM shall set up a designated national authority (DNA) for the CDM. [CMP/2005/8/Ad1,p12 para29]
- ◆ CDM project participants (PPs) shall receive written approval of voluntary

 ☐ The EB shall also allocate time for interaction during the participation from the DNA of each Party involved.
 - The written approval shall include confirmation by the host Party that the project activity assists it in achieving sustainable development. [CMP/2005/8/Ad1, p15 para40(a)]
 - The details of approval procedure is up to each Party.

BOX: Communication with EB [EB62 Anx15 para11-13]

- For the purpose of facilitating communication between the EB and DNAs, and between DNAs themselves, the secretariat shall organise global and regional DNA forum meetings as per the terms of reference of DNA forums.
- EB meetings with the global DNA forum through its cochairs twice a year
- The EB may invite the co-chairs of the global DNA forum to any of its meetings additional to the two meetings whenever it finds a need for further interaction with the forum

Definition of host Party [Glos ver.7 p12] [EB70 Anx38]

- A Party involved not included in Annex I to the UNFCCC on whose territory a CDM project activity or PoA, as applicable, is physically located..
- A project activity and a bundled project activity shall have only one host Party.
- The host Party is the Party in which the project activity is located, as set out in the PDD.
- Where a methodology provides for the application of a system, such as an electricity grid, and that system extends across more than one Party, a letter of approval from the DNA is only required from the host Party.
- A letter of approval is only required from the Party in which the project activity is located, as set out in the PDD.

4-3. CDM Executive Board (EB)

- ◆ The EB supervises the CDM, under the authority and guidance of the CMP, [CMP/2005/8/Ad1, p8 para5]
- ◆ Decisions of the EB must be consistent with and support the formal decisions of the CMP. Decisions of the EB are hierarchical in nature and are published in the meeting reports of the EB and their accompanying annexes.
- ◆ Taking into account both the rule-making and rule-enforcing roles of the EB, decisions of the EB can be divided into three main classes: [EB67 Anx4 para7]
 - **Regulatory decisions** relating to o the adoption of, or revision to, CDM rules and requirements to be followed by stakeholders.
 - Rulings relating to o the determination of whether the actions of PPs, AEs and DOEs are in compliance with the CDM rules and requirements
 - and its support structure and include: decisions on finance; administration; programmes of work; internal operating procedures and the establishment of supporting bodies
- ◆ There is the code of conduct for member and alternate member of the EB. [EB69 Anx1]
- ◆ There is terms of reference in relation to the membership of the EB. [CMP/2010/L.8 Anx 1]

Members of the EB [CMP/2005/8/Ad1, p9 para7-12]

- The EB comprises 10 members from Parties to the KP.
 - ⇒ 1 member from each of the 5 UN regional groups, 2 other members from the Annex I Parties, 2 other members from the non-Annex I Parties, and 1 representative of the small island developing States.
 - ⇒ The 5 regional groups of the UN are: Asia, Africa, Latin America, Eastern Europe, and the Western European and Others Group
 - ⇒ As a result, 4 are from Annex I Parties and 6 are from non-Annex I Parties, unless 1 member from Asia is selected from Japan.
 - ⇒ There is an alternate for each member of the EB.
- Members, including alternate members, of the EB are nominated by the relevant constituencies referred above, and be elected by the CMP.
 - ⇒ Vacancies shall be filled in the same way.
- Members are elected for a period of 2 years and be eligible to serve a maximum of 2 consecutive terms.
 - ⇒ Terms as alternate members do not count.
- ⇒ 5 members and 5 alternate members are elected initially for a term of 3 years, and other members and alternate members for a term of 2 years. Thereafter, the CMP elects, every year, 5 new members, and 5 new alternate members, for a term of 2 years.
- The EB elects its own chair and vice-chair, with one being a member from an Annex I Party and the other being from a non-Annex I Party.
 - ⇒ The positions of chair and vice-chair alternate annually between a member from an Annex I Party and a non-Annex I Party.

Meeting and decision of the EB [CMP/2005/8/Ad1, p10 para13-16]

- The EB meets as necessary but no less than 3 times a year.
- At least 2/3 of the members of the EB, representing a majority of members from Annex I Parties and a majority of members from non-Annex I Parties, must be present to constitute a quorum.
- Decisions by the EB is taken by consensus, whenever possible. If that is not possible, decisions shall be taken by 3/4 majority of the members present and voting at the meeting. Members abstaining from voting shall be considered as not voting.
- ☞ Meetings of the EB are open to attendance, as observers, except where otherwise decided by the EB.

4-3. EB

4. CDM-related bodies

The EB decision [EB67 Anx4 para7-9]

CMP is the ultimate decision-making body of the CDM. CMP decisions are treated as mandatory requirements or rules intended to ensure the successful implementation of the Kyoto Protocol.

The EB is the regulatory body of the CDM. Acting under the authority and guidance of the CMP, it is fully accountable to the CMP.

of, or revision to, CDM rules and requirements functioning of regulatory body the EB and its to be followed by stakeholders. Regulatory decisions are reflected in the adoption of, or secretariat) and include: decisions on finance; revisions to: standards. procedures. guidelines and clarifications;

Regulatory decisions: relate to the adoption Operational decisions: relate to the support structure (panels, working groups and administration; programmes of work; internal operating procedures and the establishment of supporting bodies.

Rulings: relate to the determination of whether the actions of PPs, applicant entities (AEs) and DOEs are in compliance with the CDM rules and requirements.

◆CMP requested the EB to adhere to the principle that any decision, guidance, tool and rules shall not be applied retroactively. [CMP/2010/L.8 para15]

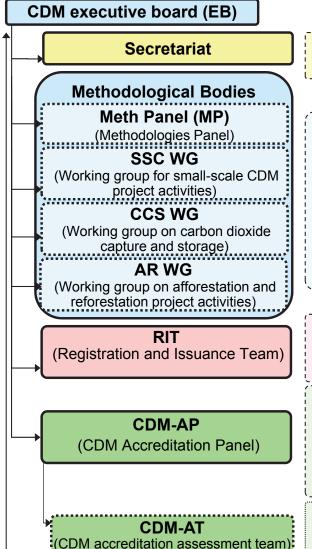
Document [EB67 Anx4 para10]

- Standards are designed to achieve a uniform approach to compliance with the CDM modalities and procedures. A standard describes mandatory levels of performance (policy standard) or provides mandatory specifications (methodological standard), and as such, is used as a reference point against which compliance is evaluated. Methodological standards include methodologies and methodological tools.
- Procedures contains a mandatory series of actions that must be undertaken to ensure demonstrate in a uniform and consistent way that the EB, the secretariat, PPs, DOEs and other stakeholders comply with the CDM modalities and procedures and the standards issued by the EB. Procedures relate to processes in the CDM project cycle and the operations of the EB and its support structure including, the rules of procedures of the EB and the terms of reference for the support structure
- Guidelines contain supplemental information such as acceptable methods for satisfying requirements identified in standards or procedures, or instructions on how to fill out forms. Guidelines describe processes and are designed to promote a uniform approach to compliance with the applicable standards or procedure
- © Clarifications are issued to alleviate confusion relating to the application of requirements in a standard or procedure. Policy clarification and methodological clarification are issued by the EB.
- Ruling notes explain the rationale behind a negative decision (ruling) of the EB regarding, inter alia, DOE, registering a project activity or PoAs or issuing CERs.
- Information Notes contain factual information on a particular subject matter relating to the CDM rules and requirements, the functioning of the EB and its support structure, or rulings of the EB.
- Forms contain pre-defined data fields to be filled in by PPs or AEs/DOEs.
- **Glossary** is an alphabetical list of terms relating to the CDM;
- **Recommendation** is a document endorsing, approving, supporting, providing options or recommending a course of action.

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4-4. The Support Structure of CDM EB

- 4. CDM-related bodies
- ◆ The EB may establish committees, panels or working groups to assist it in the performance of its functions. The EB shall draw on the expertise necessary to perform its functions, including from the UNFCCC roster of experts [CMP/2005/8/Ad1, p10 para18]
- ♦ All panels and working groups shall operate under the guidance of the EB. The secretariat shall operate under the guidance of the EB with regard to those activities that fall under the responsibility of the EB [EB73 Anx2, para9]
- ♦ The term of service of a member of panels and working groups shall be for a period of one year [EB73 Anx2, para24]



- The secretariat provides institutional and technical support to the EB and its panels and working groups. [EB73 Anx2, para7]
- The secretariat also supports the EB's broader supervisory role for the CDM processes. [EB73 Anx2, para8]
- Methodological Bodies support the EB in the creation of methodological standards, guidelines and clarifications and other methodological matters applicable to proposed and registered CDM project activities. Methodological Bodies perform the following key functions; [EB73 Anx2, para2,4]
 - Considering draft recommendations regarding the establishment, revision or withdrawal of methodological standards, guidelines and clarifications for CDM project activities;
 - Considering draft recommendations for methodological requirements for CDM project activities;
 - Providing advice and recommendations to the EB regarding the need and priority areas for methodological guidance
- Size and composition: MP 10 members, SSC WG 5 members and 1 MP member, AR WG 5 members, CCS WG 5members and 1 MP member [EB73 Anx2, Apx1]
- □ The RIT assist the EB by preparing assessments of submission relating to 1. Requests for registration of proposed project activities or PoAs, 2. Requests for issuance of CERs, 3. Requests for renewal of crediting period of registered project activities or PoAs, and requests submitted to the EB, etc [EB67 Anx2, para2]
- The RIT is composed of not less than 20 members. [EB67 Anx2, para8]
- © CDM-AP supports the EB in the establishment and implementation of standards and procedures for accreditation of operational entities that conduct validations and verifications regarding CDM project activities. [EB73 Anx2, para2,5]
 - Considering the results of assessments of operational entities regarding their compliance with accreditation requirements;
 - Providing advice and recommendations to the EB on accreditation requirements for operational entities;
 - Providing advice and recommendations to the EB on the improvement of the accreditation process.
- The CDM-AT shall undertake an assessment of the applicant and/or DOEs and prepare an assessment report for the CDM-AP.
- A team shall be composed of a team leader and at least 2 team members chosen to serve in a team for an assessment at a time. [EB09 Anx1]
- PP request for a review by an independent appeal panel of various decisions taken by a DOE in respect of validation and/or verification/certification functions. [EB67 Anx5 para10]

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Appeal Panel

4-5. Designated Operational Entity (DOE)

- ♦ A DOE under the CDM is either a domestic legal entity or an international organization accredited and designated, on a provisional basis until confirmed by the CMP, by the EB.
 - It validates and subsequently requests registration of a proposed CDM project activity.
 - It verifies emission reduction of a registered CDM project activity, certifies as appropriate and requests the EB to issue Certified Emission Reductions (CERs) accordingly.
- ◆ The list of DOEs is shown in <http://cdm.unfccc.int/DOE/list/index.html.
- ◆ Upon request, the EB may allow a single DOE to perform all these functions within a single CDM project activity. [CMP/2005/8/Ad1, p12 para27(e)]

Procedure for accrediting OEs [EB74 Anx12, para9]

- ◆ The CMP designates operational entities (OEs) and suspends and withdraws their designation, based on a recommendation by the EB;
- ◆ The EB takes the decision whether to: (i) Accredit AEs, maintain the accreditation of DOEs and reaccredit DOEs; (ii) Conduct spot-checks of DOEs; (iii) Place DOEs "under observation"; (iv) Suspend the accreditation of DOEs for some or all sectoral scopes; (v) Withdraw the accreditation of DOEs for some or all sectoral scopes; (vi) Recommend to the CMP the designation of operational entities;
- ♦ CDM-AP serves as the technical panel under the guidance of the EB and considers the results of accreditation assessments of AEs/DOEs by CDM assessment teams, provides recommendations to the EB on the accreditation status of, or related actions for, AEs/DOEs, and makes decisions on areas defined as per this Procedure.
- CDM-AT conduct accreditation assessments of AEs/DOEs in accordance with the Procedure and under the
 guidance of the CDM-AP, to evaluate whether AEs/DOEs comply with the CDM accreditation requirements, and
 submit assessment reports to the CDM-AP;.
- ◆ The secretariat supports the implementation of the CDM accreditation procedure.
- ◆ AEs/DOEs apply for accreditation, extension of accreditation for additional sectoral scopes and/or reaccreditation, and undergo accreditation assessments to demonstrate compliance with CDM accreditation requirements.

The accreditation/reaccreditation assessment of an AE/DOE consists of following main elements: [EB74 Anx12, para16]

- Desk review of the application documentation submitted by the AE/DOE with a view to identifying all missing or unclear information and getting the AE/DOE to gather all necessary information and documentation,;
- On-site assessment to assess whether the documented systems of the AE/DOE, and its competence and operational capability to perform validation and/or verification/certification functions comply with the CDM accreditation requirements. An on-site assessment shall take place at the central office of the AE/DOE, and may also take place at any other offices of the AE/DOE or outsourced entities where the validation and/or verification/certification functions of the AE/DOE are performed.

The terms used in DOE related official documents are:

- Applicant entity (<u>AE</u>)= once application has been duly submitted/subject to a procedure;
- Designated operational entity (<u>DOE</u>)= after designation by CMP. [EB56 Anx2, p3 footnote]

Performance assessment [EB74 Anx12 para75]

The number and types of performance assessments shall be determined as follows:

- (a) One performance assessment per year for any DOE as the mandatory basis.
- (b) Additional performance assessment(s) based on the volume of work
- (c) Addition or reduction of the number of performance assessments based on the output of the "Procedure on performance monitoring of designated operational entities"

Regular on-site surveillance [EB74 Anx12 para115]

A DOE shall be subject to two regular on-site surveillances during its five-year accreditation term, that is one during the second year and another one during the fourth year of the term

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There is "CDM accreditation standard for operational entities (ver.6)" [EB80 Anx43]

4-5. DOE

Suspension or withdrawal of a DOE [CMP/2005/8/Ad1, p11 para21]

The EB may recommend to the CMP to suspend or withdraw the designation of a DOE if it has carried out a review and found that the entity no longer meets the accreditation standards or applicable provisions in decisions of the CMP.

- The EB may recommend the suspension or withdrawal of designation only after the DOE has had the possibility of a hearing.
- The suspension or withdrawal is with immediate effect, on a provisional basis, once the EB has made a recommendation, and remains in effect pending a final decision by the CMP.
- The affected entity shall be notified, immediately and in writing, once the EB has recommended its suspension or withdrawal.
- The recommendation by the EB and the decision by the CMP on such a case shall be made public.
 - ⇒ It is assumed that if the CMP decides the affected DOE meets the accreditation standards, the DOE will recover from its suspension or withdrawal.

Affect to registered CDM project activities by the suspension or withdrawal of designation of a DOE [CMP/2005/8/Ad1, p11 para22-24]

- Registered project activities shall not be affected by the suspension or withdrawal of designation of a DOE unless significant deficiencies are identified in the relevant validation, verification or certification report for which the entity was responsible.
 - ⇒ There is no clear definition of "significant deficiencies."
- In this case, the EB shall decide whether a different DOE shall be appointed to review, and where appropriate correct, such deficiencies.
 - ⇒ Any costs related to the review shall be borne by the DOE whose designation has been withdrawn or suspended.
- If such a review reveals that excess CERs were issued, the DOE whose accreditation has been withdrawn or suspended shall acquire and transfer, within 30 days of the end of review, the excess CERs issued, as determined by the EB, to a cancellation account in the CDM registry.
- Any suspension or withdrawal of a DOE that adversely affects registered project activities shall be recommended by the EB only after the affected PPs have had the possibility of a hearing.

BOX: CDM Validation and Verification Standard (VVS) version 07.0 [VVS ver.7]

Solidation and Verification Standard(VVS) is applicable to DOEs that are under contractual arrangements with PPs or CMEs to validate and/or verify any CDM project activities or PoA based on CDM methodologies previously approved by the EB.

BOX: Performance monitoring DOEs [EB73 Anx14]

- Sobjective: To foster improvement of the performance of DOEs, and provide the EB and the CDM-AP with tools for informed decision making on actions in the accreditation process. [EB73 Anx14, para 3]
- Scope: To e monitors the performance of DOEs through the monitoring, classification and rating of the non-compliances identified at the requests for registration, issuance or post-registration changes submitted by DOEs [EB73 Anx14, para 4]
- The procedure establishes a system to compile information to calculate indicators relevant to the performance of DOEs at the stages of request for registration, request for issuance and request for post-registration changes. [EB73 Anx14, para 5]

BOX: Annual activity report to the EB by DOEs

- A DOE shall submit an annual activity report to the EB [CMP/2005/8/Ad1. page12 para27(g)]
- There is a form to be used by DOEs
- ⇒ DOE Annual Activity Report to the EB Form (F-CDM-AAR) (ver.1.1)

- ◆ Participation in a CDM project activity is voluntary. [CMP/2005/8/Ad1, p12 para28]
- ♦ A Party involved that intends to participate, or a private and/or public entity authorized by the DNA of a Party involved to participate in a CDM project activity or a PoA, as applicable. [Glos ver.7, p16]

A Party involved

- A non-Annex I Party may participate in a CDM project activity if it is a Party to the Kyoto Protocol.

 [CMP/2005/8/Ad1, p12 para30]
- "Party involved" is only considered a PP if this is clearly indicated in section A.3 of the PDD or, in case of registered projects, if the secretariat is explicitly informed of this in accordance with MoC. [EB25 Rep. para110]

A private and/or public entity

- ⇒ Private and/or public entities may only transfer and acquire CERs if the authorizing Party is eligible to do so at that time. [CMP/2005/8/Ad1, p13 para33]
- Approval / authorization by each Party involved constitutes the written authorization of an entity(ies) participation in a CDM project activity or PoA and written approval of voluntary participation from the DNA of each Party involved and including, from the host Party only, confirmation that the CDM project activity or PoA assists it in achieving sustainable development. [Glos ver.7, p5]
- ♦ The names of the PPs listed in the PDD or PoA-DD with which the DOE has a contractual relationship for validation of the proposed CDM project activity or PoA, as well as the name of the CME in the case of PoA; [PCP ver.7, para18]
- ♦ When submitting a request for registration (chap.13-1) of the proposed CDM project activity or PoA, all PPs with a contractual relationship with the DOE for validation of the proposed CDM project activity or PoA shall be listed in the PDD or PoA-DD, unless they have provided a letter of voluntary withdrawal from the project activity or PoA. The DOE may remove PPs that are listed in the PDD or PoA-DD published for global stakeholder consultation but do not have a contractual relationship with the DOE for validation from the PDD or PoA-DD at the time of the request for registration [PCP ver.7., para19]

Modalities of communication statement [PCP ver.7, para27]

The PPs of a CDM project activity or PoA shall designate one or more focal point entities to communicate on their behalf with the EB and the secretariat within the defined scopes of authority and include this information in a modalities of communication (MoC) statement.

Focal point [PCP ver.7, para28-31]

- ♦After the submission of a request for registration of a proposed CDM project activity or PoA, all official communication between the PPs and the EB or the secretariat for the specific project activity orPoA shall be conducted in accordance with the MoC statement
- ◆The PPs or the CME shall submit to the DOE at the time of validation of the proposed CDM project activity or PoA an MoC statement using the latest version of the form (F-CDM-MOC).
- ◆The PPs shall grant the focal points the authority to:
- ◆Scope of focal point authority: A focal point entity can be conferred the authority to:
- Scope a> Communicate in relation to requests for forwarding of CERs to individual accounts of PPs; and/or,
- Scope b> Communicate in relation to requests for addition and/or voluntary withdrawal of PPs and focal points, as well as changes to company names, legal status, contact details and specimen signatures; and/or,
- Scope c> Communicate on all other project or programme-related matters not covered by <scope a> or <scope b> above.
- ◆The PPs may designate separate entities for each scope of authority either in a sole, shared or joint focal point role and shall designate two or more focal points for a shared or joint focal point role.

Authorised signatory and signature [PCP ver.7, para32-34]

- ♦ Signature is defined as an agreed means of authentication of an MoC statement by a PP, or a given communication from a focal point entity, as the context requires.
- ◆The PPs and the focal points may designate one primary authorized signatory and one alternate authorized signatory. The signature of either the primary or alternate authorized signatory shall suffice for authenticating the PP's or the focal point's consent or instruction(s).
- ◆A PP that is also a focal point for the same CDM project activity or PoA may designate different authorized signatories for the PP status and for the focal point status.
- ♦For CDM PoAs, the CME shall be either the sole or a joint focal point for each scope of authority. The number of joint focal points for a PoA shall be limited to five, or equal to the number of host Parties if greater than five.

Private contractual obligations [PCP ver.7 para35]

♦ The PPs shall not include or refer to private contractual arrangements in an MoC statement such as the establishment of conditions for the designation or change of focal points or the purchase and/or sale of CERs. The PPs and focal points shall be solely responsible for honouring such arrangements.

Requirements on changes to focal points

- □ Designation of the focal points in a registered CDM project activity: Submitting a new F-CDM-MOC duly signed by all PPs, either through the focal point(s) for scope of authority (b) or Any of the PPs directly.
- □ Designation of the focal points in a registered CDM PoA: submitting a new F-CDM-MOC duly signed by and through the CME. When the CME is changing, the incoming CME shall sign and submit the F-CDM-MOC
- A new F-CDM-MOC and Its attachment of Annex 2 shall be submitted.

Requirements on changes of CME for PoA

If the CME for a registered CDM PoA has changed after the registration of the PoA, the DOE undertaking the next inclusion of a CPA shall submit:

- (a) New letter(s) of authorization from each respective host Party stating the change of CME;
- (b) A confirmation from the new CME that the PoA will be developed and implemented with the same set framework as originally described in the PoA-DD; and
- (c) A validation opinion from a DOE regarding the compliance of the new CME with the relevant requirements in the PS.

Requirements on changes to PPs

The focal point(s) for scope of authority (b) shall submit annex 2 of the F-CDM-MOC for each of the following changes:

(a) Addition of a PP, (b) Changes related to entity names/legal status, (c) Withdrawal of a PP, (d) Changes related only to contact details and specimen signatures.

BOX: Direct communication with stakeholders [EB62 Anx15]

- "Modalities and Procedures for Direct Communication with Stakeholders (ver.1)"
- This procedure provides for means of communication of the EB with stakeholders in the following two main areas:
 - (a) **Policy and procedural matters:** this area covers regular interactions with stakeholders as well as ad-hoc consultations with stakeholders in situations where CDM rules (e.g. procedures, methodologies, standards) that have a significant impact on them are being developed or revised.
 - (b) Case-specific matters: this area covers situations related to case submissions (e.g. requests for registration, issuance, deviation or revision of monitoring plans, proposals of new methodologies, requests for revision of approved methodologies and clarification on approved methodologies or methodological tools).
- Stakeholders include: DNAs (see Chp4-2), AEs/DOEs, PPs, and other stakeholders

5. Conditions for CDM projects

- ♦ When planning a CDM project activity, it is necessary to keep in mind following points:
 - The purpose of the CDM shall be to assist non-Annex I Parties in achieving sustainable development and in contributing to the ultimate objective of the Convention, and to assist Annex I Parties in achieving compliance with their commitments. [KP Art.12 para2]
 - ⇒It is the host Party's prerogative to confirm whether a CDM project activity assists it in achieving sustainable development. [CP/2001/13/Ad2, p20]
 - A CDM project activity is additional if GHG emissions are reduced below those that would have occurred in the absence of the registered CDM project activity; [CMP/2005/8/Ad1, p16 para43]
 - Annex I Parties are to refrain from using CERs generated from nuclear facilities to meet their quantified GHG emissions reduction targets; [CP/2001/13/Ad2, p20]
 - The eligibility of land use, land-use change and forestry project activities under the CDM is limited to afforestation and reforestation (A/R); [CP/2001/13/Ad2, p22 para7(a)]
- ♦ It is necessary to prepare a project design document (PDD) in order to be registered as a CDM project activity.

Public funding for CDM projects

- Public funding for CDM projects from Annex I Parties is not to result in the diversion of official development assistance (ODA) and is to be separate from and not counted towards the financial obligations of Annex I Parties. [CP/2001/13/Ad2, p20]
 - ⇒ Annex I Parties shall provide an affirmation that such funding does not result in a diversion of ODA and is separate from and is not counted towards the financial obligations of those Parties. [PDD GL ver.7, p9]
 - ⇒ There is also the document "ODA Eligibility of Expenditures under the Clean Development Mechanism" which was endorsed at the DAC High Level Meeting on 15-16 April 2004. [DAC/CHAIR(2004)4/FINAL]

BOX: CDM project standard (PS) version 7.0 [PS ver.7]

This Standard provides PPs and CMEs with a starting point for those wishing to design and implement a CDM project activity or PoA and seeking issuance of CERs. It specifies requirements for PPs and CMEs to comply with in designing as well as implementing any type of CDM project activities or PoAs and monitoring GHG emission reductions by sources or GHG removals by sinks.

BOX: CDM sustainable development co-benefit description tool (SD tool)

The SD tool assists to sustainable development co-benefits of a CDM project activity or PoAs. The use of the SD tool is entirely voluntary.

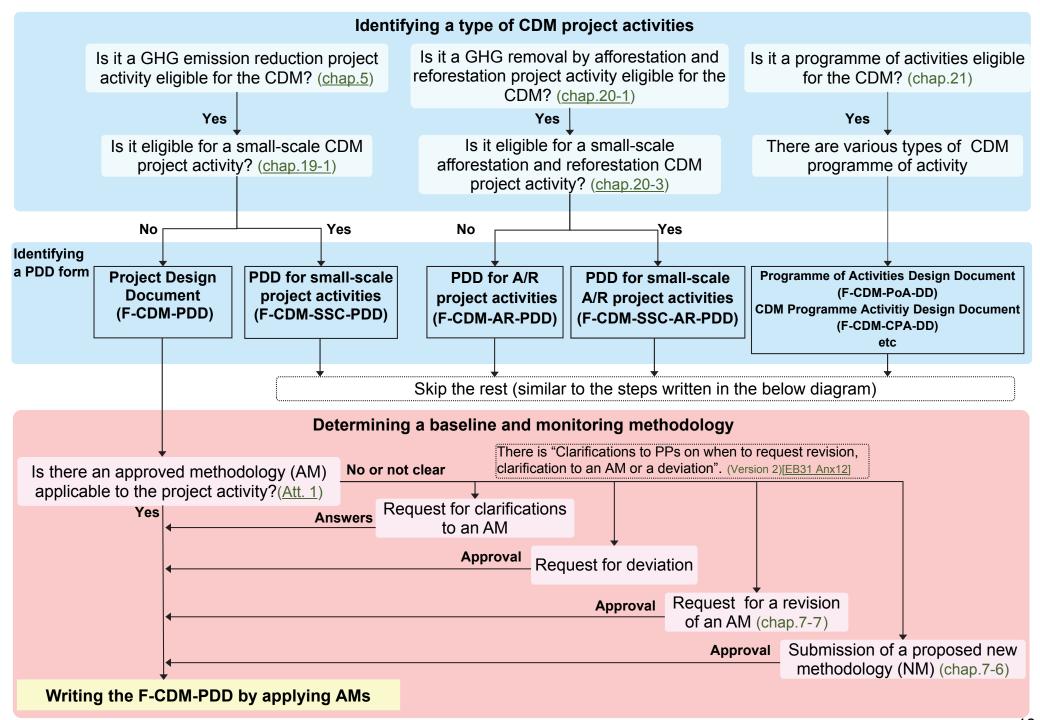
BOX: CDM project activities under a programme of activities(PoAs) [CMP/2005/8/Ad1, p97 para20]

- Local/regional/national policy or standard cannot be considered as a CDM project activity
- But that project activities under a PoAs can be registered as a single CDM project activity provided that approved baseline and monitoring methodologies are used that, inter alia, define the appropriate boundary, avoid double counting and account for leakage, ensuring that the emission reductions are real, measurable and verifiable, and additional to any that would occur in the absence of the project activity. (chap.21)

BOX: Carbon dioxide capture and storage (CCS)

- The CMP7 adopts the modalities and procedures for carbon dioxide capture and storage in geological formations as CDM project activities. [Decision 10/CMP.7 para1]
- The CMP7 decides to periodically review the modalities and procedures for carbon dioxide capture and storage in geological formations. The first review shall be carried out no later than five years after the adoption of this decision. [Decision 10/CMP.7 para2]
- There are "Guidelines for competing the proposed new carbon capture and storage baseline and monitoring methodology form" [EB67 Anx25], "Guidelines for competing the project design document form for carbon capture and storage CDM project activities" [EB67 Anx26], "Procedure for the submission and consideration of a proposed new baseline and monitoring methodology for carbon capture and storage CDM project activities" [EB67 Anx27].and "Guideline for letter of approval for carbon dioxide capture and storage project activities" [EB78 Anx6].

6. Making PDD



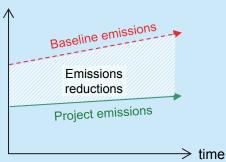
		Normal-scale CDM project activity		Small-scale CDM project activity		
		Form	Guideline	Form	Guideline	
Emission Reduction	PDD	CDM-PDD- FORM ver.5	Guidelines for completing the project design document form ver.1 [EB66 Anx8]	CDM-SSC-PDD- FORM ver.5	Guidelines for completing the project design document form for small-scale CDM project activities ver.1 [EB66 Anx9]	
		CDM-CCS-DD- FORM ver.2	Guidelines for completing the project design document form for carbon capture and storage CDM project activities [EB67 Anx26]	F-CDM-SSC-BUN ver.3	Guidelines for completing the small-scale CDM project activities bundling form ver.2 [EB66 Anx22]	
		CDM-PoA-DD- FORM ver.4.1	Guidelines for completing the programme design document form for CDM programmes of activities ver.4 [EB74 Anx7]	CDM-SSC-PoA-DD-FORM ver.3	Guidelines for completing the programme design document form for small-scale CDM programmes of activities ver.3 [EB74 Anx8]	
		CDM-CPA-DD- FORM ver.3	Guidelines for completing the component project activity design document form ver.1 [EB66 Anx16]	CDM-SSC-CPA-DD-FORM ver.3	Guidelines for completing the component project design document form for small-scale component project activities ver.1 [EB66 Anx17]	
	Methodology	CDM-NM- FORM ver.2	Guidelines for completing the proposed new baseline and monitoring methodology form ver.1 [EB66 Anx25]	CDM-SSC-NM-FORM ver.1	Guidelines for completing the proposed new small scale baseline and monitoring methodology form ver.1 [EB66 Anx26]	
		CDM-CCS-NM- FORM ver.2	Guidelines for completing the proposed new carbon capture and storage baseline and monitoring methodology form [EB67 Anx25]			
	Ž	CDM-AMC-FORM ver.1, CDM-AMR-FORM ver.1				
A/R (chap.20)	PDD	CDM-AR-PDD- FORM ver.7	Guidelines for completing the project design form for afforestation and reforestation CDM project activities ver.1 [EB66 Anx10]	CDM-SSC-AR-PDD-FORM ver.4	Guidelines for completing the project design document form for small-scale afforestation and reforestation CDM project activities ver.1 [EB66 Anx11]	
		CDM-AR-PoA- DD-FORM ver.3	Guidelines for completing the programme design document form for afforestation and reforestation CDM programmes of activities ver.2 [EB74 Anx9]	CDM-SSC-AR-PoA- DD-FORM ver.3	Guidelines for completing the programme design document form for small-scale afforestation and reforestation CDM programmes of activities ver.2 [EB74 Anx10]	
		CDM-AR-CPA- DD-FORM ver.3	Guidelines for completing the component project activity design document form for afforestation and reforestation component project activities ver.1 [EB66 Anx18]	CDM-SSC-AR-CPA- DD-FORM ver.3	Guidelines for completing the component project activity design document form for small-scale afforestation and reforestation component project activities ver.1 [EB66 Anx19]	
	Metho dology	CDM-AR-NM- FORM ver.2	Guidelines for completing the proposed new afforestation and reforestation baseline and monitoring methodology form ver.1 [EB66 Anx27]			
Monitoring F-CDM-MR ver.4 Guidelines for completing the monitoring report form ver. 4 [EB75 Anx7] There is information on actual emission reductions or net anthropogenic GHG removals by sinks during the first committee period from 1 January 2013 onwards						

7. Baseline

7-1. Concept of the baseline and additionality

◆ The baseline (scenario and emissions) for a CDM project activity is the scenario that reasonably represents GHG emissions that would occur in the absence of the proposed project activity. [CMP/2005/8/Ad1, p16 para44]

GHG emissions



 Difference between the baseline emissions and GHG emissions after implementing the CDM project activity (project emissions) is emission reductions.

- A baseline (scenario and emissions) shall be established:
 - (a)By PPs in accordance with provisions for the use of approved and new methodologies;
 - (b)In a transparent and conservative manner regarding the choice of approaches, assumptions, methodologies, parameters, data sources, key factors and additionality, and taking into account uncertainty;
 - (c)On a project-specific basis;
 - (d)In the case of small-scale CDM project activities, in accordance with simplified procedures developed for such activities (chap.19-2);
 - (e)Taking into account relevant national and/or sectoral policies and circumstances, such as sectoral reform initiatives, local fuel availability, power sector expansion plans, and the economic situation in the project sector. [CMP/2005/8/Ad1, p16 para45]
- Before calculating baseline emissions, it is necessary to identify baseline scenarios.
- A baseline (emissions) shall cover emissions from all gases, sectors and source categories within the project boundary. [CMP/2005/8/Ad1, p16 para44]
- ◆A CDM project activity is **additional** if GHG emissions are reduced below those that would have occurred in the absence of the registered CDM project activity. [CMP/2005/8/Ad1, p16 para43]
 - The DOE shall review the PDD to confirm that the project activity is expected to result in a reduction in GHG emissions that are **additional** to any that would occur in the absence of the proposed project activity. [CMP/2005/8/Ad1, p14 para37(d)]
- ◆PPs have to write explanation of how and why this project activity is **additional** and therefore not the baseline scenario in accordance with the selected baseline methodology. [PDD GL ver.7. p12]
 - If the starting date of the project activity is before the date of validation, provide evidence that the incentive from the CDM was seriously considered in the decision to proceed with the project activity. This evidence shall be based on (preferably official, legal and/or other corporate) documentation that was available at, or prior to, the start of the project activity (chap.8-1). [PDD GL ver.7, p12]
- ◆ "The tool for the demonstration and assessment of additionality" provides a general framework for demonstrating and assessing additionality. PPs may also propose other tools for the demonstration of additionality (Att 3). [EB70 Anx8 para1]
- ◆There is a "Combined tool to identify the baseline scenario and demonstrate additionality" [EB60 Anx7]
- ◆There are guidelines for demonstration of additionality for small scale (chap. 19-2) and micro scale (Att 4)

BOX: Wording

PPs shall refrain from providing glossaries or using key terminology not used in the COP documents and the CDM glossary (environmental/investme nt additionality).

[EB09 Anx3, para3]

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7-2. Baseline scenario

- ◆ The baseline scenario for a CDM project (non-A/R) or CPA (non-A/R) is the scenario for a CDM project or CPA that reasonably represents the anthropogenic emissions by sources of GHG that would occur in the absence of the proposed CDM project or CPA.

 [Glos ver.7, p7]
- ◆ Different scenarios may be elaborated as potential evolutions of the situation existing before the proposed CDM project.
 - The continuation of a current activity could be one of them;
 - Implementing the proposed project activity may be another;
 - And many others could be envisaged.
- ♦ Baseline methodologies shall require a narrative description of all reasonable baseline scenarios.
- ♦ To elaborate the different scenarios, different elements shall be taken into consideration.
 - For instance, the PPs shall take into account national / sectoral policies and circumstances, ongoing technological improvements, investment barriers, etc.
- ◆ The baseline scenario may include a scenario where future GHG emissions are projected to rise above current levels, due to the specific circumstances of the host Party. [CMP/2005/8/Ad1, p16 para46]

Clarifications on the treatment of national and/or sectoral policies and regulations in determining a baseline scenario. The EB agreed to differentiate the following 2 types of national and/or sectoral policies that are to be taken into account when establishing baseline scenarios: [PS ver.7, para44-45]

Type E+ That give comparative advantages to more emissions-intensive technologies or fuels.

- ©Only national and/or sectoral policies or regulations that have been implemented before adoption of the Kyoto Protocol (11 December 1997) shall be taken into account when developing a baseline scenario.
- If such national and/or sectoral policies were implemented since the adoption of the Kyoto Protocol, the baseline scenario should refer to a hypothetical situation without the national and/or sectoral policies or regulations being in place.

Type E- That give comparative advantages to less emissionsintensive technologies (e.g. public subsidies to promote the diffusion of renewable energy or to finance energy efficiency programs).

- Solutional and/or sectoral policies or regulations that have been implemented since the adoption by the COP of the CDM M&P(11 November 2001) need not be taken into account in developing a baseline scenario.
 - ⇒ i.e. the baseline scenario could refer to a hypothetical situation without the national and/or sectoral policies or regulations being in place).

◆ Baseline emission under the selected baseline scenarios shall be calculated by PPs in accordance with approved methodologies (AMs) or new methodologies (NMs).

A baseline methodology approved by the EB is publicly available along with relevant guidance on the UNFCCC CDM website (http://unfccc.int/cdm).

DOEs can submit queries regarding the applicability of approved methodologies.

If a proposed CDM project activity or PoA intends to apply **a new methodology**, such methodology has to be approved by the EB prior to the submission of a request for registration of the project activity or PoA. [EB70 Anx36]

There is "Technical Guidelines for the Development of New Baseline and Monitoring Methodologies Version 1". [EB24 Anx16]

Baseline approach (para 48 of the CDM M&P) [Glos ver.7, p6][CMP/2005/8/Ad1, p16 para48]

The approach used to establish a baseline methodology. The CDM rules and requirements prescribe the baseline approaches that can apply to CDM project activities and CPAs. PPs shall select from among the following approaches.

- (a)Existing actual or historical emissions, as applicable; or
- (b)Emissions from a technology that represents an economically attractive course of action, taking into account barriers to investment; or
- (c)The average emissions of similar project activities undertaken in the previous 5 years, in similar social, economic, environmental and technological circumstances, and whose performance is among the top 20 per cent of their category. <See [EB08 Anx1 para4-5] for guidance>

Guidelines for determining baselines for measures [EB69 Anx21]

- The objective of these guidelines is to ensure consistency of the approaches used in the determination of baselines in the different methodologies, by providing standardized approaches to determine the baseline for different investment scenarios defined for measure(s).
- The guidelines elaborate when and under which circumstances a baseline based on paragraph 48(a), (b), or (c) of 3/CMP.1
- The guidelines are applicable to non-afforestation and reforestation (non-A/R) sectors.

BOX: Temporarily result in "negative emission reductions" [EB21 Rep. para18]

- methodologies, project activities may temporarily result in "negative emission reductions" in a particular year, for example due to poor performance or due to leakage effects outweighing emission reductions.
- In these cases, proposed NMs should stipulate that if a project activity temporarily results in "negative emission reductions", any further CERs will only be issued when the emissions increase has been compensated by subsequent emission reductions by the project activity.

BOX: Proposed project activities applying more than one methodology [EB08 Anx1. para6]

If a proposed CDM project activity comprises different "sub-activities" requiring different methodologies, PPs may forward the proposal using one F-CDM-PDD but shall complete the methodologies sections for each "sub-activity".

Definition of Standardized Baselines(SBs) [CMP/2010/12/Add.2, p6 para44, 47, 48]

- ♦ A baseline established for a Party or a group of Parties to facilitate the calculation of emission reduction and removals and/or the determination of additionality for clean development mechanism project activities, while providing assistance for assuring environmental integrity.
- ◆ The application of the SBs shall be at the discretion of the host country's designated national authorities
- ◆ The EB to periodically review, as appropriate, the SBs used in the methodologies

Procedure for developing SBs [CMP/2010/12/Add2, p6 para45, 46]

Top-down approach

The EB develops SBs, as appropriate, in consultation with relevant designated national authorities, prioritizing methodologies that are applicable to least developed countries, small island developing States, Parties with 10 or less registered CDM project and underrepresented project types or regions

Bottom-up approach

Parties, PPs, as well as international industry organizations or admitted observer organizations through the host country's designated national authority, may submit proposals for SBs applicable to new or existing methodologies, for consideration by the EB

BOX: Other guidance on the SBs [CMP/2010/12/Add.2]

- Standardization is being used in some approved baseline and monitoring methodologies under the CDM.
- Baseline and monitoring methodologies using SBs can be developed, proposed by PPs and approved by the EB of the CDM under the modalities and procedures adopted by decisions 3/CMP.1 and 5/CMP.1.
- The use of SBs could reduce transaction costs, enhance transparency, objectivity and predictability, facilitate access to the CDM, particularly with regard to under represented project types and regions, and scale up the abatement of greenhouse gas emissions, while ensuring environmental integrity.

BOX: Standard for determining coverage of data and validity of SBs [EB77 Anx5]

- The aim of this Standard is to define requirements on the coverage and currentness of the data used to develop SBs and requirements on validity of approved SBs. This Standard also intends to complement the guidance on data quality as contained in the Guidelines for quality assurance and quality control of data used in the establishment of SBs.
- The requirements intend to reflect the national trends in the development of the sector (e.g. pace of technology evolution, volatility of fuel prices, growth rates) and changing circumstances in the sector. The requirements also recognize that data availability in a sector in a given country may be limited.

(Version 3) [EB75Anx33]

[Bottom-up process]

(1) Parties, PPs, international industry organizations or admitted observer organizations may propose a SB for a Party

Note: Data used to establish the proposed SB shall be provided in a sector-specific data template published by the secretariat on the UNFCCC CDM website. If no applicable data template is available on the UNFCCC CDM website at the time of the DNA's submission of the proposed SB, the proponent of the SB shall propose a sector specific data template for its publication, or, if applicable, request the revision or clarification of a published data template.

Note: For a Party with fewer than 10 registered CDM project activities as of 31 December 2010, the assessment report may be omitted in up to the first three submissions of a proposed SB regardless of the sector for the Party. If the DNA is of a Party that has 10 or fewer registered CDM project activities as of 31 December 2010, or represents a group of Parties, each of which has 10 or fewer registered CDM project activities as of 31 December 2010, the DNA may apply for funding from the secretariat for the DOE's preparation of the assessment report.

DNA

- (2) Approve the proposed SB. Where the proposed SB is developed for a group of Parties, it shall be approved by the DNAs of all these
- (3) Upload the following documentation to submit the proposed SB
 - (a) The duly completed Proposed SB submission form (form CDM-PSB-FORM);
 - (b) All additional documentation supporting the submission;
 - (c) An assessment report on the quality of the data collection, processing and compilation to establish the proposed SB in accordance with relevant procedures or guidelines adopted by the EB.
 - (d)Letter of approval on the proposed SB from all the DNAs of the Parties to which it applies, where it applies to a groups of Parties
- (6) The DNA should provide the missing documents or information within 42 days of the notification.

BOX: Initiation in the Top-down process

- The EB may decide to develop a draft SB (DSB) at any time following the receipt of the agreement with the DNA(s) of a Party(ies) for which the DSB is proposed using the "DSB development agreement" form (CDM-DSBA-FORM).
- The secretariat may propose to the EB that it develop a DSB at any time following the receipt of the agreement with the DNA(s) of a Party(ies) for which the DSB is proposed using the CDM-DSBA-FORM. In this case, the Board shall consider the proposal and decide whether to develop a DSB.

UNFCCC secretariat

- (4) Undertake an initial assessment of the submission using the "Proposed standardized baseline initial assessment form (CDM-PSBA-FORM)" within 21 days of receipt of the submission and shall assess whether;
- (a) The CDM-PSB-FORM, including the name and contact details of the proponent of the proposed standardized baseline, has been duly completed;
- (b) The proposed standardized baseline was derived from: (i) The "Guidelines for the establishment of sector specific standardized baselines"; (ii) A methodological approach contained in an approved baseline and monitoring methodology; (iii) A methodological approach contained in an approved methodological tool; or (iv) The "Guidelines for establishment of standardized baselines for afforestation and reforestation project activities under the CDM".
- (c) DNA submitted all the information required for consideration of the proposed standardized baseline
- (d) An assessment report was submitted presenting how the data were collected, processed and compiled to establish the proposed SB and includes a positive opinion on whether the data were collected and processed in accordance with relevant procedures or guidelines adopted by the EB.
- (5) Inform the DNA of the outcome of the initial assessment. If the secretariat finds that the required documentation or information is incomplete, it shall notify the DNA and the proponent of the proposed SB accordingly
- (7) The secretariat shall conclude the initial assessment within 14 days of receipt of missing documents or information and inform the DNA of the conclusion of the initial assessment..

BOX: Modalities for publication of sector-specific data templates for establishing SBs

A proponent may submit to the secretariat through a dedicated UNFCCC CDM website a proposed new sector-specific data template and request its publication.

The proposed data template shall be developed based on sectorspecific situations and mitigation measures

BOX: Modalities for funding for preparation of assessment reports for establishment of SBs A DNA that wishes to receive funding for the preparation of the assessment report shall request funding by submitting required documentation to the secretariat:

- "The maximum funding shall be USD 20,000 for each funding request. For a funding request submitted for a group of Parties, the maximum funding shall be USD 20,000 plus USD 5,000 per additional Party.
- Within 14 days of receipt of the complete submission of the documentation, the secretariat shall prepare an "Agreement for funding for preparation of assessment report for submission of SB "(CDM-FA-FORM), including the provisions on the amount to be funded and the deadline for the submission by the DNA of the required documents.

DNA

The secretariat shall include in its draft recommendation one of the following courses of actions

- (a) Approve the proposed SB; or
- (b) Requires further input (e.g. additional information or modification to the submitted documentation) from the DNA; or
- (c) Not to approve the proposed SB.

- (12) Submit the requested input within **28 days** of the notification. If the DNA fails to provide the requested input within the deadline, the secretariat shall suspend processing the submission any further until it receives the requested input.
- (16)-1 confirm that it is acceptable or request modifications to it within **7** days of receipt thereof .
- (19) inform the DNA of the decision and make the decision and guidance publicly available on the UNFCCC CDM website.

UNFCCC secretariat (the EB)

- (8) Within 28 days of successful conclusion of the initial assessment, the secretariat shall:
- (a) Assign a reference number to the proposed SB;
- (b) Make the submitted documentation publicly available on the UNFCCC CDM website;
- (c) In the case referred to in "Note" above, prepare an assessment report presenting how the data was collected, processed and compiled to establish the proposed SB in accordance with QA/QC guideline;
- (d) Prepare a draft recommendation on the proposed SB, using the "Proposed standardized baseline recommendation submission form" (CDM-PSBR-FORM).
- (9) Appoint 2 members of a panel or working group and forward its draft recommendation to them.
- (11) Notify the DNA and the proponent
 ←of the proposed SB accordingly.
- (13) Revise the draft recommendation to recommend either to approve or not to approve the proposed SB
- (14) Reformat the proposed SB into the form of draft SB (DSB)
- (17) Forward it as the recommendation to the EB and make it publicly available on the UNFCCC website
- (18)-1. If no member of the EB objects to the recommendation received, the
 ← recommended course of action shall be deemed to be the decision adopted by the EB.

Panels or working group

(10) The two appointed members of a panel or working group shall, within 7 days of receipt of the draft recommendation, independently assess the proposed SB and the draft recommendation, and inform the secretariat of the outcome of their assessment.

Both of the appointed members of a panel or working group agree to the draft recommendation to require further input from the DNA

> Both of the appointed members of a panel or working group agree to the draft recommendation to approve or not to approve the proposed SB

→ (15)Agree to the DSB

- → (16)-2 Finalize the DSB when the → DNA doesn't accept it
- (18)-2. If a member of the EB objects to the recommendation more than **2** weeks prior to the next EB, the case shall be placed on the agenda of the next EB meeting

7-6. Procedure for development, revision and clarifications of baseline and monitoring methodologies and methodological tools

7. Baseline

(Version 1) [EB70 Anx36]

Development of new methodology or methodological tool

Bottom-up process

1. Submission of proposed new methodology

- The secretariat shall publish the schedules of the meetings of the methodological panel and working groups and the deadlines for the submission of proposals of new methodologies.
- ➤ The proponent of a planned CDM project activity may propose a new methodology to the EB by submitting the following documents:
 - a) The duly completed CDM-PNM-FORM
 - b) The proposed new methodology
 - c) The draft PDD or PoA-DD with at least the following sections
 - i. For planned CDM project activities: **a)** Description of project activity, **b)** Application of selected approved baseline and monitoring methodology, **c)** Duration of crediting period
 - i. For planned CDM PoAs: a) General description of PoA,
 b) Demonstration of additionality and development of eligibility criteria, c) Duration of PoA, d) General description of a generic CPA, e) Application of baseline and monitoring methodology
- A fee of **USD1,000** shall e payable for each submission from the proponent

2. Completeness check

➤ The secretariat shall conduct completeness check of the submission within 7 days of the deadline for submissions.

3. Initial assessment

- The secretariat shall conduct an initial assessment of the submission using the CDM-PNIA-FORM within 30 days of the deadline for submissions.
- ➢ If the submission is concluded as qualified for consideration, the secretariat shall issue a unique reference number to the proposed new methodology and make the submission publicly available on the UNFCCC CDM website for global stakeholder consultation. The duration shall be 15 days.

4. Preparation of draft recommendation

- The secretariat shall prepare a draft recommendation to the relevant methodological panel or working group on the proposed new methodology and using the CDM-PNMR-FORM.
- ➤ The secretariat shall select two members of the relevant methodological panel or working group and forward the draft recommendation to them for their review.

5. Consideration by panel of working group

The relevant methodological panel or working group shall consider the recommendation and prepare a draft recommendation with in three consecutive meetings.

6. Consideration by the EB

- > The EB shall decide to either
- a) Approve the proposed new methodology as recommended by the relevant methodological panel or working group;
- b) Reject the proposed new methodology; or
- c) Request the relevant methodological panel or working group to review the
 recommendation to the EB, and provide guidance on the issues for review
 If the EB approves the proposed new methodology, the secretariat shall publish the
- approved new methodology on the UNFCCC CDM website within **7 days** of the approval.

7. Other

The secretariat shall maintain a publicly available list of all proposed new methodologies deemed qualified for consideration on the UNFCCC website.

Top-down process

1. Initiation

➤ The EB may decide to develop a new methodology (including a new consolidated methodology) or methodological tool at any time

2. Preparation of draft new methodology or methodological tool

- The secretariat shall prepare a draft development plan of the new methodology or methodological tool using CDM-NMP-FORM
- The secretariat shall select two members of the relevant methodological panel or working group
- The secretariat shall prepare a draft new methodology or methodological tool using CDM-NMD-FORM

3. Consideration by panel or working group

- ➤ The relevant methodological panel or working group shall consider the draft new methodology or methodological tool and prepare a draft recommendation to the EB
- ➤ The secretariat shall make the draft recommendation to the EB publicly available on the UNFCCC CDM website for global stakeholder consultation The duration shall be 15 days.

4. Consideration by the EB

- > The EB shall decide to either
- a) Approve the proposed new methodology or methodological tool;
- b) Reject the proposed new methodology or methodological tool; or
- c) Request the relevant methodological panel or working group to review the recommendation to the EB and provide guidance on the issues for review.
- If the EB approves the proposed new methodology or methodological tool, the secretariat shall publish the approved new methodology or methodological tool on the UNFCCC CDM website within **7 days** of the approval.

7-6. Procedure for development, revision and clarifications of baseline and monitoring methodologies and methodological tools

7. Baseline

Revision of approved methodology or methodological tool

(Version 1) [EB70 Anx36]

Bottom-up process

1. Submission of proposed new methodology

- The secretariat shall publish the schedules of the meetings of the methodological panel and working groups and the deadlines for the submission of requests for revision of an approved methodology or methodological tool.
- The proponent of a planned CDM project activity may request the EB to revise an approved methodology or methodological tool by submitting the following documents:
 - a) The duly completed CDM-AMR-FORM
 - The proposed revised methodology or methodological tool
 - c) The draft PDD or PoA-DD with at least the following sections
 - For planned CDM project activities: a) Description of project activity, b) Application of selected approved baseline and monitoring methodology, c) Duration of crediting period
 - For planned CDM PoAs: a) General description of PoA, b) Demonstration of additionality and development of eligibility criteria, c) Duration of PoA, d) General description of a generic CPA, e) Application of baseline and monitoring methodology
- A request shall not include proposed changes to the methodology or methodological tool that would result in the exclusion, restriction or narrowing of the applicability conditions of the methodology or methodological tool as a whole for other project activities or PoAs.

2. Completeness check

The secretariat shall conduct completeness check of the submission within 7 days of the deadline for submissions.

3. Initial assessment

- The secretariat shall conduct an initial assessment of the submission using the CDM-AMIA-FORM within 30 days of the deadline for submissions
- If the submission is concluded as qualified for consideration, the secretariat shall make the submission publicly available on the UNFCCC CDM website for global stakeholder consultation. The duration shall be 15 days.

4. Preparation of draft recommendation

- The secretariat shall prepare a draft recommendation to the relevant methodological panel or working group on the proposed revised methodology or methodological tool and using the CDM-AMRR-FORM.
- The secretariat shall select two members of the relevant methodological panel or working group and forward the draft recommendation to them for their review.

5. Consideration by panel of working group

The relevant methodological panel or working group shall consider the recommendation and prepare a draft recommendation to the EB within two consecutive meetings.

6. Consideration by the EB

- The EB shall decide to either
- a) Approve the proposed revised methodology or methodological tool as recommended by the relevant methodological panel or working group, indicating:
 - i. The revision is a major revision; or
 - ii. The revision is a minor revision;
- b) Reject the proposed revised methodology or methodological tool; or
- Request the relevant methodological panel or working group to review the recommendation to the EB and provide guidance on the issues for review
- If the EB approves the proposed revised methodology or methodological tool, the secretariat shall publish the approved revised methodology or methodological tool on the UNFCCC CDM website within **seven** days of the approval.

7. Other

The secretariat shall maintain a publicly available list of all proposed revised methodologies and methodological tools deemed qualified for consideration on the UNFCCC website.

Top-down process

1. Initiation

- The EB shall also decide to either
- a) Put on hold the approved methodology or methodological tool with immediate effect
- b) Put on hold the approved methodology or methodological tool with a grace period of 28 days.
- Maintain the current version of the approved methodology or methodological tool until the expiry of its validity

2. Preparation of draft new methodology or methodological tool

- The secretariat shall prepare a draft revised methodology or methodological tool using the CDM-AMRD-FORM
- The secretariat shall select two members of the relevant methodological panel or working group

3. Consideration by panel or working group

- > The relevant methodological panel or working group shall consider the draft new methodology or methodological tool and prepare a draft recommendation to the EB
- > The secretariat shall make the draft recommendation to the EB publicly available on the UNFCCC CDM website for global stakeholder consultation The duration shall be 15 days.

4. Consideration by the EB

- The EB shall decide to either
- a) Approve the proposed revised methodology or methodological tool;
- Reject the proposed revised methodology or methodological tool; or
- Request the relevant methodological panel or working group to review the recommendation to the EB and provide guidance on the issues for review
- If the EB approves the proposed revised methodology or methodological tool, the secretariat shall publish the approved revised methodology or methodological tool on the UNFCCC CDM website within **7 days** of the approval.

7. Baseline

Clarification of approved methodology or methodological tool

(Version 1) [EB70 Anx36]

Bottom-up process

1. Submission of proposed new methodology

- The secretariat publish the schedules of the meetings of the methodological panel and working groups and the deadlines for the submission of requests for clarification of an approved methodology or methodological tool.
- The proponent of a planned CDM project activity may request clarification of an approved methodology or methodological tool, by submitting the duly completed CDM-AMC-FORM to the secretariat

2. Completeness check

The secretariat shall conduct completeness check of the submission within 7 days of the deadline for submissions.

3. Initial assessment

- The secretariat shall conduct an initial assessment of the submission using the F-CDM-AMC-IA within 15 days of the deadline for submissions to determine either that:
- a) It does not involve any regulatory and/or technical ambiguity, or involves only simple regulatory and/or technical issues, hence requires no analysis or only a simple analysis to formulate a clarification; or
- b) It involves complex regulatory and/or technical issues, hence requires a thorough analysis to formulate a clarification.

4. Fast track

- ➢ If the submission is determined as being the case referred to in paragraph 3(a) above, the secretariat shall prepare a clarification using the CDM-AMCR-FORM and send it to the enquirer within 30 days of the deadline for submissions
- The secretariat shall send a draft clarification to the panel or working group within 30 days of the deadline for submissions.
- ➤ If no member of the panel or working group objects to the draft clarification within **7 days** of receipt of the draft clarification, the clarification shall be deemed finalized by the panel or working group.
- > The secretariat shall publish the clarification on the UNFCCC CDM website.

5. Regular track

- ➤ If the submission is determined as being the case referred to in paragraph 3(b) above, the secretariat shall prepare a draft recommendation of a clarification to the relevant methodological panel or working group using the CDM-AMCR-FORM.
- The secretariat shall select one member of the relevant methodological panel or working group and forward the draft recommendation to him/her for review.
- > The relevant methodological panel or working group shall consider the recommendation, finalize the recommendation to the EB within 1 meeting
- > The EB shall decide to either
- a)Approve the recommended clarification; or

- b) Request the relevant methodological panel or working group to review the recommendation
- The secretariat shall publish the clarification on the UNFCCC CDM website

Top-down process

If the EB, a relevant methodological panel or working group, or the secretariat finds it necessary to clarify provisions of an approved methodology or methodological tool, the process to revise the methodology or methodological tool shall be followed. In this case, the revised methodology or methodological tool shall incorporate all relevant clarifications issued prior to the revision.

BOX: Validity of new, revised and previous versions

- An approved new or revised methodology or methodological tool shall be effective from the date of publication on the UNFCCC CDM website.
- If the EB approves a revised methodology or methodological tool indicating that it is a major revision, the version number of the methodology or methodological tool shall increase by one whole number (e.g. from 1.0 to 2.0), and the previous version shall continue to be valid for 240 days from the date that the revised version becomes effective unless the previous version has been put on hold by the EB.
- If the EB approves a revised methodology or methodological tool indicating that it is a minor revision, or if an editorial revision to an approved methodology or methodological tool has been, the version number of the methodology or methodological tool shall increase by one fractional number (e.g. from 1.0 to 1.1), and the previous version shall continue to be valid until the next revision for mandatory use.
- If the EB approves a new or revised consolidated methodology or methodological tool, the approved methodology or methodological tool that has been consolidated shall continue to be valid for 240 days from the date when the consolidated methodology or methodological tool becomes effective unless the approved methodology or methodological tool that has been consolidated has been put on hold by the EB.
- For the purpose of publication of a MR and submission of a request for issuance, a project activity or PoA shall apply the version of the methodology or methodological tool that the project activity or PoA has been registered with.
- The revision of an approved methodology or methodological tool or the consolidation of methodologies or methodological tools shall not affect registered CDM project activities or PoAs until the end of the crediting periods.

8. Starting date and crediting period

8-1. Starting date of a CDM project activity

The definition and clarification of starting date of a CDM project activity [EB41 Rep., para67]

- ◆ The start date of a CDM project activity is "the earliest date at which either the implementation or construction or real action of a project activity begins".
 - The F-CDM-PDD should contain not only the date, but also a description of how this start date has been determined, and a description of the evidence available to support this start date.
 - If the start date of a proposed CDM project activity is prior to the date of publication of the PDD for the global stakeholder consultation, PPs shall demonstrate that the CDM benefits were considered necessary in the decision to undertake the project as a proposed CDM project activity. [PS ver.7, para26]
- ◆ The EB further clarified that: "In light of the above definition, the start date shall be considered to be the date on which the PP has committed to expenditures related to the implementation or related to the construction of the project activity.
 - This, for example, can be the date on which contracts have been signed for equipment or construction/operation services required for the project activity.
 - Minor pre-project expenses, e.g. the contracting of services /payment of fees for feasibility studies or preliminary surveys, should not be considered in the determination of the start date as they do not necessarily indicate the commencement of implementation of the project.
- ♦ For those project activities which do not require construction or significant pre-project implementation (e.g. light bulb replacement) the start date is to be considered the date when real action occurs.
 - In the context of the above definition, pre-project planning is not considered "real action".
- ◆ The EB further noted that there may be circumstances in which an investment decision is taken and the project activity implementation is subsequently ceased. If such project activities are restarted due to consideration of the benefits of the CDM the cessation of project implementation must be demonstrated by means of credible evidence such as cancellation of contracts or revocation of government permits.
 - The CDM the investment analysis should reflect the economic decision-making context at point of the decision to recommence the project. [EB62 Anx5, para7]
- ◆ The EB shall register the proposed project activity or PoA as a CDM project activity or PoA if the secretariat does not receive a request for review from a Party involved or at least three members of the EB. The effective date of registration shall be the date on which the DOE submitted a complete request for registration. [PCP ver.7, para80-81]
- ♦ If the EB's final decision made in the process of a review to register the proposed CDM project activity or PoA, the secretariat shall register it as a CDM project activity or PoA on the first working day subsequent to the finalization of the decision. The effective date of registration in such cases shall be the day on which the latest revisions to the validation report and/or supporting documentation were submitted. [PCP ver.7, para102]

Guidelines on the demonstration and assessment of prior consideration of the CDM (Version 4) [EB62 Anx13]

♦ In consideration of requests for registration, the EB takes notes that the issue of prior consideration of the CDM as a major element in assessing that the CDM benefits were considered necessary in the decision to undertake the project as a CDM project activity. As such the EB has introduced a guidance on the means of demonstrating compliance with this requirement.

New project activities

- The EB decided that for project activities with a starting date on or after 2 August 2008, the PP must inform a Host Party DNA, if the DNA exists, and the UNFCCC secretariat in writing of the commencement of the project activity and of their intention to seek CDM status. [EB72 Anx5]
 - ⇒ Such notification must be made within <u>6</u> months of the project activity start date.
 - ⇒ Such notification is not necessary if a PDD has been published for global stakeholder consultation or a NM proposed to the EB before the project activity start date.
- When validating a project activity with a start date on or after 2 August 2008 DOEs shall ensure by means of confirmation from the DNA or UNFCCC secretariat that such a notification has been provided. If such a notification has not been provided the DOE shall determine that the CDM was not seriously considered in the decision to implement the project activity.
- Additionally for project activities for which a PDD has not been published for global stakeholder consultation or a NM proposed or request for revision of an AM is requested, every subsequent 2 years after the initial notification the PPs shall inform the DNA and/or the UNFCCC secretariat of the progress of the project activity.

Existing project activities with a start date prior to 2 August 2008

- Proposed project activities with a start date before 2 August 2008, for which the start date is prior to the date of publication of the PDD for global stakeholder consultation, are required to demonstrate that the CDM was seriously considered in the decision to implement the project activity. Such demonstration requires the following elements to be satisfied:
 - ⇒ The PP must indicate awareness of the CDM prior to the project activity start date, and that the benefits of the CDM were a decisive factor in the decision. Evidence to support this would include one or more of the following: contracts with consultants for CDM/PDD/methodology services, draft versions of PDDs and underlying documents such as letters of authorization, and if available, letters of intent, emission reduction purchase agreement (ERPA) term sheets. ERPAs or other documentation related to the potential sale of CERs (including correspondence with multilateral financial institutions or carbon funds), evidence of agreements or negotiations with a DOE for validation services, submission of a new methodology or requests for clarification or revision of existing methodologies to the EB, publications in newspaper, interviews with DNAs, earlier correspondence on the project with the DNA or the UNFCCC secretariat
- Assessment of real and continuing actions shall be validated by the DOE and the validation should focus on real documented evidence, including an assessment by the DOE of the authenticity of the evidence. Letters, e-mail exchanges and other documented communications may help to substantiate the evidence, but can be considered as evidence only after the DOE has assessed and confirmed the authenticity of such communications, inter alia through cross-checking (e.g. interviews). In such cases the DOE must describe the cross-checking process in detail in the validation report.
- In validating proposed CDM project activities where:
 - ⇒ there is **less than 2 years** of a gap between the documented evidence the DOE shall conclude that continuing and real actions were taken to secure CDM status;
 - ⇒ the gap is **greater than 2 years and less than 3 years**, the DOE may validate that continuing and real actions were taken to secure CDM status for the project activity and shall justify any positive or negative validation opinion based on the context of the evidence and information assessed:
 - ⇒ the gap is **greater than 3 years**, the DOE shall conclude that continuing and real actions were not taken to secure CDM status for the project activity.
- If evidence to support the serious prior consideration of the CDM as indicated above is not available the DOE shall determine that the CDM was not considered in the decision to implement the project activity.

BOX: Guidelines on the prior consideration and PoA The EB agreed that the "Guidelines for the demonstration and assessment of prior consideration of the CDM" **do not apply** to **PoAs**, as it is expected that no component of the programme will commence prior to the start date of validation. [EB60 Rep Anx26]

8-2. Crediting period

- ◆ CERs shall only be issued for a crediting period starting after the date of registration of a CDM project activity. [CP/2001/13/Ad2, p23 para12]
- ◆ PPs select a crediting period for a proposed project activity from one of the following alternative approaches

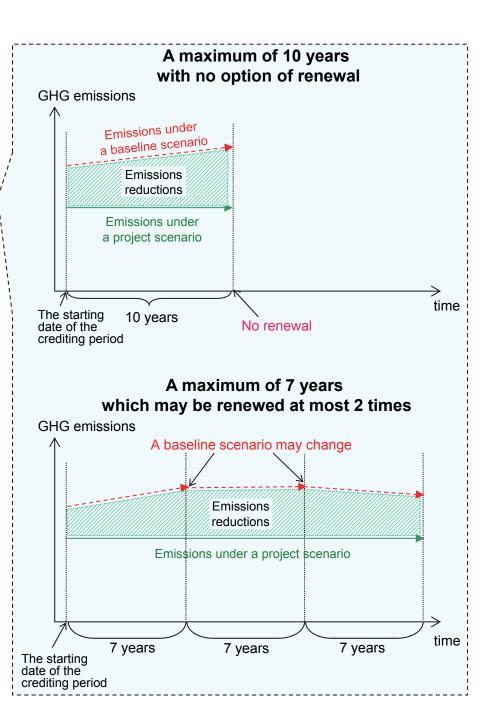
[CMP/2005/8/Ad1, p17 para49] :

- A maximum of 7 years which may be renewed at most 2 times.
 - ⇒ For each renewal, a DOE determines and informs the EB that the original project baseline is still valid or has been updated taking account of new data where applicable.
- A maximum of 10 years with no option of renewal.
- ♦ GHG emission reductions since 2000 may be eligible to claim CERs. [CP/2001/13/Ad2, p23 para13]

To demonstrate the validity of the original baseline or its update, PPs are not required to re-assess the baseline scenario. Instead, PPs shall assess the GHG emission reductions that would have resulted from that scenario. [PS ver.7. para277] (Chap.18)

Indicating the start date of the crediting period [PS ver.7. para61-62] PPs shall state the start date of the crediting period in the format dd/mm/yyyy, and shall not use any qualifications to the start date, such as "expected". PPs shall determine only one start date for the crediting period, even in cases of phased implementation of the proposed CDM project activity.

- The start date of a CDM project activity (chap.8-1) does not need to correspond to the starting date of the crediting period for this project activity. Therefore project activities starting as of 1 January 2000 may be validated and registered. [EB21 Rep. para63]
- The start date of the crediting period provided in the CDM-PDD by the PPs is an indicative date and if it is prior to the date of registration of the project activity, it will be updated by the secretariat as the effective date of registration in accordance with the PCP. [PS ver.7. p18]



9. Monitoring plan

- ♦ Monitoring refers to collecting and archiving all relevant data necessary for determining the baseline, measuring anthropogenic emissions by sources of GHGs within the project boundary, and leakage, as applicable. [Glos ver.7 p14]
- ◆ A monitoring methodology refers the methodology used for monitoring a CDM project or CPA, which constitutes one part of a baseline and monitoring methodology.
 [Glos ver.7 p14]
- ◆ A monitoring plan for a proposed project activity shall be based on a previously approved monitoring methodology or a new methodology. [CMP/2005/8/Ad1, p17 para54]
- ♦ Revisions, if any, to the monitoring plan to improve its accuracy and/or completeness of information shall be justified by PPs and shall be submitted for validation to a DOE. [CMP/2005/8/Ad1, p18 para57]

Project Boundary

The project boundary shall encompass all anthropogenic GHG emissions by sources under the control of the PPs that are significant and reasonably attributable to the CDM project activity. [CMP/2005/8/Ad1, p17 para52]

Leakage

- For a CDM project activities or PoA, the net change of anthropogenic emissions by sources of greenhouse gases (GHG) which occurs outside the project boundary, and which is measurable and attributable to the CDM project activity or PoA. [Glos ver.7 p13]
- For and A/R or SSC A/R CDM project activity or PoA(A/R), the increase in GHG emissions by sources or decrease in carbon stock in carbon pools which occurs outside the boundary of an A/R or SSC A/R CDM project activity or PoA (A/R), as applicable, which is measurable and attributable to the A/R or SSC A/R CDM project activity or PoA (A/R) [Glos ver.7 p13]
- Reductions in GHG emissions shall be adjusted for leakage in accordance with the monitoring and verification provisions. [CMP/2005/8/Ad1, p17 para50]

BOX: Calibration

- The specific uncertainty levels, methods and associated accuracy level of measurement instruments and calibration procedures to be used for various parameters and variables should be identified in the PDD, along with detailed quality assurance and quality control procedures. In addition standards recommended shall either be national or international standards. The verification of the authenticity of the uncertainty levels and instruments are to be undertaken by the DOE during the verification stage. [EB23 Rep, para24]
- ¬A zero check cannot be considered as a substitute for calibration of the measurement instrument. [EB24 Rep, para37]

BOX: The standardized format for monitoring report(MR) [EB54 Anx34]

There is guidelines for completing the monitoring report form (F-CDM-MR) and the standardized format for MR to improve consistency in reporting of the implementation and monitoring of the project activity by PPs. [EB54 Rep. para71]

10. Approval from each Party involved

Approval /authorization by Parties involved [Glos ver.7, p6-7]

◆ The written authorization of an entity(ies) participation in a CDM project activity or PoA and written approval of voluntary participation from the DNA of each Party involved and including, from the host Party only, confirmation that the CDM project activity or PoA assists it in achieving sustainable development.

Party involved [Glos ver.7, p15]

- A Party that has ratified the Kyoto Protocol and that provides written approval in accordance with the CDM rules and requirements
- Project activities from multilateral funds involving many host Parties do not necessarily require letters of approval from the DNA of each Party. However, those not providing a letter may be giving up some of their rights and privileges in terms of being a Party involved in the proposed project activity.. [PS ver.7, p19]

BOX: Contents of actual approval letters

- In most cases, an approval letter is the same with an authorization letter. (chap.4-6)
 - ⇒ In some cases, a DNA authorizes an entity in another country.
- In some cases, a DNA sets conditions on issues other than unconditional issues.
 - ⇒ For example, conditions on amount of CERs to be transferred, validity of the approval, the rejection of an unilateral CDM project, the requirement of reports to a DNA, etc.
- In some cases, an official approval letter is written in the original language and validated with a seal, while an unofficial English translation is attached.

BOX: Withdrawal letters from DNAs [EB76 Anx12]

There is a procedure for covering formal notifications received by the EB from DNAs that withdraw approval/authorization of PPs or, where the DNA is a Host Party, withdraw the approval/authorization in respect of a project activity or a PoA and its CPAs in the same Host Party.

11. Deviation request

11-1. Submission of request for deviation

[PCP ver.7, para39-56]

- ♦ The DOE may seek guidance from the EB on the acceptability of a deviation prior to the submission of a request for registration or publication of the PDD or PoA-DD of the proposed CDM project activity or PoA if the DOE finds that, due to a project- or programme-specific issue implying that a revision of the methodology would not be required to address the issue, the PPs or the CME deviated from:
 - (a) An approved baseline and monitoring methodology; or
 - (b) A section (or sections) in the selected methodology that is(are) not standardized by the selected SB(s), if the proposed CDM project activity or PoA uses SBs.
- ◆ To seek guidance from the EB on the acceptability of the deviation, the DOE shall submit the "Deviation from approved methodology request form" (F-CDM-DEV) through a dedicated interface on the UNFCCC CDM website. In the submission the DOE shall provide:
 - (a)Clear and precise assessment of the case including demonstration that the deviation does not imply revision of an approved methodology;
 - (b)A description of the impact of the deviation on the GHG emission reductions or removal enhancements from the project activity or PoA for the EB to evaluate.

11-2. Processing request for deviation

(1)Scheduling

The secretariat shall maintain a publicly available list of all submitted requests for deviation on the UNFCCC CDM website, excluding supporting documentation provided by the DOE as confidential. The secretariat shall make publicly available the schedule of processing the requests for deviation, including the expected date of commencement. The secretariat shall schedule the commencement of the processing of the requests in accordance with the secretariat's operational plans, which shall also incorporate any relevant instructions from the EB.

(2)Completeness check

- □ Upon commencement of the processing of the request for deviation, the secretariat shall conduct within <u>7 days</u> the completeness check to determine whether the request submission is complete
- DOE of the conclusion of the completeness check, the secretariat shall notify the DOE of the conclusion of the completeness check. If the request submission is found incomplete, the secretariat shall also communicate the underlying reasons to the DOE and make them publicly available on the UNFCCC CDM website. Upon submission of the revised documentation the request shall be treated as a new submission of a request for deviation.
- □ Upon determination by the secretariat that the request submission is complete, the secretariat shall, within 14 days, prepare and send to the EB a summary note on the request including a recommendation on the course of action, or with a notification that the case will be placed on the agenda of the next EB meeting.

 □ Upon determination by the secretariat that the request submission is complete, the secretariat shall, within 14 days, prepare and send to the EB a summary note on the request including a recommendation on the course of action, or with a notification that the case will be placed on the agenda of the next EB meeting.

 □ Upon determination by the secretariat that the request submission is complete, the secretariat shall, within 14 days, prepare and send to the EB a summary note on the request including a recommendation on the course of action, or with a notification that the case will be placed on the agenda of the next EB meeting.

 □ Upon determination by the secretariat that the request submission is complete.

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- If the secretariat, during the preparation of the summary note, identifies issues that require inputs from a relevant panel or working group, it shall place the case on the agenda of the next meeting of the panel or working group. The secretariat shall finalize the summary note and send it to the EB within 14 days of receipt of the inputs from the panel or working group

(3)Consideration by the EB

- If no member of the EB objects to the secretariat's recommendation on the course of action within **20 days** of receipt of the summary note, the recommended course action shall be deemed to be the decision adopted by the EB.
- An objection by a member of the EB shall be made by notifying the Chair of the EB through the secretariat, giving reasons in writing. The secretariat shall acknowledge receipt of the objection and make it available to the EB.
- If a member of the EB objects to the secretariat's recommendation on the course of action more than **14 days** prior to the next EB meeting, the case shall be placed on the agenda of the next EB meeting; other wise the subsequent EB meeting.
- The course of action shall be:
- (a) Approve the deviation and allow submission of a request for registration with the deviation; or
- (b) Decide that the deviation requires a revision of an approved baseline and monitoring methodology before submitting a request for registration.
- Source a decision has been made by the EB, the secretariat shall inform the DOE of the decision and any guidance provided by the EB as applicable, and make the decision and guidance publicly available on the UNFCCC CDM website.

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12. Validation

12-1. Procedures for validation

[PCP ver.7, para16-25]

Project participants (PPs)/ Coordinating /managing entity (CME)

(1)Select a DOE for validation from a list of DOEs and contract with them.

[CMP/2005/8/Ad1, p14 para37]

- (2)Submit a PDD or a PoA-DD and the PoA specific CPA-DD together with supporting documentation to the DOE.
- A DOE may recommence the validation activity through a new or revised contract with a different set of PPs.

Designated operational entity (DOE)

(3)Review the PDD to confirm that the requirements for the CDM have been met.[CMP/2005/8/Ad1, p14 para37]

(4) Make the PDD or PoA-DD publicly available through a dedicated interface on the UNFCCC CDM website for global stakeholder consultation.

Submit the following information to be made publicly available:

- (a)The name of the proposed CDM project activity
- (b)The host Party(ies) of the proposed CDM project activity or PoA
- (c)The names of the PPs listed in the PDD or PoA-DD and the name of CME in the case of PoA with which the DOE has a contractual relationship
- (d) The estimated annual GHG emission reductions or removal enhancements, (In the case of PoA, the estimated total volume of them of all CPAs)
- (e) The approved baseline and monitoring methodology(ies) and where applicable, the approved SB
- (f)Reference to any previous publication of the PDD or PoA-DD for public comments on the UNFCCC CDM website;
- (g) The proposed start date and length of the first crediting period
- (h) In the case of a PoA,
 - (i) The generic CPA-DDs, (ii) at least one specific case CPA-DD corresponding to any of the generic CPA-DDs, (iii)If the PoA is hosted in more than one host Party, one specific-case CPA-DD for each host Party

(7) Check the authenticity of this information in case of doubt.

(9)Make a determination whether the project activity should be validated. [CMP/2005/8/Ad1, p15 para40(d)]

UNFCCC secretariat

- (5) In case the DOE is accredited for all sectoral scope(s), the secretariat, through the CDM information system, shall make the PDD or PoA-DD publicy available on the UNFCCC website.
- (6) Parties, stakeholders and UNFCCC accredited observers may submit comments on the validation requirements for the proposed CDM project activity or PoA to the DOE through the secretariat via a dedicated interface on the UNFCCC CDM website.

(8) Make the comments publicly available on the UNFCCC CDM website where the PDD or PoA-DD is displayed, and shall remove those that the DOE has determined to be unauthentic

May be reconsidered for validation and subsequent registration, after appropriate revisions. [CMP/2005/8/Ad1, p16 para42]

Inform PPs of reasons for non-acceptance

No r

(8)Inform PPs of confirmation of validation.

Yes

[CMP/2005/8/Ad1, p15 para40(e)]

Registration Procedure

At 180days subsequent to the end of the period for submission of comments on the PDD or PoA-DD, the DOE shall provide an update of the status of its validation activity, unless the project activity has been submitted for registration.

12-2. Validation requirements

[VVS ver.7, para19-148]

♦ General reporting requirements:

- The DOE shall report the results of its assessment in a validation report.
- The validation report shall include a positive validation opinion only if the proposed project activity complies with the applicable CDM requirements.
- The DOE shall submit this validation report, along with the supporting documents, to the EB as part of the request for registration of a project activity as a proposed project activity.
- If the validation report includes a negative validation opinion, the DOE shall provide the PPs with the report and inform the EB of the outcome.
- ◆ Approval: The DOE shall determine whether the DNA of each Party indicated as being involved in the proposed CDM project activity in the PDD has provided a written letter of approval.
- ◆ Authorization: The DOE shall determine whether each PP has been authorized by at least one Party involved in a letter of approval.
- ◆ Contribution to sustainable development: The DOE shall confirm that the DNA has considered whether the proposed CDM project activity assists the host Party in achieving sustainable development.
- ◆ Modalities of communications: The DOE shall validate the corporate identity of all PPs and focal points included in the Modalities of Communication (MoC) statement, as well as the personal identities, including specimen signatures and employment status, of their authorized signatories. The DOE shall validate that the MoC statement has been correctly completed and duly authorized.
- ◆ PDD: The DOE shall determine whether the PDD was completed using the latest version of the PDD form appropriate to the type of project activity.
- ◆ Description of project activity: The DOE shall determine whether the description of the proposed project activity in the PDD is accurate, complete, and provides an understanding of the proposed CDM project activity.

♦ Application of the selected baseline and monitoring methodology:

- The DOE shall determine whether the baseline and monitoring methodologies and where applicable, the standardized baseline selected by the PPs are the valid versions of those approved by the EB.
- The DOE shall apply specific guidance and/or clarifications provided by the EB with respect to the approved methodology and any applicable tools and/or the approved SB that is(are) selected by the PPs. The DOE shall determine whether the selected methodology and, where applicable, the selected standardized baseline applies to the project activity and was correctly applied with respect to the following:
 - (a) Project boundary;
 - (b) Baseline identification;
 - (c) Algorithms and/or formulae used to determine emission reductions;
 - (d) Additionality;
 - ✓ Assessment of prior consideration of the clean development mechanism
 - ✓ Identification of alternatives
 - ✓Investment analysis
 - √ Barrier analysis
 - √ Common practice analysis
 - ✓ Monitoring plan
 - (e) Monitoring methodology.
- ◆ Environmental impacts: The DOE shall determine whether the PPs conducted an analysis of the environmental impacts of the proposed project activity, including transboundary impacts, and whether those impacts are considered significant by the PPs or the host Party.
- ◆ Local stakeholder consultation: The DOE shall determine whether the PPs have completed a local stakeholder consultation process and that due steps were taken to engage stakeholders and solicit comments for the proposed project activity.

13. Registration

13-1. Procedures for requests for registration

[PCP ver.7, para60-82]

DOE (and PPs)

- (1)The DOE, after determining that a proposed CDM project activity or PoA meets all relevant requirements in the "CDM-PS" by following the relevant provisions of the VVS and other CDM requirements, shall submit, through a dedicated interface on the UNFCCC CDM website, a request for registration of the proposed CDM project activity or PoA by using the form of "F-CDM-REG" or "F-CDM-PoA-REG", respectively, and all the required documents listed in the completeness checklist for requests for registration.
- (3)The DOE communicates to the PPs or CME the unique reference number, and registration fee due or ← confirmation that no registration fee is due.
- (4) The PPs or the CME shall pay registration fee by bank transfer, quoting the unique reference number. The DOE shall submit proof of payment through a dedicated interface on the UNFCCC CDM website.

UNFCCC secretariat (and the EB)

- (2) The secretariat shall issue a unique reference

 number for the submission of the request for registration
 and a statement of the registration fee due, or
 confirmation that no registration fee is due, determined
 in accordance with the provisions on the registration fee,
 and shall communicate these to the DOE.
- (5) The secretariat maintains a publicly available list of all submitted requests for registration for which the applicable registration fee has been received. The secretariat shall make publicly available the schedule of processing the requests for registration, including the expected date of commencement. The secretariat shall schedule the commencement of the processing of the requests for registration in accordance with the secretariat's operational plans, which shall also incorporate any relevant instructions from the EB.
- (6) The secretariat shall conduct within **7 days** a completeness check to determine whether the request for registration submission is complete in accordance with the completeness checklist for requests for registration.
- (7) Upon conclusion of the completeness check stage, the secretariat will notify the PPs or CME, and the DOE, of the conclusion of the completeness check stage. If the request does not meet the requirements of the completeness check, the secretariat shall also communicate the underlying reasons to the PPs or the CME, and the DOE, and make the result publicly available. Upon submission of the revised documentation, the request shall be treated as a new submission of a request for registration.
- (8) Upon conclusion of the completeness check stage, the secretariat shall, subject to the guidance of the EB, conduct within **23 days** an information and reporting check in accordance with the information and reporting checklist for requests for registration.

- (9) Upon conclusion of the information and reporting check, the secretariat shall notify the PPs or the CME, and the DOE, of the conclusion of the information and reporting check. If the request does not meet the requirements, the secretariat shall conclude that the request submission is incomplete and communicate the underlying reasons to the the PPs or the CME, and the DOE, and make them publicly available. Upon submission of the revised documentation, the request shall be treated as a new submission of a request for registration.
- (10) Upon positive conclusion of the information and reporting check, the secretariat shall publish the request for registration on the UNFCCC CDM website, and the request for registration shall be deemed received by the EB for consideration.
- (11) The secretariat will notify the PPs or the CME, the DNA(ies) of the Party(ies) involved, and the DOE: that the EB has received the request for registration for consideration of registration; that the secretariat has published the request for registration on the UNFCCC CDM website; and the last day by which members of the EB or a Party involved may request a review of the request for registration
- (12) The secretariat shall prepare and send to the EB a summary note on the request for registration, within <u>14</u> <u>days</u> of date of publication of the request for registration.

Whether a Party involved in a proposed CDM project activity or PoA or at least 3 EB members request a review of the request for registration before 5 p.m. GMT of the last day of the 28 day period following the publication of the request for registration.

(<u>chap.</u> 13-2)

(13) The EB shall register the proposed project activity or PoA.

⊥ No

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(1) Commencement of Review

- if a Party involved in a proposed CDM project activity or at least 3 EB members request a review of the request for registration, the secretariat shall:
 - ⇒ Notify the PPs or CME, and the DOE, that validated the proposed project activity or PoA;
 - ⇒ Make he request for registration as "under review" on the UNFCCC CDM website and publicly available an anonymous version of each request for review form;
 - ⇒ Establish a team comprising two experts selected from the RIT Team to conduct an assessment of the request for review. The secretariat shall appoint one of the RIT Team members to serve as the lead, who shall be responsible for all communications with the secretariat.
- The PPs or the CME and the DOE shall provide responses to the issues identified in the request for review no later than **28 calendar days** after the notification. For each issue raised in the request for review, the PPs and DOE shall either:
 - ⇒ Respond by making any revisions to the PDD or PoA-DD and/or validation report (VR); or
 - ⇒ Respond in writing by addressing why no revisions to the PDD and/or VR are necessary.

The secretariat shall schedule the commencement of the review of the request for registration, and make the schedule of review publicly available. Upon scheduling the commencement date, or altering it as applicable, the secretariat shall inform the PPs or the CME and DOE of this date. The commencement of the review shall be defined as the date on which the secretariat notifies the PPs and the DOE of the scheduled or altered commencement date, respectively.

(2) Assessment

- The secretariat shall as well as the RIT team, Concurrently and independently from the secretariat's assessment, conduct an assessment of the request for registration in the context of the reasons for the request for review and the CDM requirements, taking into account the responses of the PPs or the CME and the DOE. The secretariat and the RIT Team shall finalize their assessments no later than 14 days after the commencement of the review.
- Each assessment shall include a proposed decision. Each proposed decision shall suggest either: (a) register the proposed project activity or PoA; or (b) reject the request for registration. If a proposed decision is to reject the request for registration, then the assessment shall included a proposed ruling, containing an explanation of the reasons and rationale.
- In addition both the secretariat and the RIT Team shall, in their assessment reports, highlight any issues of significant importance related to the policies and goals of the CDM arising from the assessment. The secretariat, in consultation with the Chair of the EB, shall bring these issues to the attention of the EB by preparing background notes and policy options and presenting them to the EB at its meetings.
- The RIT Team shall submit its assessment report to the EB through the secretariat. The secretariat shall inform the EB of the availability of each assessment report, and make each assessment report available to the EB, together with any responses from the PPs or the CME, and the DOE and any revision to the PDD and/or VR and other relevant

(3) Consideration by the EB

- is if the respective assessment of the secretariat and the RIT Team contain the same proposed decision, then that shall become the final decision of the EB after 20 days, unless a member of the EB objects to the proposed decision. An objection by a member of the EB shall be made by notifying the Chair of the EB, giving reasons in writing. The secretariat shall make it available to the EB.
- ⇒ If an EB member objects to the proposed decision more than 14 days prior to the next EB meeting, the case shall be placed on the agenda of the next EB meeting (otherwise the subsequent EB meeting).
- If the assessments of the secretariat and the RIT Team contain different proposed decisions and the EB receives both proposed rulings more than **14 days** prior to the next EB meeting, the case will be placed on the agenda of the next EB (otherwise the subsequent EB meeting).
- At the EB meeting for which the case is placed on the agenda, the EB shall decide to either: register the proposed CDM project activity or PoA; or reject the request for registration.

(4) Finalization and implementation of the ruling

- If a final decision approves the registration of the proposed CDM project activity or PoA, the secretariat shall register them on the first working day subsequent to the finalization of the decision. The effective date of registration shall be day on which the latest revisions to the validation report and/or supporting documentation were submitted.
- If the EB's final decision is to reject the request for registration, the secretariat shall update the information on the UNFCCC CDM website on the first working day subsequent to the finalization of the decision. Furthermore, within 21 days of the finalization of the decision, the secretariat will provide the Chair of the EB with an information note containing a proposed final ruling incorporating the final decision. The proposed ruling shall contain an explanation of the reasons and rationale for the final decision.
- Sonce approved by the Chair of the EB, the secretariat shall make the proposed final ruling available to the EB. The proposed ruling shall become the final ruling of the EB 10 days after the date when the proposed ruling was made available to the EB, unless a member of the EB objects to the proposed ruling.
- An objection by a member of the EB shall be made by notifying the Chair of the EB, giving reasons in writing, through the secretariat. The secretariat shall make the objection available to the EB.
- If an EB member objects to the proposed final ruling more than 14days
 prior to the next EB meeting, the case shall be placed on the agenda of the next. EB meeting (otherwise the subsequent EB meeting).
- The secretariat shall make the final ruling publicly available on the UNFCCC CDM website.

13-3. Registration fee

[PCP ver.7 App1]

- ◆ The registration fee schedule applies to submissions of request for registration of proposed project activities under the CDM.
- ♦ The share of proceeds to cover administrative expenses (SOP-Admin) is:
 - **USD 0.10/CER** issued for the first 15,000 t-CO₂ equivalent for which issuance is requested in a given year.
 - USD 0.20/CER issued for any amount in excess of 15,000 t-CO₂ equivalent for which issuance is requested in a given year.
 - No share of proceeds shall be due for project activities and PoAs hosted in LDCs. In the case of PoAs hosted not exclusively in LDC, the exemption from the share of proceeds applies to the issuance of CERs for the emission reductions occurring in CPAs hosted in least developed countries. The application of this exemption from the share of proceeds shall be based on the status of the country on the date of the publication of the request for issuance of CERs
- ◆ The registration fee for a PoA shall be the share of the proceeds applied to the total expected average annual CERs of the specific actual case CPA(s) submitted together with the request for registration of the PoA. The average annual emission reductions for each specific case CPA are calculated over its crediting period. For each CPA which is included subsequently, no registration fee is to be paid. Fees are to be paid by the CME to the secretariat.
- ♦ The registration fee for a PoA shall be the share of proceeds applied to the expected average annual CERs of the "actual case" CPA submitted together with the request for registration of the PoA over its crediting period, as identified in the CPA-DD and as validated by the DOE. If more than one specific case CPA-DDs corresponding to different generic CPA-DDs in the PoA are submitted, the registration fee shall be based on the sum of expected average annual CERs of actual case CPAs.
- ◆ Upon re-submission of a request for registration directly following a determination by the secretariat that the submission is incomplete, no registration fee shall be payable unless the re-submission results in an increase in the expected average annual CERs for the proposed project activity, or for the "actual case" CPA submitted together with the request for registration of the PoA, over its crediting period. If the re-submission results in an increase in the expected average annual CERs, then the registration fee due shall be re-calculated upon re-submission. The registration fee due upon re-submission shall be the difference between the re-calculated registration fee and the registration fee previously paid
- ♦ For the purpose of calculating the registration fee for proposed A/R project activities or A/R PoAs, CERs shall mean the net GHG removals by sinks.
- ♦ The maximum registration fee payable based on this calculation shall be **USD 350,000**.
- ◆ The registration fee shall be deducted from the SOP-Admin due for issuance of the CERs. In effect, the registration fee is an advance payment of the SOP-Admin due for the issuance of CERs likely to be achieved during the first year.

SOP-Admin is a fee that PPs have to pay at issuance of CERs. (chap.17)

BOX: Example of registration fee

Expected average annual emission reduction	Registration fee
10,000 t	-
15,000 t	\$ 1,500
30,000 t	\$ 4,500
100,000 t	\$ 18,500
1,000,000 t	\$ 198,500
3,000,000 t	\$ 350,000

No registration fee shall be payable:

- For proposed project activities or proposed PoAs with the "specific case" CPA submitted together with the request for registration of the PoA, with expected average annual CERs over its crediting period, below 15,000 t-CO2 equivalent.
- For proposed project activities or proposed PoAs hosted in LDCs:
 - ⇒ The application of this exemption is based on the status of the country on the date of the publication of the request for registration.
- Until after the date of the first issuance of CERs in countries with fewer than 10 registered CDM project activities.
 - ⇒ The application of this exemption shall be based on the number of registered CDM projects in the country on the date of the submission of the request for registration.

13-4. Procedures for withdrawal of a request for registration

[PCP ver.7, para110-115]

Submission of request for withdrawal

The DOE shall submit a request for withdrawal of a request for registration by using the "Registration request withdrawal form" (F-CDM-RW) and uploading it through a dedicated interface on the UNFCCC CDM website, for the following cases;

This procedure shall be applied if a DOE wishes to request the withdrawal of a request for registration after the concerned request for registration has been submitted by the DOE to the EB.

- ⇒The PPs or CME voluntarily wishes to withdraw the proposed CDM project activity or PoA, of which the DOE is requesting registration;
- ⇒The DOE has a revised its validation opinion based on new insights or information and has determined that the proposed project activity or PoA dose not meet all relevant requirements for a CDM project activity or PoA.

Processing request for withdrawal

- □ Upon receipt of the request for withdrawal, the secretariat shall as soon as possible check the documents submitted.
- The types of request for withdrawal of request for registration, and the procedures applicable to each type of withdrawal are as follows:

Type 1

- The DOE requests the withdrawal prior to the publication of the request for registration
 - ⇒ The registration fee will be reimbursed in full to the PPs or CME. In this case, the project activity or PoA shall not be marked as "withdrawn", but the unique reference number assigned to the withdrawn project activity or PoA shall be blocked from further use.

Type 2

- The DOE requests the withdrawal during the 28-day period for requesting a review of the request for registration
 - ⇒ Any registration fee paid above USD 30,000 shall be reimbursed to the PPs or the CME, and the proposed CDM project activity or PoA shall be marked as "withdrawn" on the UNFCCC CDM website.

Type 3

- The DOE requests the withdrawal subsequent to being notified a request for review of the request for registration.
 - ⇒ Any registration fee paid above USD 30,000 shall be reimbursed to the PPs or the CME, and the proposed CDM project activity or PoA shall be marked as "withdrawn" on the UNFCCC CDM website.

Submission of requests for withdrawal will be incorporated into the framework for addressing noncompliance by DOEs.

14. Changes to registered CDM project activity or PoA

14-1. Submission for request for approval of changes

[PCP ver.7, para134-144]

- ♦ A request for approval of changes may be submitted in respect of the following changes that have occurred or are expected to occur to a registered CDM project activity or PoA:
 - (a) Temporary deviation from the monitoring plan as described in the registered PDD, the monitoring methodology or the SB;
 - (b) Permanent changes:
 - (i) Corrections;
 - (ii) Changes to the start date of the crediting period of the project activity or CPA;
 - (iii) Permanent changes to the monitoring plan as described in the registered PDD, the monitoring methodology or the SB; including changes to apply the provisions of the most recent version of the "Standard for sampling and surveys for CDM project activities and programme of activities";
 - (iv) Changes to the project or programme design in the registered CDM project activity or PoA.
 - (v) Changes to the project design in the registered generic CPA or specific CPA.
- ♦ In the following circumstances, the DOE shall submit a request for approval by the EB prior to the submission of the request for issuance:
 - (a) The DOE, when performing a verification for a registered CDM project activity or PoA, determines that one or more of the changes have occurred or are expected to occur to the project activity or PoA after its registration, and the changes require "prior approval" by the EB
 - (b) The PPs or CME have requested a DOE at any time prior to the commencement of a verification, to conduct a validation of one or more of the changes that have occurred or are expected to occur to the project activity or PoA after its registration.
- In the cases above, where more than one of the changes have occurred or are expected to occur to the project activity or PoA after its registration, the DOE shall, wherever possible, combine such changes into one request for approval.
- ♦ In all other cases, the DOE that performs a verification of a registered CDM project activity or PoA shall submit the changes for acceptance by the EB as part of the request for issuance.
- ♦ In any cases, the DOE shall be accredited for the validation function in the sectoral scope(s) of the project activity or PoA in question.
- ♦ For the change of (b) (ii), the request for approval of change may be made only once for each registered CDM project activity or CPA.
- ◆ To obtain approval from the EB for the changes, the DOE shall submit a request for approval of changes to the secretariat through a dedicated interface on the UNFCCC CDM website.
- ◆ The request for approval of changes shall contain:
 - (a) A duly completed "Post-registration changes request form" (F-CDM-PRC);
 - (b) An assessment opinion on the changes by the DOE prepared in accordance with the VVS;
 - (c) A revised PDD, or revised PoA-DD and revised generic CPA-DD and specidfic CPA-DD, as applicable;
 - (c) A specific CPA-DD for each of the additionally included host Parties in the CDM PoA, as applicable;
 - (d) Letters of approval by the DNAs of the additionally included host Parties in the CDM PoA, as applicable;
 - (e) Supplemental documentation, as appropriate.
- ◆ For CDM PoAs only the following changes shall be allowed:
 - (a) Changes to programme boundary to expand geographical coverage or to include additional host Parties;
 - (b) Updates to the eligibility criteria under the circumstances indicated in the "Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities"
 - (c) If a PoA includes more than one generic CPA-DD, addition of specific case CPA-DDs corresponding to generic CPA-DDs for which a specific case CPA-DD has not been submitted at the time of request for registration of the PoA;
 - (d) Removal of methodologies from the registered PoA.
- ♦ The CME shall update the eligibility criteria for inclusion of CPAs in the PoA to reflect the change, and include them in new versions of PoA-DD and generic CPA-DD, to be validated by the DOE and approved by the EB.

14-2. Processing request for approval of changes

[PCP ver.7, para145-161]

(1)Scheduling

The secretariat shall maintain a publicly available list of all submitted requests for approval of changes on the UNFCCC CDM website. The secretariat shall make publicly available the schedule of processing the requests for approval of changes, including the expected date of commencement. The secretariat shall schedule the commencement of the processing of the requests for approval of changes in accordance with the secretariat's operational plans, which shall also incorporate any relevant instructions from the EB.

(2)Completeness check

- Upon commencement of the processing of the request for approval of changes, the secretariat shall conduct within <u>7 days</u> the completeness check to determine whether the request submission is complete
- or the CME, and the DOE, and make them publicly available on the UNFCCC CDM website. Upon submission of the request for approval of changes.
- □ Upon determination by the secretariat that the request submission is complete, the secretariat shall, within 14 days, prepare and send to the EB a summary note on the request including a recommendation on the course of action, or with a notification that the case will be placed on the agenda of the next EB meeting.
- identifies issues that require inputs from a relevant panel or working group, it shall place the case on the agenda of the next meeting of the panel or working group. The secretariat shall finalize the summary note and send it to the EB within 14 days of receipt of the inputs from the panel or working group

(3)Consideration by the EB

- If no member of the EB objects to the secretariat's recommendation on the course of action within 20 days of receipt of the summary note, the recommended course action shall be deemed to be the decision adopted by the EB
- An objection by a member of the EB shall be made by notifying the Chair of the EB through the secretariat, giving reasons in writing. The secretariat shall acknowledge receipt of the objection and make it available to the EB.
- If a member of the EB objects to the secretariat's recommendation on the course of action more than **14 days** prior to the next EB meeting, the case shall be placed on the agenda of the next EB meeting; otherwise the subsequent EB meeting.
- The course of action for (b)(iv) shall be:
- (a) Approve the changes and allow subsequent requests for issuance for the project activity or PoA;
- (b) Approve the changes and allow subsequent requests for issuance for the project activity or PoA, but, for the case of a project activity, limit the CERs up to the level estimated in the originally registered PDD;
- (c) Reject the proposed changes but allow subsequent requests for issuance for the project activity or PoA
- The course of action for (a) and (B)(i)-(iii) shall be:
- (a) Approve the changes;
- (b) Reject the changes.
- Tonce a decision has been made by the EB, the secretariat shall inform the DOE of the decision and any guidance provided by the EB as applicable, and make the decision and guidance publicly available on the UNFCCC CDM website.
- The secretariat shall make the revised PDD, or revised PoA-DD and revised generic CPA-DD, and the validation or assessment opinion by the DOE, as applicable, publicly available on the UNFCCC CDM website. This version of the PDD, or PoA-DD and generic CPA-DD, shall be applied for future requests for issuance or for inclusion of new CPAs in the PoA.
- The CPAs that were included before the change to the programme boundary shall apply the latest version of the generic CPA-DD only at the time of the renewal of its crediting period.

15. Verification and certification

- ◆ Verification is the periodic independent review and ex post determination by the DOE of the monitored reductions in GHG emissions that have occurred as a result of a registered CDM project activity during the verification period.
- ◆ Certification is the written assurance by the DOE that, during a specified time period, a project activity achieved the GHG emission reductions as verified.

 [CMP/2005/8/Ad1, p18 para61]
- Timing and frequency of verification and certification are not specified in the official documents.

15-1. Publication of monitoring report (MR)

[PCP ver.7, para181-187]

Publication of monitoring report(MR)

- (1)The PPs of a registered CDM project activity or the CME of a registered CDM PoA shall prepare (a) MR(s) in accordance with the PS, and submit it/them together with supporting documentation to the DOE contracted by the PPs or the CME to perform verification of the monitored GHG emission reductions or removal enhancements.
- (2)The DOE shall make the MR publicly available through a dedicated interface on the UNFCCC CDM website no later than **14 days** before undertaking the site-visit for the verification.
 - When submitting the MR, the DOE shall, through a dedicated interface of the UNFCCC CDM website:
 - (a) Select the CDM project activity or PoA that the MR concerns from a list of registered CDM project activities or PoAs:
 - (b) Specify the start and end dates of the monitoring period covered by the MR.
 - If the DOE is accredited for the verification function in all sectoral scopes to which the CDM project activity or PoA is linked through the application of baseline and monitoring methodology(ies), the secretariat, through the CDM information system, shall make the MR publicly available on the UNFCCC website.
 - SUNFCCC CDM web page where the MR is made available shall contain the following information:
 - (a) The name and reference number of the CDM project activity or PoA;
 - (b) A link to the MR;
 - (c) The name of the DOE contracted by the PPs or the CME for the verification;
 - (d) The name of the DOE that performed the validation of the CDM project activity or PoA.

Reporting of status of registered project activity or programme

- ◆ At 2 years subsequent to the registration of a CDM project activity or PoA, the PPs or CME shall provide, through a dedicated interface on the UNFCCC CDM website, an update of the status of its implementation of the project activity or PoA, unless a DOE contracted by the PPs or CME to perform a verification has made a MR for the project activity or PoA publicly available. The PPs or CME shall include one of the following statuses in the update:
 - (a) The project activity or PoA is under implementation, but has not reached the stage of monitoring of GHG emission reductions or removal enhancements. In this case the PPs or CME shall also provide an update of the status at 180-day intervals thereafter;
 - (b) The project activity or PoA has not yet been implemented, but is still planned to be implemented. In this case the PPs or CME shall also provide an update of the status at 180-day intervals thereafter;
 - (c) The project activity or PoA has been implemented, but the PPs or CME have not yet decided to proceed with the request for issuance stage;
 - (d) The implementation of the project activity or PoA has been cancelled;
 - (e) Any other reason for not having submitted a MR for the project activity or PoA.
- ◆ At 180 days subsequent to the publication of the MR, the DOE shall provide, through a dedicated interface on the UNFCCC CDM website, an update of the status of its verification activity, unless it has submitted a request for issuance of CERs for the registered CDM project activity or PoA. The DOE shall include one of the following statuses in the update:
 - (a) The verification contract has been terminated. In this case the DOE shall also provide a reason for the termination to the EB through the secretariat on a confidential basis;
 - (b) The DOE has issued a negative verification opinion;
 - (c) The DOE has raised one or more corrective action requests or clarification requests, for which no response has been received from the PPs or CME. In this case the DOE shall also provide a summary of the issues raised and update or reconfirm the status of the verification activities at 90-day intervals thereafter;
 - (d) The DOE is performing verification activities and it has not yet sent any corrective action or clarification requests to the PPs or CME. In this case the DOE shall also provide an explanation on the length of time taken and update or reconfirm the status of the verification activities at 90-day intervals thereafter.

15-2. Verification requirements

[VVS ver.7, para240-287]

General verification approach

- In carrying out its verification work, the DOE shall determine whether the project activity complies with the requirements of paragraph 62 of the CDM modalities and procedures.
- The DOE shall ensure that only verification activities undertaken after the publication of the MR on the UNFCCC CDM website shall be used as a basis for the DOE to conclude their verification and submit a request for issuance of CERs to the EB.
- The DOE shall make publicly available the MR received from the PPs in accordance with the PCP. Unless the EB has agreed to grant an exception, a DOE shall not perform verification functions on a project activity for which it has performed the function of validation/registration.
- The DOE shall assess both quantitative and qualitative information on emission reductions provided in the project documentation.
- The DOE shall assess and determine whether the implementation and operation of the project activity, and the steps taken to report emission reductions comply with the CDM criteria and relevant guidance provided by the EB. This assessment shall involve a review of relevant documentation as well as an on-site visit(s).
- The DOE shall assess whether the data collection system meets the requirements of the monitoring plan as per the applied methodology including applicable tool(s). and, where applicable, the applied SB.
- In addition to the monitoring documentation the DOE shall review: (a)The registered PDD and the monitoring plan, including any approved revised monitoring plan and/or changes from the registered PDD, and the corresponding validation opinion; (b) The validation report; (c) Previous verification reports (VR), if any; (d) The applied monitoring methodology and, where applicable, the applied SB; (e) The MR to verify that it is as per the standardized format;(f)Any other information and references relevant to the project activity's emission reductions

Verification Requirements

- ♦ Compliance of the project implementation with the registered project design document: The DOE shall identify any concerns related to the conformity of the actual project activity and its operation with the registered project design document and determine whether:
 - (a) The implementation and operation of the project activity has been conducted in accordance with the description contained in the registered PDD; or
 - (b) Any deviation or the proposed or actual changes in the implementation or operation of the project activity comply with the requirements of the PS.
- ♦ Compliance of the monitoring plan with the monitoring methodology including applicable tool(s) and the SB: The DOE shall determine whether the monitoring plan of the project activity is in accordance with the applied methodology including applicable tool(s) and, where applicable, the applied SB.
- ♦ Compliance of monitoring activities with the registered monitoring plan: The DOE shall determine whether the monitoring of parameters related to the GHG emissions reductions in the project activity has been implemented in accordance with the monitoring plan contained in the registered PDD or any accepted revised monitoring plan.
- ♦ Compliance with the calibration frequency requirements for measuring instruments: The DOE shall determine whether the calibration of those measuring equipments that have an impact on the claimed emission reductions is conducted by the PPs at a frequency specified in the applied monitoring methodology, the applied SB and/or the monitoring plan.
- ◆ Assessment of data and calculation of emission reductions: The DOE shall assess the data and calculations of GHG emission reductions achieved by/resulting from the project activity by the application of the selected approved methodology.
- ♦ Assessment Temporary deviations from the registered monitoring plan and/or monitoring methodology: The DOE shall determine whether there are deviations from the registered monitoring plan, the applied methodology and/or the applied SB.
- ♦ Corrections: The DOE shall verify that any corrections to project information or parameters fixed at validation, as described in the registered PDD, made by PPs in a revised PDD comply with the requirements of the Project standard.
- ◆ Changes to the start date of the crediting period: If the PPs wish to change the start date of the crediting period in accordance with section 12.8 of the Project standard, the DOE shall determine whether the proposed changes result in a less conservative baseline.
- ♦ Changes to the project design of a registered project activity:
 The DOE shall determine whether there are proposed or actual changes to the project design of a registered CDM project activity.

16. Issuance of CERs

16-1. Procedures for requests for issuance of CERs

[PCP ver.7, para190-212]

DOE (and PPs/CME)

(1)The DOE shall submit a request for issuance of CERs by using the "CDM project activity issuance request form" (F-CDM-ISS) or "CDM programme of activities issuance request form" (F-CDM-PoA-ISS), as applicable, only after it verifies that the monitored GHG emission reductions or removal enhancements meet the relevant requirements in the PS and certifies the quantity of CERs claimed in the MR. by following the relevant provisions of the VVS and other CDM requirements. The DOE shall submit the required documents listed in the completeness checklist for requests for issuance. The DOE shall submit the required documents through a dedicated interface on the UNFCCC CDM website.

UNFCCC secretariat (and the EB)

- (2) The secretariat shall make publicly available the schedule of processing the requests for issuance, including the expected date of commencement. The secretariat shall schedule the commencement of the processing of the requests for issuance in accordance with the secretariat's operational plans which shall also incorporate any relevant instructions from the EB.
- (3) Upon commencement of the completeness check stage, the secretariat shall, subject to the guidance of the EB, conduct within 7 days a completeness check to determine whether the request for issuance submission is complete in accordance with the completeness checklist for requests for issuance.
- (4) Upon conclusion of the completeness check stage. the secretariat shall notify the PPs or CME, and the DOE, of the conclusion of the completeness check stage. If the request submission does not meet the requirements of the completeness check, the secretariat shall also communicate the underlying reasons to the PPs or CME, and the DOE, and make them publicly available. In this case, the DOE may resubmit the request for issuance with revised documentation. Upon submission of the revised documentation, the request shall be treated as a new submission.
- (5)Upon conclusion of the completeness check stage. the secretariat shall, subject to the guidance of the EB, conduct within 23 days an information and reporting check in accordance with the information and reporting checklist for requests for issuance.

- (6) Upon conclusion of the information and reporting check stage, the secretariat shall notify the PPs or CME, and the DOE, of the conclusion of the information and reporting check stage. If the request submission for which the secretariat conducted an information and reporting check does not meet the requirements of the information and reporting check, the secretariat shall conclude that the request submission is incomplete and communicate the underlying reasons to the PPs or CME, and the DOE, and make them publicly available. Upon submission of the revised documentation, the request shall be treated as a new submission.
- (7) Upon positive conclusion of the information and reporting check stage, the secretariat shall publish the request for issuance on the UNFCCC CDM website, and the request for issuance shall be deemed received by the EB for consideration.
- (8) The secretariat shall notify the PPs or CME, the DNA(s) of the Partv(ies) involved, and the DOE that; the EB has received the request for issuance for consideration of issuance; the secretariat has published the request for issuance on the UNFCCC CDM website; and the last day by which members of the EB or a Party involved may request a review of request for issuance,
- (9) The secretariat shall, subject to the guidance of the EB, prepare and send to the EB a summary note on the request for issuance within 14 days of the date of publication of the request for issuance.

Whether a Party involved in a CDM project activity or PoA at least 3 EB members request a review of the request within 28 days after the date of publication of the request for Yes issuance for the project activity or 42 days of receipt of request for issuance for the PoA, respectively.

(chap. 16-2)

No

(10) The EB shall instruct the CDM registry administrator to issue a quantity of CERs claimed in the request for issuance into the pending account of the EB in the CDM registry. The secretariat shall inform the PPs or CME of the EB's instruction to the CDM registry administrator and of any share of proceeds payable by the PPs or CME to cover administrative expenses of the CDM. The secretariat shall update the status of the request for issuance on the UNFCCC CDM website accordingly.

(1) Commencement of Review

- if Party involved in a proposed CDM project activity or PoA, or at least 3 EB members request a review of the request for issuance, the secretariat shall:
 - ⇒ Notify the PPs or CME, and the DOE ,that verified and certified the claimed CERs;
 - Make the request for issuance as "under review" on the UNFCCC website and publicly available an anonymous version of each request for review form;
 - ⇒ Establish a team comprising two experts selected from the RIT Team to conduct an assessment of the request for review. The secretariat shall appoint one of the RIT Team members to serve as the lead, who shall be responsible for all communications with the secretariat.
- The PPs or the CME, and the DOE, shall provide responses to the issues identified in the request for review no later than **28 days** after the notification. For each issue raised in the request for review, the PPs or the CME, and DOE, shall either:
 - ⇒ Respond by making any revisions to the MR and attached spreadsheets, VR, and/or certification; or
 - ⇒ Respond in writing by addressing why no revisions to the MR, VR, and/or certification are necessary.
- The secretariat shall schedule the commencement of the review of the request for issuance, and make the schedule of review publicly available. Upon scheduling the commencement date, the secretariat shall inform the PPs and DOE of this date. The commencement of the review shall be defined as the date on which the secretariat notifies the PPs or the CME, and the DOE, that the review has commenced.

(2) Assessment

- The secretariat as well as the RIT team independent from the secretariat shall conduct an assessment of the request for issuance in the context of the reasons for the request for review and the CDM requirements, taking into account the responses of the PPs or the CME, and the DOE. The secretariat and the RIT Team shall finalize their respective assessments no later than 14 days after the commencement of the review.
- Each assessment shall include a proposed decision. Each proposed decision shall propose to either: (a) Issue the CER; or (b) Reject the request for issuance. If a proposed decision is to reject the request for issuance, then the assessment shall included a proposed ruling, containing an explanation of the reasons and rationale.
- In addition both the secretariat and the RIT Team shall highlight any policy issues of significant importance related to the policies and goals of the CDM. The secretariat, in consultation with the Chair of the EB, shall bring these issues to the attention of the EB by preparing background notes and policy options and presenting them to the EB at its meetings.
- The RIT Team shall submit its assessment report to the EB through the secretariat. The secretariat shall inform the EB of the availability of each assessment report, and make each assessment report available to the EB, together with any responses from the PPs or the CME, and the DOE, and any revision to the MR and/or VR.

(3) Consideration by the EB

- If the assessment of the secretariat and the RIT Team contain the same proposed decision, then that shall become the final decision of the EB **20 days** after the date when the availability of the assessment report of the secretariat or the RIT Team, whichever the later, was communicated to the EB, unless a member of the EB objects to the proposed decision.
- An objection by a member of the EB shall be made by notifying the Chair of the EB, through the secretariat, giving reasons in writing. The secretariat shall acknowledge receipt of the objection and make it available to the EB. If a member of the EB objects to the proposed decision more than 14 days prior to the next EB meeting, the case shall be placed on the agenda of the next EB meeting; otherwise it shall be placed on the agenda of the subsequent EB meeting.
- If the assessments of the secretariat and the RIT Team contain different proposed decisions and the EB receives both proposed decisions more than 14 days prior to the next EB meeting, the matter will be placed on the agenda of the next EB (otherwise the subsequent EB meeting).
- FAt the EB meeting for which the matter is placed on the agenda, the EB shall decide to either to: (a)Issue the CERs; or (b)Reject the request for issuance.

(4) Finalization and implementation of the ruling

- If the EB's final decision is to issue the CERs, the EB shall instruct the CDM registry administrator to issue a specified quantity of CERs into the pending account of the EB of the CDM registry. The secretariat shall inform the PPs or the CME of the EB's instruction to the CDM registry administrator and of any share of proceeds payable by the PPs or the CME to cover administrative expenses of the CDM. The secretariat shall update the status of the request for issuance on the UNFCCC CDM website accordingly.
- If the EB's final decision is to reject the request, the secretariat shall update the information on the UNFCCC CDM website accordingly on the first working day subsequent to the finalization of the decision. Furthermore, within 21 days of the finalization of the decision, the secretariat will provide the Chair of the EB with an information note containing a proposed ruling incorporating the final decision.
- Once approved by the Chair of the EB, the secretariat shall immediately make the proposed ruling available to the EB. The proposed ruling shall become the final ruling of the EB after <u>10 days</u>, unless a member of the EB objects to the proposed ruling.
- An objection by a member of the EB shall be made by notifying the Chair of the EB, giving reasons in writing, through the secretariat. The secretariat shall make the objection available to the EB.
- If an EB member objects to the proposed final ruling more than 14 days prior to the next EB meeting, the case shall be placed on the agenda of the next EB meeting (otherwise the subsequent EB meeting) and the EB finalize the ruling.
- The secretariat shall make the final ruling publicly available on the UNFCCC CDM website.

16-3. Procedures for withdrawal of a request for issuance of CERs

[PCP ver.7, para243-248]

Submission of request for withdrawal

- For the following cases, the DOE shall submit a request for withdrawal of a request for issuance by using the "Issuance request withdrawal form" (F-CDM-IW) and uploading it through a dedicated interface on the UNFCCC CDM website:
 - ⇒ The PP or the CME voluntarily wish to withdraw a request for issuance for the specified monitoring period;
 - ⇒ The DOE has revised its VR and/or certification report based on new insights or information.

Processing request for withdrawal

□ Upon receipt of the request for withdrawal, the secretariat shall as soon as possible check the documents submitted.

Type 1

- If the DOE requests the withdrawal of the request for issuance prior to the publication of the request for issuance.
 - ⇒ The request for issuance for the specified monitoring period will not be marked as "withdrawn". If the DOE resubmits the request for issuance for the same monitoring period after such withdrawal, the request for issuance shall be treated as a new submission

Type 2

- if the DOE requests the withdrawal of the request for issuance during the **28 day** period for requesting a review.
 - ⇒ The request for issuance for the specified monitoring period will be marked as "withdrawn". The DOE may re-submit the request for issuance without requesting permission from the EB.

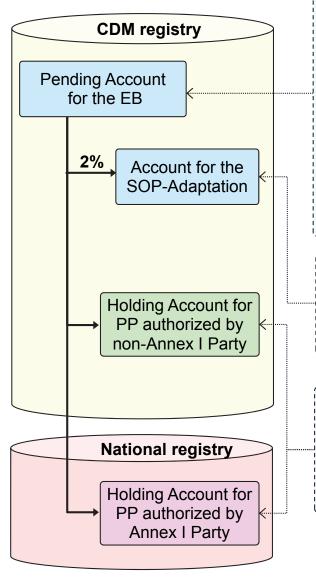
Type 3

- if the DOE requests the withdrawal subsequent to being notified a request for review of the request for issuance
- ⇒ The request for issuance for the specified monitoring period shall be marked as "withdrawn". The DOE may re-submit the request for issuance for the same monitoring period after such withdrawal. In this case, the DOE shall request permission from the EB to resubmit such request.

BOX: Guidance on a request for issuance of CERs

The EB clarified that <u>only verification activities undertaken after the publishing of MR on the UNFCCC CDM website</u> shall be used as a basis for DOEs to conclude their verification and submit a request for issuance of CERs to the EB. [EB60 Rep para101]

17. Distribution of CERs



- ◆ Upon being instructed by the EB to issue CERs for a CDM project activity, the CDM registry administrator shall, promptly, issue the specified quantity of CERs into the pending account of the EB in the CDM registry. [CMP/2005/8/Ad1, p19 para66]
- ◆ The issuance of CERs, in accordance with the distribution agreement, shall be effected only when the share of proceeds to cover administrative expenses (SOP-Admin) of the CDM has been received. [CMP/2005/8/Ad1, p98 para37]
 - The **SOP-Admin** shall be:
 - ⇒**USD 0.10** per CER issued for the 1st 15,000 t-CO₂ equivalent for which issuance is requested in a given calendar year;
 - ⇒**USD 0.20** per CER issued for any amount in excess of 15,000 t-CO₂ equivalent for which issuance is requested in a given calendar year.
 - ⇒ **No** share of proceeds shall be due for project activities and PoAs hosted in LDCs. In the case of PoAs hosted not exclusively in LDC, the exemption from the share of proceeds applies to the issuance of CERs for the emission reductions occurring in CPAs hosted in least developed countries. The application of this exemption from the share of proceeds shall be based on the status of the country on the date of the publication of the request for issuance of CERs[PCP ver.7, App1]
 - The registration fee shall be deducted from the SOP-Admin. (chap.13-3)

Among issued CERs, 2% of those will be deducted for share of proceeds to assist developing Parties that are particularly vulnerable to the adverse effects of climate change to meet the costs of adaptation (SOP-Adaptation). [CP/2001/13/Ad2, p23 para15(a)]

- ©CDM project activities in least developed country Parties shall be exempt from the SOP to assist with the costs of adaptation. [CP/2001/13/Ad2, p23 para15(b)]
- ◆ CERs are forwarded to the registry accounts of PPs, in accordance with their request. [CMP/2005/8/Ad1, p20 para66(b)]
- ◆ The PPs or the CME shall pay the share of proceeds and instruct the CDM registry administrator on the distribution of the CERs using the "Certified emission reductions forwarding request form" (F-CDM-FWD). After receiving the share of proceeds and the instruction from the PPs, the secretariat shall forward the CERs to the PPs or the CME accordingly. [PCP ver5 para212, 234]

BOX: Transferring CERs from the CDM registry

The CDM registry is to enable non-Annex I Parties, and entities from non-Annex I Parties, to transfer CERs from their holding accounts in the CDM registry to accounts in national registries. [CP/2004/2/, p15 para58]

18. Renewal of crediting period

[PCP ver.7, 259-276], [PS ver.7, para275-280]

PP shall update the sections of the PDD of the project activity relating to the baseline, estimated GHG emission reductions and the monitoring plan using a baseline and monitoring methodology as follows;

- a) PPs shall use the valid version of the methodology applied in the original PDD;
- b) If the methodology applied in the original PDD was withdrawn after the registration of the project activity and replaced by a consolidated methodology, project participants shall use the valid version of the respective consolidated methodology;
- c) If the registered project activity does not meet the applicability criteria of the options provided for in subparagraphs (a) or (b) above, due to their revision or due to the update of the baseline, PP shall either:
 - i. Select another applicable methodology; or
 - ii. Request, through the DOE, a deviation from a methodology for the purpose of renewal of the crediting period.
- The demonstration of the validity of the original baseline or its update does not require a reassessment of the baseline scenario, but rather an assessment of the emissions which would have resulted from that scenario.
- PP shall assess and incorporate the impact of national and/or sectoral policies and circumstances existing at the time of requesting renewal of the crediting period on the current baseline GHG emissions.
- * There is an explanation for the application of an approved SB [PS ver.7 para 276bis]

(2) Submission of request for renewal of crediting period

PPs or CME shall notify the secretariat of their intention to request a renewal of a crediting period of the registered CDM project activity by submitting an updated PDD and informing of their selection of a DOE, <u>within 270 to 180</u> <u>days</u> prior to the date of expiration of the current crediting period.

- For the purpose of renewal of the crediting period it is not necessary to obtain a new letter of approval from Parties involved.
- Solution Solution Solution For the renewal of the crediting period.

The DOE shall submit a request for renewal of crediting period of a registered CDM project activity or PoA using the (F-CDM-REN) along with the updated PDD, or new PoA-DD and new generic CPA-DD, and updated validation report.

If the notification of the intention to request a renewal of crediting period is not received by the secretariat 180 days prior to the date of expiration of the current crediting period, the PP or the CME shall not be entitled to claim the issuance of CERs for the period from the expiration date of the current crediting period until the last date before the crediting period is deemed renewed.

(3) Processing request for renewal of crediting period

For processing of the request for renewal of crediting period, the provisions in the section of "Processing request for registration" shall apply mutatis mutandis.

(4) Requesting review of request for renewal of crediting period

- A Party involved in the CDM project activity or PoA and/or any member of the EB may request a review of the request for renewal of crediting period within 28 days after the date of publication of the request for renewal of crediting period.
- If a Party involved wishes to request a review, the relevant DNA shall send the request to the EB, through the secretariat, using the (F-CDM-RENR) by official means of communication. If a member of the EB wishes to request a review, he/she shall communicate the request to the EB through the secretariat, using (F-CDM-RENR).

(5) Finalizing request for renewal of crediting period if no request for review

The crediting period of the registered CDM project activity or PoA shall be deemed renewed 28 days after the publication of the request for renewal on the UNFCCC CDM website, unless a Party involved or at least three members of the EB request a review of the request for renewal.

(6) Review of request for renewal of crediting period

- For reviews of the request for renewal of crediting period, the provisions in the section of "Review of request for registration" shall apply mutatis mutandis.
- The start date of the renewed crediting period shall be the first day after the end date of the previous crediting period.

Not

No

Not valid

plausible

Step 1: Assess the validity of the current baseline for the next crediting period

▼ Yes

Step 1.1: Assess compliance of the current baseline with relevant mandatory national and/or sectoral policies

The current baseline complies with all relevant mandatory national and/or sectoral policies which have come into effect after the submission of the project activity for validation or the submission of the previous request for renewal of the crediting period and are applicable at the time of requesting renewal of the crediting period?

No or if it cannot be shown that the policies are systematically not enforced and that non-compliance with those policies is widespread in the country or region

Step 1.2: Assess the impact of circumstances

Assess the impact of circumstances existing at the time of requesting renewal of the crediting period on the current baseline emissions, without reassessing the baseline scenario. The new circumstances make a continued validity of the current baseline not plausible?

↓ Plausible

Step 1.3: Assess whether the continuation of the use of current baseline equipment(s) is technically possible

This Sub-step should only be applied if the baseline is the continuation of the current practice. Assess whether the remaining technical lifetime of the equipment that would have continued to be used in the absence of the project activity exceeds the crediting period for which renewal is requested.

Yes

Option: Limit the crediting period to the end of the technical lifetime of the baseline equipment

Step 1.4: Assessment of the validity of the data and parameters

Assess whether data and parameters that were only determined at the start of the crediting period and not monitored during the crediting period are still valid or whether they should be updated. Updates should be undertaken in the following cases:

- Where IPCC default values are used, the values should be updated if any new default values have been adopted and published by the IPCC;
- Where emission factors, values or emission benchmarks are used and determined only once for the crediting period, they should be updated, except if those figures are based on the historical situation at the site of the project activity and can not be updated because the historical situation does not exist anymore as a result of the CDM project activity.

Valid

If the application of Steps 1.1, 1.2, 1.3 and 1.4 confirmed that the current baseline as well as data and parameters are still valid for the subsequent crediting period, then this baseline, data and parameters can be used for the renewed crediting period.

The current baseline needs to be updated for the subsequent crediting period.

Step 2: Update the current baseline and the data and parameters

Step 2.1: Update the current baseline

Update the current baseline emissions for the subsequent crediting period, without reassessing the baseline scenario, based on the latest version of the AM applicable to the project activity. The procedure should be applied in the context of the sectoral policies and circumstances that are applicable at the time of request for renewal of the crediting period.

Step 2.2: Update the data and parameters

If the application of Step 1.4 showed that the data and/or parameter(s) that were only determined at the start of the crediting period and not monitored during the crediting period are not valid anymore, PPs should update all applicable data and parameters, following the guidance in Step 1.4.

19. Small-scale CDM (SSC)

19-1. Definition of small-scale CDM (SSC)

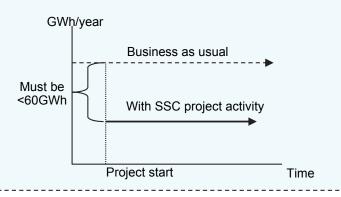
Simplified modalities and procedures are applicable for the following small-scale CDM project activities. [CMP/2005/8/Ad1, p43-45]

Type I

project activities shall remain the same, such that renewable energy project activities shall have a maximum output capacity of 15 MW (or an appropriate **equivalent)** [CMP/2006/10/Ad1, p8 para28(a)]

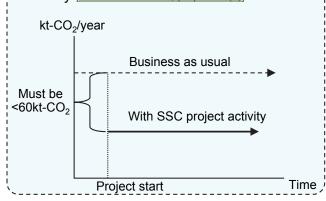
Type II

project activities or those relating to improvements in energy efficiency which reduce energy consumption, on the supply and/or demand side, shall be limited to those with a maximum output of 60 GWh/y (or an appropriate equivalent) [CMP/2006/10/Ad1, p8 para28(b)]



Type III

project activities, otherwise known as other project activities, shall be limited to those that result in emission reductions of less than or equal to 60 kt CO2 equivalent annually [CMP/2006/10/Ad1, p8 para28(c)]



Project activity eligibility [PS ver.7, para 80 - 84]

- ◆ The scope of the maximum output capacity of 15 MW, PPs shall consider the following:
- Regarding "maximum output", "output" is the installed/rated capacity as indicated by the manufacturer of the equipment or plant, irrespective of the actual load factor of the plant
- Regarding the "appropriate equivalent" of 15 MW refers to MW, but PPs may refer to MW(p) MW(e) or MW(th). As MW(e) is the most common denomination, MW is defined as MW(e), and otherwise an appropriate conversion factor is to be applied;
- For biomass, biofuel and biogas project activities, the maximal limit of 15 MW(e) is equivalent to a 45 MW thermal output of the equipment or the plant (e.g. boilers). For thermal applications of biomass, biofuels or biogas (e.g. cook stoves), the limit of 45 MWth is the installed/rated capacity of the thermal application equipment or device(s) (e.g. biogas stoves). For electrical or mechanical applications, the limit of a 15 MW installed/rated output shall be used. In the case of co-firing renewable and fossil fuels, the rated capacity of the system when using fossil fuel shall apply:
- For thermal applications of solar energy projects, "maximum output" shall be calculated using a conversion factor of 700 Wth/m2 of aperture area of glazed flat plate or evacuated tubular collector
- ◆ The three types of small-scale CDM project activities defined above are mutually exclusive. In a small-scale project activity with more than one component following the CDM SSC M&Ps, each component shall meet the threshold criterion of each applicable type;

 The sum of the size of components of a small-scale CDM project activity belonging to the same type shall not exceed the limits for small-scale
- project activities.

19-2. Simplified modalities and procedures

- ◆ SSC project activities shall follow the stages of the project cycle specified in the CDM M&P. In order to reduce transaction costs, however, modalities and procedures are simplified for SSC project activities, as follows: [CMP/2005/8/Ad1, p45 para9]
 - Project activities may be bundled or portfolio bundled at the following stages in the project cycle: the PDD, validation, registration, monitoring, verification and certification;
 - The requirements for the PDD are reduced;
 - Baselines methodologies by project category are simplified to reduce the cost of developing a project baseline;
 - Monitoring plans are simplified to reduce monitoring costs;
 - The same OE may undertake validation, and verification and certification.

Leakage in CDM project

- For a CDM project (non-A/R) or PoA (non-A/R), the net change of anthropogenic emissions by sources of GHG which occurs outside the project boundary, and which is measurable and attributable to the CDM project or PoA, as applicable. [Glos ver7, p13]
- For an A/R or SSC A/R CDM project or PoA (A/R), the increase in GHG emissions by sources or decrease in carbon stock in carbon pools which occurs outside the boundary of an A/R or SSC A/R CDM project or PoA (A/R), as applicable, which is measurable and attributable to the A/R or SSC A/R CDM project or PoA (A/R), as applicable. [Glos ver7 p13]

Standard for sampling and surveys for CDM project activities and programme of activities [EB74 Anx6]

This document specifies the reliability requirements and describes appropriate sampling methods and what is expected to be provided in a sampling plan. The general requirements shall be applicable to both small-scale and large scale CDM project activities as well as PoAs with any requirements specified in the applicable methodologies having precedence. Sampling-related requirements pertaining to validation and verification are also included

Guideline for sampling and surveys for CDM project activities and programme of activities [EB75 Anx8]

This guideline describes common types of sampling approaches and includes a recommended outline for a sampling plan, recommended practices for unbiased estimates of sampled parameters and recommended evaluation criteria for DOE validation besides several best-practice examples covering large and small-scale project activities and PoAs. It also provides examples for checking the reliability of data collected through sample surveys.

BOX: Simplified baseline and monitoring methodologies

- There is a "General Guidelines to SSC CDM methodologies". (Version 20) [EB76 Anx11]
- There is a "Guidelines for Completing F-CDM-SSC-PDD, F-CDM-SSC-Subm and F-CDM-SSC-BUNDLE". (Version 5) [EB34 Anx9]
- There are approved methodologies for small scale CDM project activities (AMS). (Att.1)

Additionality for SSC project activities (Guidelines on the demonstration of additionality of small-scale project activities)

◆ PPs shall provide an explanation to show that the project activity would not have occurred anyway due to at least one of the following barriers:

Investment barrier:

a financially more viable alternative to the project activity would have led to higher emissions;

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;

Barrier due to prevailing practice:

prevailing practice or existing regulatory or policy requirements would have led to implementation of a technology with higher emissions;

Other barriers:

- without the project activity, for another specific reason identified by the PP, such as institutional barriers or limited information, managerial resources, organizational capacity, financial resources, or capacity to absorb new technologies, emissions would have been higher.
- ♦ Quantitative evidence that the project activity would otherwise not be implemented may be provided instead of a demonstration based on the barriers listed above.
- ◆ Documentation of barriers is not required for the positive list of technologies and project activity types that are defined as automatically additional 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: [EB68 Anx27 para2]
 - (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;
 - (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);
 - (iv) Geothermal (up to 200 kW);
 - (v) Biomass gasification/biogas (up to 100 kW);
 - (c) Project activities solely composed of isolated units where the users of the technology/measure are households or communities or Small and Medium Enterprises (SMEs) and where the size of each unit is no larger than 5% of the small-scale CDM thresholds:
 - (d) Rural electrification project activities using renewable energy sources in countries with rural electrification rates less than 20%; the most recent available data on the electrification rates shall be used to demonstrate compliance with the 20 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.

Bundling [Glos ver7, p7]

◆Bundle is defined as several SSC or SSC A/R CDM project activities which form a single project activity or portfolio without the loss of distinctive characteristics of each component.

Debundling [EB54 Anx13]

- ◆ Debundling is defined as the fragmentation of a large scale project activity into smaller parts.
- ♦ A small-scale project activity that is part of a large scale project activity is not eligible to use the simplified modalities and procedures for SSC project activities.
- ♦ There is the "Guidelines on assessment of de-bundling for SSC project activities (Version 03)". [EB54 Anx13]
- ♦ A proposed small-scale project activity shall be deemed to be a debundled component of a large scale project activity if there is a registered SSC project activity or a request for registration by another small-scale project activity: (a)With the same PPs; (b) In the same project category and technology/measure; (d)Registered within the previous 2 years; (e) Whose project boundary is within 1 km of the project boundary of the proposed small-scale activity at the closest point.
- ◆The flow chart for judging the occurrence of debundring is described in the guidance.

Requirements and guidance for any bundles [EB66 Anx21, para7-15]

- Once a project activity becomes part of a bundle for a project cycle stage, it shall not be debundled for this stage. The EB may consider debundling in exceptional situations.
- The composition of bundles shall not change over time (i.e. the submission of project activities to be used in a bundle shall be made at the same time. A project activity shall not be taken out of a bundle nor shall a project activity be added to the bundle after registration).
- All project activities in the bundle shall have the same crediting period.
- To submit a bundle of project activities for validation, PPs shall complete the and provide all necessary information and documentation to demonstrate compliance of the bundle with all applicable CDM rules and requirements
- The sum of the size of the technology or measure utilized in the bundle shall not exceed the limits of each type of small-scale project activities as defined in the PS (type I, II or III).
- It shall be demonstrated that the bundle will remain under the limit of its type every year during the crediting period. The total emission reductions estimated for the crediting period shall be included in PDD of each project activity and further monitored.
- If during its crediting period a bundle goes beyond the limits of its type, the emission reductions that can be claimed for this particular year shall be capped at the maximum emission reductions estimated
- in the PDD of the registered project activities in the bundle for that year during the crediting period.

Letter of approval [EB66 Anx21, para16]

The letter of approval by the host Party(ies) shall indicate that the Party is aware that the project activity(ies) taking place in its territory is part of the bundle.

Overall monitoring plan [EB66 Anx21, para17]

whether a bundle of project activities is submitted with a single or multiple PDDs, it will have only one reference number for all project activities in the bundle for the issuance of CERs

Validation and verification [EB66 Anx21, para19-23]

- A single DOE may validate the bundle of project activities. .
- All PDDs shall be made publicly available at the same time for public comments in the global stakeholder consultation.
- Bundled project activities shall be submitted in a single submission to the EB and pay only one fee proportional to the amount of expected average annual emission reductions of the total bundle.
- one VR is adequate for the bundle of project activities, and one issuance of CERs will be made at the same time for the same crediting period.

20. Afforestation and Reforestation CDM (A/R CDM)

20-1. Overview of A/R CDM

Rules and procedures regarding A/R CDM project activities are similar to those of GHG emission reduction CDM project activity. The most significant difference of A/R CDM is non-permanence. In A/R CDM, CO₂ once sequestered in trees could be release back into the atmosphere in an occasion of such as forest fire or die back from pests. The issue of non-permanence is addressed by creating different type of CERs, namely temporary CERs (tCERs) and long-term CERs (ICERs).

Procedures to demonstrate the eligibility of lands for A/R CDM project activities [EB35 Anx18]

- ◆ 1. PPs shall provide evidence that the land within the planned project boundary is eligible for an A/R CDM project activity. (a)Demonstrate that the land at the moment the project starts does not contain forest by providing transparent information that:
 - ⇒ Vegetation on the land is below the forest thresholds adopted by the host country; and
 - ⇒ All young natural stands and all plantations on the land are not expected to reach the minimum crown cover and minimum height chosen by the host country to define forest; and
 - ⇒ The land is not temporarily unstocked, as a result of human intervention.
 - (b) Demonstrate that the activity is a reforestation or afforestation project activity:
 - ⇒ For reforestation project activities, demonstrate that the land was not forest by demonstrating that the conditions outlined under (a) above also applied to the land on 31 December 1989.
 - ⇒ For afforestation project activities, demonstrate that for at least 50 years vegetation on the land has been below the thresholds adopted by the host country for definition of forest.
- ♦ 2. In order to demonstrate steps 1 (a) and 1 (b), PPs shall provide information that reliably discriminates between forest and non-forest land according to the particular thresholds, *inter alia*:
 - (a) Aerial photographs or satellite imagery complemented by ground reference data; or
 - (b) Land use or land cover information from maps or digital spatial datasets; or
 - (c) Ground based surveys (land use or land cover information from permits, plans, or information from local registers such as cadastre, owners registers, or other land registers).

If options (a), (b), and (c) are not available/applicable, PP shall submit a written testimony which was produced by following a Participatory Rural Appraisal (PRA) methodology or a standard Participatory Rural Appraisal (PRA) as practised in the host country.

Crediting period of the A/R CDM project activity

[CMP/2005/8/Ad1, p67 para23]

- It begins at the start of the A/R CDM project activity and can be either:

- A/R CDM project activity starting after 1 January 2000 can be validated and registered after 31 December 2005 as long as the 1st verification of the project activity occurs after the date of registration.
- Given that the crediting period starts at the same date as the starting date of the project activity, the projects starting 2000 onwards can accrue tCERs/ICERs as of the starting date. [EB21 Rep. para64]

The initial verification and certification of an A/R CDM project activity may be undertaken at a time selected by the PPs. Thereafter, verification and certification shall be carried out **every 5 years** until the end of the crediting period. [CMP/2005/8/Ad1, p69 para32]

- an A/R CDM project, if it has selected and reported to the EB through its DNA:
 - (a) A single minimum tree crown cover value between 10 and 30%; and
 - (b) A single minimum land area value between 0.05 and 1 hectare; and
 - (c) A single minimum tree height value between 2 and 5 metres.
 [CP/2003/6/Ad2, p17 para7-8]
- There is the procedure on change in the selected values of minimum tree crown cover, minimum land area and minimum tree height required for hosting an A/R CDM project activity. [EB40 Anx1]

Project boundary [EB44 Rep para38]

◆ The EB agreed to the "Guidance on the application of the definition of project boundary to A/R CDM project activities" [EB44 Anx14], which provides the option for fixing the project boundary at the first verification, thereby allowing for more flexibility in delineation of areas of land at registration.

20-2. Non-permanence of A/R CDM (tCER and ICER)

Temporary CERs (tCERs) and Long-term CERs (ICERs):

- The PPs shall select one of the following approaches to addressing non-permanence of an A/R CDM project activity [CMP/2005/8/Ad1. p70 para38]:
 - (a) Issuance of **tCERs** for the net GHG removals by sinks achieved by the project activity since the project starting date; or
 - (b) Issuance of **ICERs** for the net GHG removals by sinks achieved by the project activity during each verification period
- The approach chosen to address non-permanence shall remain fixed for the crediting period including any renewals.

Expiry of tCERs and ICERs

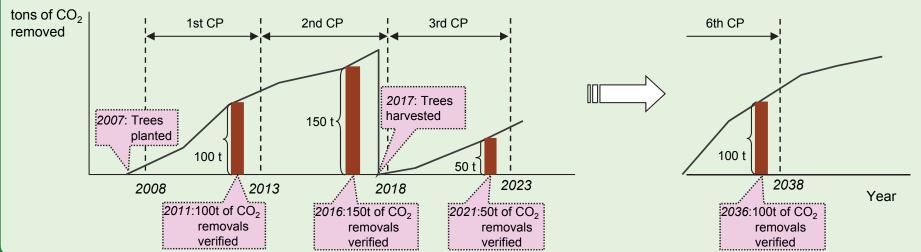
- Each tCER shall expire at the end of the commitment period subsequent to the commitment period for which it was issued. [CMP/2005/8/Ad1, p71 para42]
- Each ICER shall expire at the end of the crediting period or, where a renewable crediting period is chosen, at the end of the last crediting period of the project activity.

 [CMP/2005/8/Ad1, p71 para46]

Example: Changes in net GHG removals by a A/R project activity

The chart below shows changes in GHG removals by an A/R project activity. In the next two pages, an explanation of issuance and expiration of tCERs and ICERs will be given based on the assumptions shown in the chart below.

- Trees are planted in 2007.
- ⇒ 1st issuance of tCERs or ICERs takes place in 2011. Trees are left to grow during the 1st and 2nd commitment periods and 2nd issuance of tCERs or ICERs takes place in 2016.
- Assuming each commitment period (CP) would be 5 years.
- Trees are cut in 2017 before the end of the 2nd commitment period (CP) and 3rd issuance takes place in 2021. The last issuance takes place in in 2036.
- Each tCER or ICER issued will be used for achieving a Party's emission reduction target.
- Crediting period is 30 years without renewal.



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20-3. Small-scale A/R CDM

Definition of small-scale A/R CDM project activity

- ◆ Those that are expected to result in net GHG removals by sinks of less than 16,000 t-CO₂/year; [CMP/2007/9/Ad1, p26]
 - The average projected net GHG removals by sinks for each verification period shall not exceed 16,000 t-CO₂/year. [CP/2004/10/Ad2, p26 para1(b)]
- ◆ Developed or implemented by low-income communities and individuals as determined by the host Party. [CMP/2005/8/Ad1, p62 para1(i)]
 - Prior to the submission of the validation report to the EB, the DOE have received from the PPs a written declaration of that.

 [CMP/2005/8/Ad1, p85 para15(b)]

If a small-scale A/R CDM project activity results in net GHG removals by sinks greater than 16,000t of CO₂ per year, the excess removals will not be eligible for the issuance of tCERs or ICERs.

[CMP/2007/9/Ad1, p26]

The "General principles for bundling" [EB21, Anx 21] may not be applicable mutatis mutandis in the context of bundles of small scale A/R project activities created for the purpose of validation. [EB32 Rep, para42]

Simplified modalities and procedures for small-scale A/R CDM project activity

- ♦ In order to reduce transaction costs, modalities and procedures are simplified for small-scale A/R CDM project activities as follows: [CMP/2005/8/Ad1, p82 para1]
 - The requirements for the project design document are reduced;
 - Baseline methodologies by project type are simplified to reduce the cost of developing a project baseline;
 - Monitoring plans are simplified, including simplified monitoring requirements, to reduce monitoring costs;
 - The same operational entity may undertake validation, and verification and certification.
- ◆ Small-scale A/R CDM project activities shall be:
 - exempt from the share of proceeds to be used to assist developing country Parties that are particularly vulnerable to the adverse effects of climate change;
 - entitled to a reduced level of the non-reimbursable fee for requesting registration and a reduced rate of the share of proceeds to cover administrative expenses of the CDM. [CMP/2005/8/Ad1, p83 para13]
- There is a "Guidelines for completing the small-scale afforestation and reforestation baseline monitoring and methodology submission form." (Version 01.1) [EB66 Anx28]

There is "Guidelines on application of specified versions of A/R CDM methodologies in verification of registered A/R CDM project activities" (ver.01) to allow a registered A/R CDM project activity to apply, at the time of verification, the improvements in the methodology that occurred after the date of registration of the project activity. [EB63 Anx26]

There is "Guidelines on accounting of specified types of changes in A/R CDM project activities from the description in registered project design documents" (ver.02) to provide guidelines on addressing, in verification of A/R CDM project activities, specified types of changes from the description contained in the registered PDD. [EB66 Anx24]

21. CDM Programme of activities (PoA)

21-1. Overview of programme of activities (PoA)

A programme of activities (PoA) and a CDM programme activity (CPA)

A programme of activities (PoA) is [Glos ver.7, p15]:

- ¦ sa voluntary coordinated action;
- by a private or public entity which coordinates and implements any policy/measure or stated goal (i.e. incentive schemes and voluntary programmes);
- which leads to GHG emission reductions or net anthropogenic GHG removals by sinks that are additional to any that would occur in the absence of the **PoA**;
- via an unlimited number of CDM programme activities (CPAs).

A CDM programme activity (CPA) is [Glos ver.7, p10]:

a single, or a set of interrelated measures under a **PoA**, to reduce GHG emissions by sources or result in net anthropogenic GHG removals by sinks, applied within a designated area defined in the baseline methodology(ies).

Coordinating / managing entity (CME) [Glos ver.7, p9]

- □ CME is an entity authorized by all participating host country DNAs involved in a particular PoA and nominated in the MoC (chap. 4-7) statement as the entity that communicates with the EB and the secretariat including on matters relating to the distribution of CERs, tCERs or ICERs, as applicable.
- The CME shall be either the sole or a joint focal point for each scope of authority. The number of joint focal points for a *PoA* shall be limited to 5) or equal to the number of host Parties if greater than 5. [PCP ver.7,para34]
- The operators of individual *CPAs* are not required to be PP. CDM project participation is only recorded at the *PoA* level. [PS ver.7,para224]
- The CME shall obtain from each host Party a letter of authorization of its coordination of the proposed CDM PoA. [PS ver.7, para222]
- If the CME has changed then the DOE who is undertaking the next inclusion of a *CPA* shall submit, (a) new letter(s) of authorization by the each respective host Party, (b) a confirmation from new CME that the *PoA* will be the same set framework, and (c) a validation opinion by a DOE regarding the compliance of the new CME. [PCP ver.7 para178]

Boundary

A new host Party(ies) may be added after the registration of the *PoA*. In this case, CME shall request for approval by the EB, following the post-registration change process as defined in the PCP. [PS ver.7, para220]

Registration fee for a PoA [EB33 Rep. para60]

- The registration fee for a **PoA** is based on the total expected annual emission reductions of the **CPA(s)** that will be submitted together with the request for registration of the **PoA**. The calculation of the amount to be paid and the procedures for payment will follow mutatis mutandis the existing rules. (chap.13-3)
- For each *CPA* which is included subsequently, no fee is to be paid.
- Fees are to be paid by the CME to the secretariat.

Sampling of the PoA

There are "Standard for sampling and surveys for CDM project activities and programme of activities" [EB69 Anx4] and "Guidelines for sampling and surveys for CDM project activities and programme of activities" including examples [EB69 Anx5]

Application of multiple methodologies for PoA

- ◆Combinations of technologies/measures and/or methodologies for a PoA are eligible where it is demonstrated that there are no cross effects between the technologies/measures applied. Where such cross effects do exist, the CME shall propose methods to account for such cross effects requesting deviation (Chap.11) [EB74 Anx25]
- ◆The following combinations of approved methodologies may be applied without further assessment of cross effects: (a) AMS-III.R with AMS-I.C; (b) Combination of any one of the Type III methodologies where activities lead to methane generation (i.e. AMS-III.H, AMS-III.D, AMS-III.F and AMS-III.G), with any one of the Type I methodologies that utilise the methane for generating renewable energy, (i.e. AMS-I.A, AMS-I.C, AMS-I.D and AMS-I.F); (c) AMS-III.D, AMS-I.C and AMS-I.F; (d) AMS-I.C and AMS-I.F (approved at EB 61); (e) AMS-III.AO and AMS-I.E; (f) AMS-I.A, AMS-I.D and AMS-I.F; (g) AMS-I.E and AMS-II.G [EB69 Anx27]

BOX1: Additionality of CPA

The EB clarified that a full additionality assessment is not required in the context of *CPA*, rather the confirmation of additionality for *CPA*s should be conducted by means of the eligibility criteria. [EB60 Anx26 para4].

BOX2: De-bundling under a PoA

There is the "Guidance for determining the occurrence of de-bundling under a *PoA*.[EB47 Anx32 para7-9]. The flow chart for judging the occurrence of de-bundring under a *PoA* is described in the guidance.

BOX3: Interactive effects for a PoA

There is the "Guidance for the consideration of interactive effects for the application of multiple CDM methodologies for a programme of activities".[EB68 Anx3]. This document provides guidance on consideration of interactive effects when applying different technologies/measures pertaining to the same methodology and/or combinations of approved CDM methodologies.

Start date of a PoA [PS ver.7, para205]

- The start date of a **PoA** shall be either of the two dates below:
- a) The date of notification of the intention to seek the CDM status by the CME to the secretariat and the DNA; or
- b) The date of publication of the PoA-DD for global stakeholder consultation.

Duration of the PoA [PS ver.7, para206]

- The duration of the **PoA**, shall not exceed **28 years** (**60 years** for A/R project activities), and shall be defined by the entity at the time of request for registration of the **PoA**.
 - ⇒ Any *CPA* can be added to the *PoA* at any time during the duration of the *PoA* by the CME. The entity shall inform the EB of the adding of *CPA(s)* through a DOE using a predefined format.

Crediting period and starting date of the CPA [PS ver.7, para209-214]

- a) The start date of the crediting period of a CPA shall be on or after
 - i. The date of registration of the **PoA**, if the corresponding **CPA-DD** is submitted together with the request for registration;
 - ii. The date of approval of the corresponding specific case *CPA-DD*, if the specific case *CPA-DD* is submitted for approval by the EB
 - iii. The date when the CPA was included in accordance with the PCP
- b) Each renewable crediting period shall be at most seven years (20 years for an A/R CPA) and may be renewed at most two times, for a maximum total length of 21 years (60 years for an A/R CPA). The first renewal of the crediting period of the CPA shall be conducted no later than seven years after the start date of the crediting period of the CPA
- c) A fixed crediting period shall be at most 10 years;
- d) The duration of the crediting period of a *CPA* shall not exceed the duration of the **PoA**, regardless of the crediting period type of the *CPA* (renewable or fixed).
- e) Where ICERs are expected to be issued for a PoA, the dates of renewal of the crediting periods of all *CPA*s included in the *PoA* are to be aligned with the date of renewal of the *PoA*.
- for the demonstration and assessment of prior consideration of the CDM" do not apply to PoAs, as it is expected that no component of the programme will commence prior to the start date of validation. [EB60]
- The EB agreed that if an A/R project activity was started after 10 December 2005 and complies with the eligibility criteria for inclusion as an A/R *CPA* under the A/R *PoA*, then the project activity may be included as an A/R *CPA* and its crediting period starts at the starting date of the project activity. [EB53 Rep para40]

Preparation of a PoA-DD and CPA-DD

[PS ver.7 para231] [VVS ver.7, para221-223]

- The CME and/or PPs shall select a DOE for the validation of the proposed CDM *PoA* and *CPA* that is accredited for the validation function and sectoral scopes(s) of the *PoA*. The CME and/or PPs shall have a contractual arrangement with the DOE for the validation. The CME shall submit to the selected DOE for validation the completed *PoA*-DD, the generic *CPA*-DD and the completed *CPA*-DD.
- The DOE shall assess the management system described in the PoA design document (CDM- *PoA* -DD) (chap.21-3)'.
- The DOE shall assess any proposed *CPA* that the CME wishes to include in the *PoA*, to determine whether it complies with the eligibility criteria specified in the CDM- *PoA* -DD. The means of validation to determine the compliance with this requirement will be specific to the *PoA*.
- The DOE should consider a desk review of the documentation sufficient to determine compliance in certain instances and also consider follow-up interviews and/or site visits necessary for other types of *PoA*.

Request for issuance of CERs for a PoA [PCP ver.7, para190-194]

- "The DOE shall submit a request for issuance of CERs by using the "CDM programme of activities issuance request form" (F-CDM-**PoA** ISS) only after it verifies that the monitored GHG emission reductions meet the relevant requirements in the PS and certifies the quantity of CERs claimed in the MR, by following the relevant provisions of the VVS and other CDM requirements.
- (a) The request for issuance for a specified monitoring period shall either: i). Relate to all CPAs included in the PoA; or ii). In the case of two separate MRs for a monitoring period, relate to all CPAs included in the batch of CPAs that the request covers, out of the two batches. In this case the same DOE shall submit the request for the two batches; (a)bis The monitoring periods shall be consecutive. CPAs shall be included in issuance requests in a consecutive manner; (a)ter If the PoA applies any of the methodologies listed in appendix 3 as indicating potential accrual of negative emission reductions, a request for issuance for a monitoring period can be submitted only after the CERs, tCERs or ICERs have been issued for all CPAs included in the PoA for the previous monitoring period.
- The CME shall submit a request for forwarding of CERs issued in accordance with the MoC as agreed between PP

Inclusion of CPAs in PoAs [PCP ver.7, para116-122]

- The CME shall forward the completed specific case CPA-DD to any DOE, after having ensured that the CPA and the specific case CPA-DD meet the eligibility criteria for inclusion in the PoA defined in the PoA-DD and its generic CPA-DD. The CME may forward more than one specific case CPA-DD at one time. Only upon the approval of the first specific case CPA-DD corresponding to a generic CPA-DD by the EB, CPAs corresponding to that generic CPA-DD may be included in the registered CDM PoA.
- If the DOE confirms that the CPA meets the eligibility criteria for inclusion in the PoA, it shall include the CPA in the PoA by submitting the specific CPA-DD to the EB via uploading it through a dedicated interface on the UNFCCC CDM website. Such uploads shall be grouped and not occur more frequently than once per month.
- The CPA identified in the specific CPA-DD uploaded by the DOE will be automatically included in the registered CDM PoA and displayed on the view page of that PoA. The secretariat shall automatically notify the DOE, the CME and the DNA of the change in the status of the PoA.
- If an approved baseline and monitoring methodology and/or an approved SB that is applied to the PoA is put on hold or withdrawn for any reason other than for the purpose of including the methodology in a consolidated methodology, no new CPAs shall be included in the PoA
- If the methodology and/or the SB, subsequent to being placed on hold, is revised, the CME shall revise the PoA-DD including updating the eligibility criteria for inclusion of CPAs in the PoA to be in line with the revised methodology and or the SB, and the generic CPA-DD applying the updated eligibility criteria. Such revisions to the PoA-DD and the generic CPA-DD are not required in cases where the methodology is revised or withdrawn to be included in a consolidated methodology without being placed on hold, unless otherwise indicated in the report of the EB meeting at which the EB approved the revised or consolidated methodology.
- Once the revised PoA-DD and generic CPA-DD have been approved by the EB, the inclusion of all new CPAs shall be based on the new version of the generic CPA-DD.
- The CPAs that were included before the methodology was put on hold shall apply the latest version of the generic CPA-DD at the time of the renewal of the crediting period.

21-2. Procedures for programme of activities (PoA)

Application of multiple methodologies in PoAs [PCP ver.7, para58-59]

- If the **PoA** applies only small-scale methodologies, and if "cross effects" as defined in the Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities" exist between the technologies or measures applied, the CME shall propose methods to account for such cross effects and request approval by the EB using the process.
 - Before submitting such request, the CME may seek clarification from the EB on cross effects in the proposed combination of technologies or measures, using
 the procedure "Development, revision and clarification of baseline and monitoring methodologies and methodological tools" by submitting the PoA -DD and
 generic CPA -DD with completed sections for detailed technical descriptions. Where possible, such clarification requests shall be treated under the "fast track"
 of the procedure and the clarification shall be provided within 28 days.
- If the *PoA* applies only large-scale methodologies, or both large-scale and small-scale methodologies, and if the combination is explicitly permitted in the methodologies, the DOE may proceed with the publication of the *PoA* -DD or the request for registration without pre-approval by the EB of the application of the multiple methodologies.

Procedures for review of erroneous inclusion or renewal of crediting period of CPAs [PCP ver.7, para123 - 133]

(1) Requesting a review of erroneous inclusion

- If a DNA involved in the PoA or a EB member identifies information that may disqualify the CPA from inclusion in the PoA or renewal of its crediting period, it/he/she shall request a review of the inclusion of the CPA by notifying the Secretary of the EB within 1 year after the inclusion of the CPA into the PoA or renewal of the crediting period of the CPA, or within 180 days after the first issuance of CERs for that CPA, by submitting a completed (F-CDM-CPAR).
- If the request is received from a EB member, the Chair of the EB decide, within 14 days, whether to add the request for review to the agenda of the next EB meeting.
- If the Chair of the EB decides to add the request to the agenda of the next EB meeting, or if the request has been received from a Party involved, the secretariat shall accordingly notify the CME, the DOE and the DNAs of all Parties involved. The CME and the including DOE shall provide initial comments on the request for review no later than 28 days from the date of notification of the review.

(2) Consideration of a request for review

At the EB meeting, taking into account any comments received from the CME and the including DOE:

> Initiate a full review if it determines that the consideration of the request for review raises concerns regarding the processes used to include CPAs in the PoA

Exclude the CPA from the PoA with immediate effect if it determines that the CPA was erroneously included in the PoA

(4)Consequence of erroneous inclusion

The EB determines that the including DOE failed to adequately assess their compliance with the eligibility criteria, the DOE shall acquire and transfer, within 30 days of the exclusion of the CPAs, an amount of reduced tonnes of carbon dioxide equivalent to the amount of CERs issued for the CPAs as a result of the CPAs having been included, to a cancellation account in the CDM registry maintained by the EB.

(3) Full review of erroneous inclusion

- If the EB initiates the full review, it shall request the secretariat to contract a DOE, that has not performed validation, registration, CPA inclusion or verification functions with regard to this PoA, to review the CPAs. The DOE shall submit a review report to the secretariat <u>within 30 days</u>.
- The EB shall establish an assessment team to analyse the DOE's review report and provide findings and recommendations to the EB <u>within 14 days</u>. Based on this assessment, the assessment team shall make a finding as to
- → a) Whether any CPAs have been erroneously included in the PoA; and
- b) Whether the compliance of each of the CPAs reviewed with the eligibility criteria for inclusion in the PoA was adequately assessed by the including DOE.
- The EB shall consider the DOE's review report and the assessment team's finding at the next EB meeting for which the report and the finding have been made available by the 14-day document deadline.
- The EB shall decide to exclude any of the CPAs from the PoA if it concludes that they have been erroneously included.
- Any CPA that has been excluded shall not be re-included in that or any other PoA, or qualify as a CDM project activity.

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21-3. Standard for the development of eligibility criteria

[EB70 Anx5]

A. Requirements for the development of eligibility criteria

The eligibility criteria shall cover as a minimum the following:

- (a) The geographical boundary of the CPA including any time-induced boundary consistent with the geographical boundary set in the PoA;
- (b) Conditions that avoid double counting of emission reductions like unique identifications of product and end-user locations (e.g. programme logo);
- (c) The specifications of technology/measure including the level and type of service, performance specifications including compliance with testing/certifications;
- (d) Conditions to check the start date of the CPA through documentary evidence:
- (e) Conditions that ensure compliance with applicability and other requirements of single or multiple methodologies applied by CPAs;
- (f) The conditions that ensure that CPAs meet the requirements pertaining to the demonstration of additionality
- (g) The PoA-specific requirements stipulated by the CME including any conditions related to undertaking local stakeholder consultations and environmental impact analysis;

- (h) Conditions to provide an affirmation that funding from Annex I parties, if any, does not result in a diversion of official development assistance;
- (i) Where applicable, target group (e.g. domestic/commercial/industrial, rural/urban, grid-connected/offgrid) and distribution mechanisms (e.g. direct installation);
- (j) Where applicable, the conditions related to sampling requirements for a PoA in accordance with the approved guidelines/standard from the EB pertaining to sampling and surveys;
- (k) Where applicable, the conditions that ensure that every CPA in aggregate meets the small-scale or microscale threshold criteria and remains within those thresholds throughout the crediting period of the CPA;
- (I) Where applicable, the requirements for the debundling check, in case CPAs belong to small-scale or microscale project categories.

Coordinating/Managing Entity (CME)

The CME shall develop eligibility criteria for inclusion of CPAs in the PoA and shall include these criteria in the PoA-DD and demonstrate their usability to assess the inclusion of CPAs in the generic CPA-DD.

The CME shall develop and implement a management system that includes the following made available to the DOE at the time of validation of the PoA:

- (a) A clear definition of roles and responsibilities of personnel involved in the process of inclusion of CPAs, including a review of their competencies;
- (b) Records of arrangements for training and capacity development for personnel;
- (c) A procedure for technical review of inclusion of CPAs;
- (d) A procedure to avoid double counting (e.g. to avoid the case of including a new CPA that has already been registered either as a CDM project activity or as a CPA of another PoA);
- (e) Records and documentation control process for each CPA under the PoA;
- (f) Measures for continuous improvements of the PoA management system;
- (g) Any other relevant elements.

Designated operational entity (DOE)

The validating DOE shall determine whether the eligibility criteria are sufficiently objective and comprehensive to permit the assessment of the inclusion of CPAs in the PoA.

The DOE shall assess the elements of the management system as part of the validation of the PoA or as part of the validation of a CPA inclusion.

CPAs may be included in the PoA on the basis that the DOE has confirmed the eligibility of the CPAs where applicable undertaking sample-based checks in accordance with the guidelines/standard approved by the EB.

For PoAs that include combinations of technologies/measures and/or methodologies, distinct eligibility criteria shall be developed per combination as EB70 Anx5 para29.

B. Requirements for updating eligibility criteria [EB70 Anx5]

- (1) Methodologies applied by the PoA is revised or replaced subsequent to being placed on hold
- the CME shall update the eligibility criteria to the requirements of the revised or new methodologies with immediate effect. A new version of the PoA-DD (e.g. version 1.1) and the generic CPA-DDs containing updated eligibility criteria validated8 by a DOE shall be submitted to the secretariat for approval by the EB.

Once the changes have been approved by the EB, the inclusion of all new CPAs shall be based on the updated eligibility criteria applying the orresponding new generic CPA-DDs;

CPAs that were included before the methodology was put on hold shall apply the revised version of the corresponding generic CPA-DDs only at the time of the renewal of their crediting periods.

(2) The version of the methodologies applied by the PoA is revised without being placed on hold or is withdrawn for the purpose of inclusion in a consolidated methodologies, unless otherwise indicated in the respective report of the meeting of the EB that has approved the new methodologies.

- (3) The boundary of the PoA is amended post-registration to expand the geographic coverage or to include one or more additional host Parties,
 - The CME shall update the eligibility criteria to reflect the consequent changes. A new version of the PoA-DD (e.g. version 1.2) and the generic CPA-DDs containing updated eligibility criteria validated by a DOE shall be submitted to the secretariat for approval by the EB

Once the changes have been approved by the EB, the inclusion of all new CPAs shall be based on the updated eligibility criteria applying the corresponding new generic CPA-DDs

CPAs that were included before the boundary of the PoA was amended shall apply the revised eligibility criteria only at the time of the renewal of their crediting periods.

The revision of the eligibility criteria of a registered PoA may be initiated by the EB at any time during the lifetime of the PoA if an issue related to environment integrity is identified, as follows:

- (a) In the event that the revision of the eligibility criteria of a PoA is requested by the EB, the CME shall update the eligibility criteria to reflect the consequent changes. A new version of the PoA-DD (e.g. version 1.3) and the generic CPA-DDs validated by a DOE shall be submitted to the secretariat for approval by the EB;
- (b) Once the changes have been approved by the EB, the inclusion of all new CPAs shall be based on the updated eligibility criteria applying the corresponding new generic CPA-DDs;
- (c) CPAs that were included before the revision of the eligibility criteria shall apply the revised eligibility criteria only at the time of the renewal of their crediting periods.

At the renewal of a PoA, the CME shall update the eligibility criteria as per the latest revised applicable methodologies. A new version of the PoA-DD (e.g. version 1.4) and the generic CPA-DDs validated9 by a DOE shall be submitted to the secretariat for approval by the EB in accordance with the renewal of PoA process as defined in the PCP.

- (a) Once the changes have been approved by the EB, the inclusion of all new CPAs shall be based on the updated eligibility criteria applying the corresponding new generic CPA-DDs;
- (b) The subsequent CPAs requesting the renewal of the crediting period shall apply the new version of the corresponding generic CPA-DDs.

22. Registry and international transaction log (ITL)

22-1. CDM registry

- ◆ The EB establishes and maintains a CDM registry to ensure the accurate accounting of the issuance, holding, transfer and acquisition of CERs by non-Annex I Parties. [CMP/2005/8/Ad1, p27 para1-2]
 - The EB identifies a registry administrator to maintain the registry under its authority
 - The CDM registry is in the form of a standardized electronic database, which enables the accurate, transparent and efficient exchange of data between national registries, the CDM registry and the international transaction log.
- ◆ The CDM registry will have the following accounts.
- (1) One pending account for the EB, into which CERs are issued before being transferred to other accounts. [CMP/2005/8/Ad1, p27 para3(a)]
- (2) Holding accounts for non-Annex I Party of hosting a CDM project activity or requesting an account. [CMP/2005/8/Ad1, p27 para3(b)]
- (3) Cancellation accounts for excess CERs, to cancel KP units equal to excess CERs issued, as determined by the EB.
 [CMP/2005/8/Ad1, p27 para3(c)]

- (4) Cancellation account for tCERs and ICERs, that have expired in a holding account of the CDM registry, and ICERs that have become ineligible. [CMP/2005/8/Ad1, p80 para3]
- (5) Accounts for the share of proceeds, to hold and transfer CERs corresponding to the SOP-Adaptation.

 [CMP/2005/8/Ad1, p27 para3(d)]
- (6) Voluntary cancellation account for the cancellation of CERs in the CDM registry for voluntary purposes. [EB75 Anx34 para1]
- ◆ Accounts described in (2)(3)(5) above may have multiple accounts.
 - Each account will have a unique account number comprising a Party/organization identifier and a number unique to that account. [CMP/2005/8/Ad1, p27 para5]
- ♦ KP units transferred to a cancellation account may not be further transferred or used for the purpose of demonstrating the compliance of a Party with its commitment.
- ◆ Each CER has a unique serial number and be held in only one account in one registry at a given time. [CMP/2005/8/Ad1, p27 para4]
- ◆ CERs transferred to the voluntary cancellation account in the CDM Registry may not be transferred further to any other account in any registry. [EB75 Anx34 para5]

Publicly accessible information through the CDM registry

The CDM registry shall make non-confidential information publicly available through the Internet. [CMP/2005/8/Ad1, p28 para9-12]

- Up-to-date information for account name, representative identifier,
 Party/organization identifier, etc for each account.
- ◆CDM project activity information including project name, years of CER issuance, operational entities involved, downloadable documentation to be made publicly available, etc.
- Holding and transaction information relevant to the CDM registry, by serial number, for each calendar year

Monthly report [EB21 Rep. para70]

The CDM registry will provide the monthly reports to DNAs of respective Parties involved.

22-2. National registry

- ◆ Each Annex I Party must establish and maintain a national registry to ensure the accurate accounting of the issuance, holding, transfer, acquisition, cancellation and retirement of ERUs, CERs, AAUs and RMUs and the carry-over of ERUs, CERs and AAUs. [CMP/2005/8/Ad2, p28 para17]
 - ⇒ Each Party designates an organization as its registry administrator to maintain the national registry of that Party. [CMP/2005/8/Ad2, p28 para18] ⇒ Any 2 or more Parties may voluntarily maintain their respective national registries in a consolidated system, provided that each national registry remains distinct.
 - A national registry is in the form of a standardized electronic database. The accurate, transparent and efficient exchange of data between national registries, the CDM registry and the transaction log should be ensured. [CMP/2005/8/Ad2, p28 para19]
- ♦ Each national registry has the following accounts in order to account for KP units (AAUs, ERUs, CERs, tCERs, ICERs and RMUs): [CMP/2005/8/Ad2, p28 para21]
 - (1) Holding account for the Party
- (3) Cancellation account for LULUCF activities, to cancel the KP units in case such activities result in a net source of GHG emissions.
- (2) Holding account for each legal entity authorized by the Party, to hold KP units under its responsibility.
- (4) Cancellation account for non compliance, to cancel the KP units equal to 1.3 times the amount of excess emissions in case the Party was not in compliance in the 1st commitment period
- (5) Cancellation account for other cancellations by the Party, to cancel KP units for purposes of cancellations other than (3) and (4) above.

- (6) tCER replacement account, to cancel AAUs, CERs, ERUs, RMUs and/or tCERs for the purposes of replacing tCERs prior to expiry. [CMP/2005/8/Ad1. p71 para43]
- (7) ICER replacement account, to cancel AAUs, CERs, ICERs, ERUs and/or RMUs for the purposes of replacing ICERs. [CMP/2005/8/Ad1, p71 para47]
- (8) Retirement account,
 used to retire KP units valid for that
 commitment period for use towards meeting
 the Party's commitments.
 [CMP/2005/8/Ad2, p27 para14]
- For accounts described in (1) (2)(3)(5), multiple accounts may be established.
- Accounts described in (3) (4) (5) (6) (7) (8) should be established for each commitment period.
- Each account must have a unique account number comprising a Party identifier and a unique number. [CMP/2005/8/Ad2, p28 para22]
- ◆ KP units transferred to cancellation accounts may not be further transferred or carried over to the subsequent commitment period, or be used for the purpose of demonstrating the compliance of a Party. [CMP/2005/8/Ad2. p30 para35]
- ♦ KP units transferred to the retirement account may not be further transferred or carried over to the subsequent commitment period.

 [CMP/2005/8/Ad2, p30 para35]

22-2. National registry

Serial number of KP units *Below are images for illustrative purposes

- ♦ Every t-CO₂ of KP units is given a unique serial number.
- ♦ Each KP unit shall be held in only one account in one registry at a given time.

[CMP/2005/8/Ad2, p28 para20]

Serial Number Identifiers

1	2	3	4	5	6	7	8	9	10	11
XX	1		000,000,000,000,001	999,999,999,999	01	01	1	0000001	1	XX/YY/ZZ

	Identifier	Range or Codes					
1	Originating Registry	Two-letter country codes in ISO3166, as of 01 January 2005					
2	Unit Type	1 = AAU, 2 = RMU, 3 = ERU converted from AAU, 4 = ERU converted from RMU, 5 = CER, 6 = tCER, 7 = ICER					
3	Supplementary Unit Type	Blank for Kyoto-only Units, or as defined by STL (supplementary transaction log)					
4	Unit Serial Block Start	Unique numeric values assigned by registry from 1 - 999,999,999,999,999					
5	Unit Serial Block End	Unique numeric values assigned by registry from 1 - 999,999,999,999,999					
6	Original Commitment Period	1 - 99					
7	Applicable Commitment Period	1 - 99					
8	LULUCF Activity	1 = Afforestation and reforestation, 2 = Deforestation, 3 = Forest management, 4 = Cropland management, 5 = Grazing land management, 6 = Revegetation					
9	Project Identifier	Numeric value assigned by registry for Project, unique per originating registry. The Project Number is the combination of the Originating Registry and the Project Identifier.					
10	Track	1 or 2					
11	Expiry Date	Expiry Date for tCERs or ICERs					

Publicly accessible information through national registry

Each national registry shall make nonconfidential information publicly available through the Internet.

[CMP/2005/8/Ad2, p32 para44-48]

- This also applies to information on accounts held by legal entities.
- ♦Information on accounts
- The holder of the account, representative name and contact information of the account holder, etc.
- ◆Information on the total quantity of KP units
- ♦Holdings of KP units in each account
- ♦Information on the JI project
- Project name, location, years of ERU issuance, relevant publicly available documentation.
- ◆A list of legal entities authorized by the Party to participate to the Kyoto Mechanisms.

[Data exchange standards for registry system under the Kyoto Protocol, technical specifications (Version 1.1.2), 7 April, 2009, p F-2]

22-3. International transaction log (ITL)

- ◆ The UNFCCC secretariat establishes and maintain an international transaction log (ITL) to verify the validity of transactions, including issuance, transfer and acquisition between registries, cancellation, expiration and replacement (in case of tCER and ICER), retirement and the carry-over of KP units. [CMP/2005/8/Ad2, p31 para38] [CMP/2005/8/Ad1, p73 para55-56]
 - The ITL is in the form of a standardized electronic database. The accurate, transparent and efficient exchange of data between national registries, the CDM registry and the ITL should be ensured
- ◆ The ITL conducts the following automated check. [CMP/2005/8/Ad2, p31 para42]

(1) All transactions (issuance, transfer and acquisition between registries, cancellation, retirement and carry-over)

- units previously retired or cancelled; units existing in more than one registry; units for which a previously identified discrepancy has not been resolved;
- units improperly carried over; units improperly issued;
- The authorization of legal entities involved to participate in the transaction.

(2) Transfers between registries

- The eligibility of Parties involved in the transaction to participate in the KM;
- infringement upon the commitment period reserve of the transferring Party.

(3) Acquisitions of CERs from A/R CDM projects

infringement of the limits (limitation for net acquisitions of tCERs and ICERs).

(4) Retirement of CERs

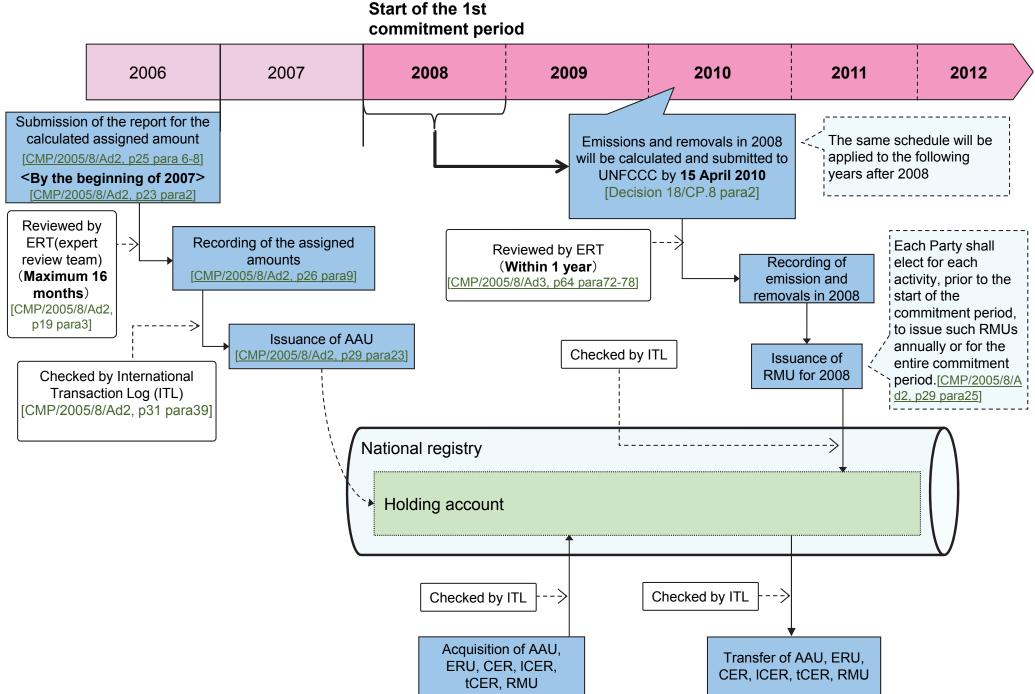
- the eligibility of the Party involved to use CERs to contribute to its compliance.
- ◆ Prior to the completion of any transactions, the initiating registry sends a record of the proposed transaction to the ITL and, in the case of transfers to another registry, to the acquiring national registry. [CMP/2005/8/Ad2, p31 para41]
- ◆ The ITL shall records, and makes publicly available, all transaction records and the date and time of completion of each transaction.

 [CMP/2005/8/Ad2, p32 para43(d)]
- ◆ The ITL notifies the Annex I Party that a replacement of the tCER or ICER has to occur, <u>1 month</u> prior to the expiry of each tCER or ICER. [CMP/2005/8/Ad1, p73 para55]
 - Where a Annex I Party does not replace tCERs or ICERs in accordance with the rules, the ITL shall forward a record of non-replacement to the secretariat, for consideration as part of the review process for the relevant Party, under Art.8 of the KP, to the EB and to the Party concerned. [CMP/2005/8/Ad1, p73 para56]

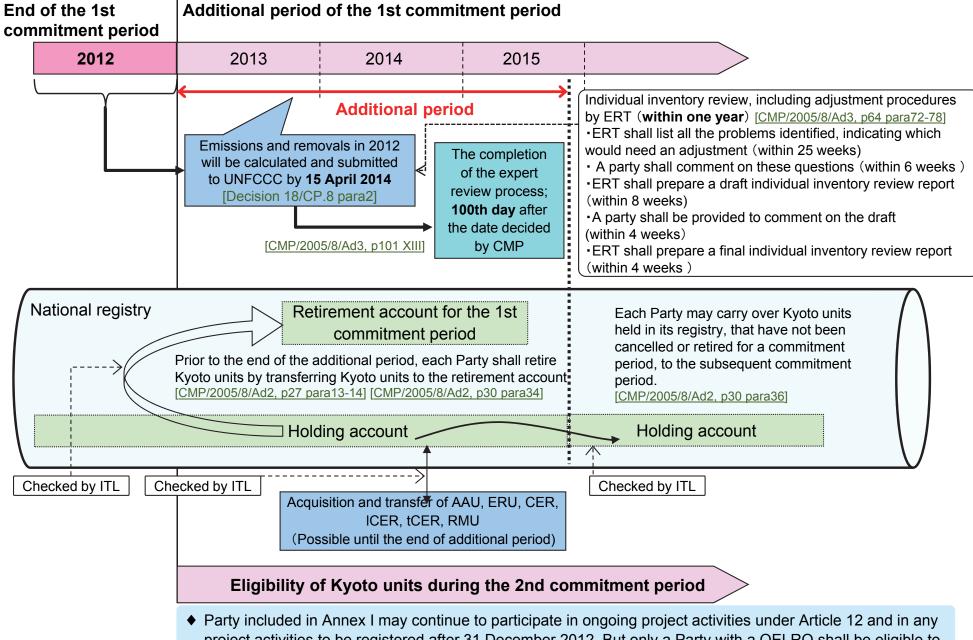
BOX: In case a discrepancy is notified in the automated check by the ITL

- The initiating registry shall terminate the transaction, notify the ITL and, in the case of transfers to another registry, the acquiring registry of the termination. The ITL shall forward a record of the discrepancy to the secretariat for consideration as part of the review process for the relevant Party or Parties under Article 8. [CMP/2005/8/Ad2, p32 para43(a)]
- In the event of a failure by the initiating registry to terminate the transaction, KP units involved in the transaction shall not be valid for use towards compliance with commitments, until the problem has been corrected and questions have been resolved.
 - ⇒ The Party shall perform any necessary corrective action within 30 days. [CMP/2005/8/Ad2, p32 para43(b)]

22-4. Issuance, transfer and acquisition of Kyoto units



22-5. Retirement, carry-over of Kyoto units and the 2nd commitment period



- project activities to be registered after 31 December 2012 But only a Party with a QELRO shall be eligible to transfer and acquire CERs. [FCCC/KP/CMP/2012/L.9 para13]
- ◆ As of 1 January 2013, only a Party with a commitment shall be eligible to transfer and acquire CERs and AAUs, ERUs and RMUs valid for the second commitment period under Article 17 of the Kyoto Protocol para14 [FCCC/KP/CMP/2012/L.9 para14]

Attachment 1. Approved methodologies (AMs) and tools

Methodological Tools for Emission Reduct	ion CDM Project Activities
Tool for the demonstration and assessment of additionality (ver.7) [EB70 Anx8]	This tool provides for a step-wise approach to demonstrate and assess additionality.(Att.3)
2. Combined tool to identify the baseline scenario and demonstrate additionality (ver.5) [EB70Anx9]	This tool provides for a step-wise approach to identify the baseline scenario and simultaneously demonstrate additionality.
Tool to calculate project or leakage CO ₂ emissions from fossil fuel combustion (ver.2) [EB41 Anx11]	This tool provides procedures to calculate project and/or leakage CO_2 emissions from the combustion of fossil fuels. It can be used in cases where CO_2 emissions from fossil fuel combustion is calculated based on the quantity of fuel combusted and its properties.
4. Emissions from solid waste disposal sites (ver.6.0.1) [EB66 Anx46]	This tool provides procedures to calculate baseline, project or leakage emissions of methane from solid waste disposed or prevented from disposal at a SWDS
5. Tool to calculate baseline, project and/or leakage emissions from electricity consumption (ver.1) [EB39 Anx7]	The tool may, for example, be used in methodologies where auxiliary electricity is consumed in the project and/or the baseline scenario. The tool can also be applied in situations where electricity is only consumed in the baseline or in the project or as leakage source.
6. Project emissions from flaring (ver.2) [EB68 Anx15]	This tool provides procedures to calculate project emissions from flaring of a residual gas.
7. Tool to calculate the emission factor for an electricity system (ver.4) [EB75 Anx15]	This methodological tool determines the ${\rm CO}_2$ emission factor for the displacement of electricity generated by power plants in an electricity system.
8. Tool to determine the mass flow of a greenhouse gas in a gaseous stream (ver.2) [EB61 Anx11]	This tool provides procedures to determine the mass flow of a greenhouse gas in a gaseous stream. The tool can be used to determine the mass flow of the following gases: CO ₂ , CH ₄ , N ₂ O, SF ₆ and/or PFCs.
Tool to determine the baseline efficiency of thermal or electric energy generation systems (ver.1) [EB48 Anx12]	The tool provides various options to determine the baseline efficiency of an energy generation system with the purpose of estimating baseline emissions.
10.Tool to determine the remaining lifetime of equipment (ver.1) [EB50 Anx15]	This tool may, for example, be used for project activities which involve the replacement of existing equipment with new equipment or which retrofit existing equipment as part of energy efficiency improvement activities.
11. Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period (ver.3.0.1) [EB66 Anx47]	This tool provides a stepwise procedures to assess the continued validity of the baseline and to update the baseline at the renewal of a crediting period.
12.Project and leakage emissions from road transportation of freight (ver.1.1.0) [EB70 Anx23]	This tool provides procedures to estimate project and/or leakage CO2 emissions from road transportation of freight by vehicles.
13. Project and leakage emissions from composting (ver.1) [EB65 Anx9]	This tool provides procedures to calculate project and/or leakage emissions from composting and co- composting. Typical applications of the tool include projects composting municipal solid wastes, agricultural wastes and digester.
14. Project and leakage emissions from anaerobic digesters (ver.1) [EB66 Anx32]	This tool provides procedures to calculate project and leakage emissions associated with anaerobic digestion in an anaerobic digester. The tool is not applicable to other systems where waste may be decomposed anaerobically, for instances stockpiles, SWDS or un-aerated lagoons.
15. Upstream leakage emissions associated with fossil fuel use (ver.1) [EB69 Anx12]	This tool provides a procedure to calculate leakage upstream emissions associated with the use of fossil fuels.
16. Project emissions from cultivation of biomass (ver.1) [EB75 Anx11]	This tool provides steps to determine the project emissions resulting from cultivation of biomass in a dedicated plantation.
17. Baseline emissions for modal shift measures in inter-urban cargo transport (ver.1) [EB79 Anx9]	This tool provides methodological guidance to determine baseline emissions for transport projects implementing modal shift measures in inter-urban cargo transport.
18. Methodological tool: Baseline emissions for modal shift measures in urban passenger transport (ver.1) [EB79 Anx10]	The tool provides methodological guidance to estimate baseline emissions for transport projects implementing modal shift measures in urban passenger transport.

Key word	Number	Ver.	Name of the Approved Methodology	Tools*	Valid from	Reg*
	ACM0002	15	Grid-connected electricity generation from renewable sources	1,2,3,7,10 ,11	01-Jun-14	3209
	AM0019	2	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	1	18-May-06	0
	AM0026	3	Methodology for zero-emissions grid-connected electricity generation from renewable sources in Chile or in countries with merit order based dispatch grid	1,7	2-Nov-07	6
	AM0072	3	Fossil Fuel Displacement by Geothermal Resources for Space Heating	2,3,5	31-May-13	2
	AM0100	1	Integrated Solar Combined Cycle (ISCC) projects	2,3,7,11	25-Nov-11	0
Danawahla	AM0103	2	Renewable energy power generation in isolated grids	2,3	11-May-12	0
Renewable energy	AMS-I.A	16	Electricity generation by the user	5	28-Sep-12	37
	AMS-I.B	11	Mechanical energy for the user with or without electrical energy	5	08-Nov-13	0
	AMS-I.C	20	Thermal energy production with or without electricity	3,4,5,6,9, 12,16	01-Jun-14	311
	AMS-I.D	17	Grid connected renewable electricity generation	3,7	17-Jun-11	2087
	AMS-I.F	2	Renewable electricity generation for captive use and mini-grid	3,5	17-Jun-11	45
	AMS-I.J	1	Solar water heating systems (SWH)		15-Apr-11	0
	AMS-I.K	1	Solar cookers for households	5	02-Mar-12	0
	AMS-I.L	2	Electrification of rural communities using renewable energy	0	01-Jun-14	0
	ACM0006	12.1	Consolidated methodology for electricity and heat generation from biomass	1,3,4,5,7, 9,10,11, 12, AR13	02-Mar-12	146
	ACM0018	3	Electricity generation from biomass residues in power-only plants	3,4,5,7,11 ,12	08-Nov-13	84
	ACM0020	1	Co-firing of biomass residues for heat generation and/or electricity generation in grid connected power plants	2,3,7,9	29-Sep-11	0
Biomass	AM0007	1	Analysis of the least-cost fuel option for seasonally-operating biomass cogeneration plants		13-Jun-04	0
	AM0036	4	Fuel switch from fossil fuels to biomass residues in heat generation equipment	1,3,4,7,9, 10,11,12	2-Mar-12	8
	AM0042	2.1	Grid-connected electricity generation using biomass from newly developed dedicated plantations	1,7	2-Nov-07	0
	AM0094	2	Distribution of biomass based stove and/or heater for household or institutional use	2,3,5,11	23-Nov-12	0
	AMS-I.E	5	Switch from non-renewable biomass for thermal applications by the user		3-Aug-12	23

Key word	Number	Ver.	Name of the Approved Methodology	Tools*	Valid from	Reg*
Biomass	AMS-III.E	16	Avoidance of methane production from decay of biomass through controlled combustion, gasification or mechanical/thermal treatment		31-Jul-09	37
	AMS-III.AS	1	Switch from fossil fuel to biomass in existing manufacturing facilities for non-energy applications	3,5,AR13	18-Feb-11	5
	ACM0012	4	Consolidated baseline methodology for GHG emission reductions from waste energy recovery projects	3,7,9,10	15-Apr-11	142
	AM0009	7	Recovery and utilization of gas from oil fields that would otherwise be flared or vented	1,2,3,5,11	08-Nov-13	22
	AM0037	2.1	Flare (or vent) reduction and utilization of gas from oil wells as a feedstock	1,3,5,7	28-Mar-08	2
	AM0055	2.1	Recovery and utilization of waste gas in refinery or gas plant	2,5,9	3-Jun-11	6
	AM0066	2	GHG emission reductions through waste heat utilization for pre-heating of raw materials in sponge iron manufacturing process	2,3,5,7	5-Dec-08	1
	AM0074	3	Methodology for new grid connected power plants using permeate gas previously flared and/or vented	1,3,5,7	11-May-12	1
Waste gas	AM0077	1	Recovery of gas from oil wells that would otherwise be vented or flared and its delivery to specific end-users	1,2,3,5	12-Feb-09	C
or heat	AM0081	1	Flare or vent reduction at coke plants through the conversion of their waste gas into dimethyl ether for use as a fuel	1,3,5	27-May-09	(
	AM0095	1	Waste gas based combined cycle power plant in a Greenfield iron and steel plant	1,7,11	29-Sep-11	(
	AM0098	1	Utilization of ammonia-plant off gas for steam generation	2,3,5,9	29-Sep-11	(
	AM0102	1	Greenfield cogeneration facility supplying electricity and steam to a Greenfield Industrial Consumer and exporting excess electricity to a grid and/or project customer(s)	2,3,7,10,11	02-Mar-12	С
	AMS-II.I	1	Efficient utilization of waste energy in industrial facilities	2	16-May-08	
	AMS-III.P	1	Recovery and utilization of waste gas in refinery facilities	3,5	19-Oct-07	5
	AMS-III.Q	5	Waste energy recovery (gas/heat/pressure) projects	3,5,7,9	28-Sep-12	45
	AMS-III.BI.	1	Flare gas recovery in gas treating facilities	3,5,7,11	04-Oct-13	(
	ACM0009	4	Consolidated baseline and monitoring methodology for fuel switching from coal or petroleum fuel to natural gas	1	20-Jul-12	5
	ACM0011	2.2	Consolidated baseline methodology for fuel switching from coal and/or petroleum fuels to natural gas in existing power plants for electricity generation	1,2,3,7	2-Nov-07	3
Fuel switch	AM0014	4	Natural gas-based package cogeneration	1	10-Aug-07	6
i dei switch	AM0029	3	Baseline Methodology for Grid Connected Electricity Generation Plants using Natural Gas	1,7	30-May-08	
	AM0048	3.1	New cogeneration project activities supplying electricity and heat to multiple costumers	1,3,7	26-Feb-10	
	AM0099	1	Installation of a new natural gas fired gas turbine to an existing CHP plant	1,3,7,9,10,1 1	25-Nov-11	
	AMS-III.B	17	Switching fossil fuels	9	21-Feb-14	24

Attachment 1. AMs and tools

Number Ver. Name of the Approved Methodology Tools* Valid from				Attavii	mont i. A	ivio arra	.001
AMS-III.AC 1 Electricity and/or heat generation using fuel cell 2,7 28-May.09 AMS-III.AG 2 Switching from high carbon intensive grid electricity to low carbon intensive fossil fuel 5,7 11-Jun-10 Shift from high carbon intensive fuel mix ratio to low carbon intensive fuel mix ratio 16-0ct-89 AMS-III.AM 1 Shift from high carbon intensive fuel mix ratio to low carbon intensive fuel mix ratio 18-0ct-89 AMS-III.AM 2 Fossil fuel switch in a cogeneration/frigeneration system 3 4-Mar-11 AMS-III.AN 2 Fossil fuel switch in existing manufacturing industries 3 4-Mar-11 ACM0007 6-1 Conversion from single cycle to combined cycle power generation 2,3,7,10 11-May-12 ACM0013 5 Construction and operation of new grid connected fossil fuel fired power plants using a less GHG intensive technology in a boiler 1,5,9,10 4-0ct-13 ACM0023 1 Introduction of an efficiency improvement technology in a boiler 1,5,9,10 4-0ct-13 AM0017 2 Steam system efficiency improvement technology in a boiler 1,5,9,10 4-0ct-13 AM0018 3 Baseline methodology for steam optimization systems 2,3,5,11 2-Mar-12 Energy efficiency - supply side 2 Energy efficiency for provement projects - boiler rehabilitation or replacement in industrial and district heating sectors 1,7,10 3-Jun-11 Energy efficiency - supply side 2 Grid connection of isolated electricity systems 1,7,10 23-Nov-07 AM0042 2 Grid connection of isolated electricity systems 1,7,10 27-Feb-99 AM0055 2 Grid connection of isolated electricity systems 1,7,10 27-Feb-99 AM0056 3 1 Efficiency improvement by boiler replacement or rehabilitation and optional fuel switch in fossil fuel-fired steam boiler systems 1,2,3,7 11-Jun-09 AM0058 3.1 Introduction of a new primary district heating system 1,2,3,7 13-May-10 AM0067 2 Energy efficiency improvements of a power plant through retrofitting turbines 2,3,7,9 13-May-10 AM0067 2 Energy efficiency improvements of a power plant through retrofitting turbines 2,3,7,9 13-May-10	Key word	Number	Ver.	Name of the Approved Methodology	Tools*	Valid from	Re g*
Fuel switch AMS-III.AG 2 Switching from high carbon intensive grid electricity to low carbon intensive fossil fuel AMS-III.AH 1 Shift from high carbon intensive fuel mix ratio to low carbon intensive fuel mix ratio 16.0ct.09 AMS-III.AH 2 Fossil fuel switch in a cogeneration/trigeneration system AMS-III.AN 2 Fossil fuel switch in existing manufacturing industries 3 4-Mar-11 AMS-III.AN 2 Fossil fuel switch in existing manufacturing industries 3 4-Mar-11 AMS-III.AN 2 Fossil fuel switch in existing manufacturing industries 3 4-Mar-11 AMS-III.AN 2 Fossil fuel switch in existing manufacturing industries 3 4-Mar-11 AMS-III.AN 3 4-Mar-11 ACM0007 4 Conversion from single cycle to combined cycle power generation 2,3,7.10 11-May-12 ACM0021 1 Reduction of emissions from charcoal production by improved kiln design and/or abatement of methane ACM0023 1 Introduction of an efficiency improvement technology in a boiler AM0017 2 Steam system efficiency improvements by replacing steam traps and returning condensate AM0018 3 Baseline methodology for steam optimization systems AM0048 3 Methodology for improved electrical energy efficiency of an existing submerged electric are furnace used for the production of silicon and ferro alloys Energy efficiency-supply side AM0044 2 Energy efficiency improvement projects - boiler rehabilitation or replacement in industrial and district heating sectors AM0045 2 Grid connection of isolated electricity systems AM0046 3 Methodology for gas based energy generation in an industrial facility 1,7 27-Feb-09 1,7 2-Nov-07 2,8 2-Jul-07 2,8 3-Jul-07 2,9 3-Jul-		AMS-III.Z	5	Fuel Switch, process improvement and energy efficiency in brick manufacture	3,5, 16	01-Jun-14	6
Fuel switch AMS-III.AH 1 Shift from high carbon intensive fuel mix ratio to low carbon intensive fuel mix ratio 16.0ct.09 AMS-III.AM 2 Fossil fuel switch in a cogeneration/trigeneration system 3 4.Mar.11 AMS-III.AN 2 Fossil fuel switch in existing manufacturing industries 3 4.Mar.11 AMS-III.AN 3 Destruction of hazardous waste using plasma technology including energy recovery 3, 5 4.0ct.13 ACM0013 5 Construction and operation of new grid connected fossil fuel fired power plants using a less GHG intensive technology ACM0021 1 Reduction of emissions from charcoal production by improved kiln design and/or 11 throduction of an efficiency improvement technology in a boiler 1,5,9,10 4.0ct.13 ACM0013 2 Steam system efficiency improvement technology in a boiler 1,5,9,10 4.0ct.13 AM0017 2 Steam system efficiency improvement technology in a boiler 1,5,9,10 4.0ct.13 AM0018 3 Baseline methodology for steam optimization systems 2,3,5,11 2.Mar.12 AM0038 3 Methodology for improved electrical energy efficiency of an existing submerged electric arc furnace used for the production of silicon and ferro alloys Energy efficiency-supply side AM0045 2 Grid connection of isolated electricity systems 1,7,10 3.Jun-11 Energy efficiency supply side AM0045 2 Grid connection of isolated electricity systems 1,7,10 3.Jun-11 Energy efficiency supply side AM0045 2 Grid connection of isolated electricity systems 1,7,10 3.Jun-11 Energy efficiency improvement projects - boiler rehabilitation or replacement in industrial and district heating sectors 1,7,10 3.Jun-11 Energy efficiency improvement by boiler rehabilitation and optional fuel switch in fossil fuel-fired steam boiler systems 1,7,10 2.Nov-07 Energy efficiency improvement by boiler replacement or rehabilitation and optional fuel switch in fossil fuel-fired steam boiler systems 1,2,3,7 11.Jun-09 Energy efficiency improvement by boiler replacement or rehabilitation and optional fuel switch in fossil fuel-fired steam boiler systems 1,2,3,7 11.Jun-09 Energy efficiency improveme		AMS-III.AC	1	Electricity and/or heat generation using fuel cell	2,7	28-May-09	C
AMS-III.AM 2 Fossil fuel switch in a cogeneration/trigeneration system 3 4-Mar-11 AMS-III.AM 2 Fossil fuel switch in existing manufacturing industries 3 4-Mar-11 1 Destruction of hazardous waste using plasma technology including energy recovery 3, 5 4-Oct-13 ACM0007 6.1 Conversion from single cycle to combined cycle power generation 2,3,7,10 11-May-12 ACM0003 5 Construction and operation of new grid connected fossil fuel fired power plants using a less GHG intensive technology 1,7,11 13-Sep-12 ACM0021 1 Reduction of emissions from charcoal production by improved kiln design and/or abatement of methane 11 11-May-12 ACM0023 1 Introduction of an efficiency improvement technology in a boiler 1,5,9,10 4-Oct-13 AM0017 2 Steam system efficiency improvements by replacing steam traps and returning condensate AM0018 3 Baseline methodology for steam optimization systems 2,3,5,11 2-Mar-12 AM0038 3 Methodology for improved electrical energy efficiency of an existing submerged electric arc furnace used for the production of silicon and ferro alloys 1,7,10 3-Jun-11 arc furnace used for the production of silicon and ferro alloys 1,7,10 3-Jun-11 and district heating sectors 1,10,11 23-Nov-12 AM0045 2 Grid connection of isolated electricity systems 1,17 2-Nov-07 AM0049 3 Methodology for gas based energy generation in an industrial facility 1,7 2-Nov-07 Support System optimization 2,1 Introduction of a new primary district heating system 1,2,3,7 11-Jun-09 AM0066 2 Energy efficiency improvement by boiler replacement or rehabilitation and optional fuel switch in fossil fuel-fired steam boiler systems 1,2,3,7 11-Jun-09 AM0067 2 Energy efficiency improvements of a power plant through retrofitting furbines 2,3,7 13-May-10 AM0067 2 Energy efficiency improvements of a power plant through retrofitting furbines 2,3,7 13-May-10 AM0067 2 Construction of a new natural gas power pl		AMS-III.AG	2	Switching from high carbon intensive grid electricity to low carbon intensive fossil fuel	5,7	11-Jun-10	1
AMS-III.AN 2 Fossil fuel switch in existing manufacturing industries 3 4-Mar-11 AMS-III.BJ. 1 Destruction of hazardous waste using plasma technology including energy recovery 3, 5 4-Oct-13 ACM0007 6.1 Conversion from single cycle to combined cycle power generation 2,3,7,10 11-May-12 using a less GHG intensive technology 1,7,11 13-Sep-12 us	Fuel switch	AMS-III.AH	1	Shift from high carbon intensive fuel mix ratio to low carbon intensive fuel mix ratio		16-Oct-09	3
AMS-III.B 1 Destruction of hazardous waste using plasma technology including energy recovery ACM0007 6.1 Conversion from single cycle to combined cycle power generation 2,3,7,10 11-May-12 Construction and operation of new grid connected fossil fuel fired power plants using a less GHG intensive technology ACM0021 1 Reduction of emissions from charcoal production by improved kiln design and/or abatement of methane ACM0023 1 Introduction of an efficiency improvement technology in a boiler AM0017 2 Steam system efficiency improvements by replacing steam traps and returning condensate AM0018 3 Baseline methodology for steam optimization systems AM0038 3 Methodology for improved electrical energy efficiency of an existing submerged electric arc furnace used for the production of silicon and ferro alloys AM0042 2 Energy efficiency improvement projects - boiler rehabilitation or replacement in industrial and district heating sectors Supply side AM0045 2 Grid connection of isolated electricity systems AM0040 3 Methodology for gas based energy generation in an industrial facility AM0040 3 Methodology for gas based energy generation in an industrial facility AM0040 4 Encreased electricity generation from existing hydropower stations through Decision Support System optimization AM0050 1 Efficiency improvement by boiler replacement or rehabilitation and optional fuel switch in fossil fuel-fired steam boiler systems AM0051 2.1 Methodology for rehabilitation and/or energy efficiency improvement in existing power plants AM0062 2 Energy efficiency improvements of a power plant through retrofitting turbines 2,3,7,9 13-Aug-10 AM0067 2 Construction of a new natural gas power plant supplying electricity to the grid or a single		AMS-III.AM	2	Fossil fuel switch in a cogeneration/trigeneration system	3	4-Mar-11	1
ACM0007 6.1 Conversion from single cycle to combined cycle power generation 2,3,7,10 11-May-12 Construction and operation of new grid connected fossil fuel fired power plants using a less GHG intensive technology 1,7,11 13-Sep-12 2,35,10 11-May-12 14-Oct-13 15-May-12 15-May-1		AMS-III.AN	2	Fossil fuel switch in existing manufacturing industries	3	4-Mar-11	1
ACM0013 5 Construction and operation of new grid connected fossil fuel fired power plants using a less GHG intensive technology ACM0021 1 Reduction of emissions from charcoal production by improved kiln design and/or abatement of methane ACM0023 1 Introduction of an efficiency improvement technology in a boiler 1,5,9,10 4-Oct-13 AM0017 2 Steam system efficiency improvements by replacing steam traps and returning condensate AM0018 3 Baseline methodology for steam optimization systems 2,3,5,11 2-Mar-12 AM0038 3 Methodology for improved electrical energy efficiency of an existing submerged electric arc furnace used for the production of silicon and ferro alloys Energy efficiency - am0044 2 Energy efficiency improvement projects - boiler rehabilitation or replacement in industrial and district heating sectors AM0049 2 Grid connection of isolated electricity systems 1,7 2-Nov-07 AM0049 3 Methodology for gas based energy generation in an industrial facility 1,7 27-Feb-09 Increased electricity generation from existing hydropower stations through Decision 5 Support System optimization 2,3 26-Jul-07 AM0056 1 Efficiency improvement by boiler replacement or rehabilitation and optional fuel switch in fossil fuel-fired steam boiler systems 1,2,3,7 11-Jun-09 AM0058 3.1 Introduction of a new primary district heating system 1,2,3,7 11-Jun-09 AM0061 2.1 Methodology for rehabilitation and/or energy efficiency improvement in existing power plants AM0062 2 Energy efficiency improvements of a power plant through retrofitting turbines 2,3,7,9 13-Aug-10		AMS-III.BJ.	1	Destruction of hazardous waste using plasma technology including energy recovery	3, 5	4-Oct-13	C
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ACM0023 1 Introduction of an efficiency improvement technology in a boiler 1,5,9,10 4-Oct-13 AM0017 2 Steam system efficiency improvements by replacing steam traps and returning condensate 2,3,5,11 2-Mar-12 AM0018 3 Baseline methodology for steam optimization systems 2,3,5,11 2-Mar-12 AM0038 3 Methodology for improved electrical energy efficiency of an existing submerged electric arc furnace used for the production of silicon and ferro alloys 1,7,10 3-Jun-11 Energy efficiency - supply side AM0044 2 Energy efficiency improvement projects - boiler rehabilitation or replacement in industrial and district heating sectors 1,10,11 23-Nov-12 and district heating sectors 1,10,11 27-Feb-09 AM0049 3 Methodology for gas based energy generation in an industrial facility 1,7 27-Feb-09 AM0052 2 Grid connection of isolated electricity systems 1,7 2-Nov-07 AM0055 1 Efficiency improvement by boiler replacement or rehabilitation and optional fuel switch in fossil fuel-fired steam boiler systems 1,2,3,7 3-Mov-08 AM0061 2.1 Methodology for rehabilitation and/or energy efficiency improvement in existing power plants 1,3,7,9 13-Aug-10 AM0062 2 Energy efficiency improvements of a power plant through retrofitting turbines 2,3,7,9 13-Aug-10 AM0087 2 Construction of a new natural gas power plant supplying electricity to the grid or a single 1,3,7,9 13-Aug-10		ACM0013	5		1,7,11	13-Sep-12	6
AM0017 2 Steam system efficiency improvements by replacing steam traps and returning condensate AM0018 3 Baseline methodology for steam optimization systems AM0038 3 Methodology for improved electrical energy efficiency of an existing submerged electric arc furnace used for the production of silicon and ferro alloys AM0044 2 Energy efficiency improvement projects - boiler rehabilitation or replacement in industrial and district heating sectors AM0045 2 Grid connection of isolated electricity systems AM0049 3 Methodology for gas based energy generation in an industrial facility AM0040 2 Increased electricity generation from existing hydropower stations through Decision Support System optimization AM0056 1 Efficiency improvement by boiler replacement or rehabilitation and optional fuel switch in fossil fuel-fired steam boiler systems AM0058 3.1 Introduction of a new primary district heating system AM0058 2.1 Methodology for rehabilitation and/or energy efficiency improvement in existing power plants AM0062 2 Energy efficiency improvements of a power plant through retrofitting turbines AM0087 2 Construction of a new natural gas power plant supplying electricity to the grid or a single 1.3.7.9 1.3.4.9.10		ACM0021	1			11-May-12	C
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AM0038 3 Methodology for improved electrical energy efficiency of an existing submerged electric arc furnace used for the production of silicon and ferro alloys AM0044 2 Energy efficiency inprovement projects - boiler rehabilitation or replacement in industrial and district heating sectors AM0045 2 Grid connection of isolated electricity systems AM0049 3 Methodology for gas based energy generation in an industrial facility AM0052 2 Increased electricity generation from existing hydropower stations through Decision Support System optimization AM0056 1 Efficiency improvement by boiler replacement or rehabilitation and optional fuel switch in fossil fuel-fired steam boiler systems AM0058 3.1 Introduction of a new primary district heating system AM0061 2.1 Methodology for rehabilitation and/or energy efficiency improvement in existing power plants AM0062 2 Energy efficiency improvements of a power plant through retrofitting turbines 2.3.7.9 13-Aug-10 AM0087 2 Construction of a new natural gas power plant supplying electricity to the grid or a single		AM0017	2			21-Jun-05	С
Energy efficiency - supply side AM0044 2 Energy efficiency improvement projects - boiler rehabilitation or replacement in industrial and district heating sectors AM0045 2 Grid connection of isolated electricity systems AM0049 3 Methodology for gas based energy generation in an industrial facility AM0052 2 Increased electricity generation from existing hydropower stations through Decision support System optimization AM0056 1 Efficiency improvement by boiler replacement or rehabilitation and optional fuel switch in fossil fuel-fired steam boiler systems AM0058 3.1 Introduction of a new primary district heating system AM0061 2.1 Methodology for rehabilitation and/or energy efficiency improvement in existing power plants AM0062 2 Energy efficiency improvements of a power plant through retrofitting turbines 2,3,7,9 13-Aug-10 AM0087 2 Construction of a new natural gas power plant supplying electricity to the grid or a single		AM0018	3	Baseline methodology for steam optimization systems	2,3,5,11	2-Mar-12	11
efficiency - supply side AM0045 2 Grid connection of isolated electricity systems AM0049 3 Methodology for gas based energy generation in an industrial facility AM0052 2 Increased electricity generation from existing hydropower stations through Decision Support System optimization AM0056 1 Efficiency improvement by boiler replacement or rehabilitation and optional fuel switch in fossil fuel-fired steam boiler systems AM0058 3.1 Introduction of a new primary district heating system AM0061 2.1 Methodology for rehabilitation and/or energy efficiency improvement in existing power plants AM0062 2 Energy efficiency improvements of a power plant through retrofitting turbines AM0087 2 Construction of a new natural gas power plant supplying electricity to the grid or a single 1,70, 23-Nov-07 2-Nov-07 2-		AM0038	3		1,7,10	3-Jun-11	1
supply side AM0045 2 Grid connection of isolated electricity systems 1,7 2-Nov-07 AM0049 3 Methodology for gas based energy generation in an industrial facility 1,7 27-Feb-09 AM0052 2 Increased electricity generation from existing hydropower stations through Decision Support System optimization 1,7 2-Nov-07 AM0056 1 Efficiency improvement by boiler replacement or rehabilitation and optional fuel switch in fossil fuel-fired steam boiler systems 2,3 26-Jul-07 AM0058 3.1 Introduction of a new primary district heating system 1,2,3,7 11-Jun-09 AM0061 2.1 Methodology for rehabilitation and/or energy efficiency improvement in existing power plants 2,3,7 30-May-08 AM0062 2 Energy efficiency improvements of a power plant through retrofitting turbines 2,3,7,9 13-Aug-10 AM0087 2 Construction of a new natural gas power plant supplying electricity to the grid or a single 1,3,7,9 13-Aug-10		AM0044	2		1,10,11	23-Nov-12	С
AM0052 2 Increased electricity generation from existing hydropower stations through Decision 1,7 2-Nov-07 AM0056 1 Efficiency improvement by boiler replacement or rehabilitation and optional fuel switch in fossil fuel-fired steam boiler systems AM0058 3.1 Introduction of a new primary district heating system AM0061 2.1 Methodology for rehabilitation and/or energy efficiency improvement in existing power plants AM0062 2 Energy efficiency improvements of a power plant through retrofitting turbines AM0087 2 Construction of a new natural gas power plant supplying electricity to the grid or a single	_	AM0045	2	Grid connection of isolated electricity systems	1,7	2-Nov-07	1
AM0052 2 Support System optimization AM0056 1 Efficiency improvement by boiler replacement or rehabilitation and optional fuel switch in fossil fuel-fired steam boiler systems AM0058 3.1 Introduction of a new primary district heating system AM0061 2.1 Methodology for rehabilitation and/or energy efficiency improvement in existing power plants AM0062 2 Energy efficiency improvements of a power plant through retrofitting turbines AM0087 2 Construction of a new natural gas power plant supplying electricity to the grid or a single		AM0049	3	Methodology for gas based energy generation in an industrial facility	1,7	27-Feb-09	0
AM0058 3.1 Introduction of a new primary district heating system 1,2,3,7 11-Jun-09 AM0061 2.1 Methodology for rehabilitation and/or energy efficiency improvement in existing power plants AM0062 2 Energy efficiency improvements of a power plant through retrofitting turbines 2,3,7 30-May-08 AM0087 2 Construction of a new natural gas power plant supplying electricity to the grid or a single 1,3,7,9 13 Aug 10		AM0052	2		1,7	2-Nov-07	0
AM0061 2.1 Methodology for rehabilitation and/or energy efficiency improvement in existing power plants AM0062 2 Energy efficiency improvements of a power plant through retrofitting turbines 2,3,7,9 13-Aug-10 AM0087 2 Construction of a new natural gas power plant supplying electricity to the grid or a single 1,3,7,9 13 Aug 10		AM0056	1		2,3	26-Jul-07	С
AM0061 2.1 plants AM0062 2 Energy efficiency improvements of a power plant through retrofitting turbines 2,3,7,9 13-Aug-10 AM0087 2 Construction of a new natural gas power plant supplying electricity to the grid or a single 1,3,7,9 13 Aug 10		AM0058	3.1	Introduction of a new primary district heating system	1,2,3,7	11-Jun-09	11
AM0087 2 Construction of a new natural gas power plant supplying electricity to the grid or a single		AM0061	2.1		2,3,7	30-May-08	2
IAMUU8/ 2		AM0062	2	Energy efficiency improvements of a power plant through retrofitting turbines	2,3,7,9	13-Aug-10	2
		AM0087	2		1,3,7,9	13-Aug-10	0

Key word	Number	Ver.	Name of the Approved Methodology	Tools*	Valid from	Reg*
	AM0104	2	Interconnection of electricity grids in countries with economic merit order dispatch	1,7,11	23-Nov-12	(
	AM0107	2	New natural gas based cogeneration plant	2,3,7,9,10, 11	13-Sep-12	10
	AM0108	1	Interconnection between electricity systems for energy exchange	1, 7	13-Sep-12	(
	AM0109	1	Introduction of hot supply of Direct Reduced Iron in Electric Arc Furnaces	2,3,5,7,11	13-Sep-12	(
	AMS-II.A	10	Supply side energy efficiency improvements – transmission and distribution		31-Jul-09	:
Energy	AMS-II.B	9	Supply side energy efficiency improvements – generation		10-Aug-07	1:
efficiency -	AMS-II.K	2	Installation of co-generation or tri-generation systems supplying energy to commercial building	3,5,9,10	25-May-12	:
supply side	AMS-II.Q	1	Energy efficiency and/or energy supply projects in commercial buildings		20-Jul-12	
	AMS-III.M	2	Reduction in consumption of electricity by recovering soda from paper manufacturing process		10-Aug-07	1
	AMS-III.AL	1	Conversion from single cycle to combined cycle power generation	3,5,9	29-Jul-10	2
	AMS-III.BB	1	Electrification of communities through grid extension or construction of new mini-grids		11-May-12	(
	AMS-III.BG	3	Emission reduction through sustainable charcoal production and consumption	3,5, 16	01-Jun-14	(
	AMS-III.BH	1	Displacement of production of brick and cement by manufacture and installation of gypsum concrete wall panels	3,5,11	4-Oct-13	
	AM0020	2	Baseline methodology for water pumping efficiency improvements	1,7	2-Nov-07	(
	AM0046	2	Distribution of efficient light bulbs to households	1,7	2-Nov-07	
	AM0060	1.1	Power saving through replacement by energy efficient chillers	2,7	29-Nov-07	(
	AM0067	2	Methodologies for installation of energy efficient transformers in a power distribution grid	2,7	16-Aug-08	(
Enorgy	AM0068	1	Methodology for improved energy efficiency by modifying ferroalloy production facility	2,5	15-May-08	(
Energy	AM0070	3.1	Manufacturing of energy efficient domestic refrigerators	7	8-Apr-10	:
efficiency - demand	AM0076	1	Methodology for implementation of fossil fuel trigeneration systems in existing industrial facilities	2,3,5,7	12-Feb-09	(
side	AM0084	2	Installation of cogeneration system supplying electricity and chilled water to new and existing consumers	1,2,5,7,10	23-Nov-12	
	AM0086	3	Installation of zero energy water purifier for safe drinking water application	1,3,5,7,11	08-Nov-13	(
	AM0088	1	Air separation using cryogenic energy recovered from the vaporization of LNG	2,3,5	29-Jul-10	
	AM0091	2	Energy efficiency technologies and fuel switching in new and existing buildings	3,5,7,11	21-Feb-14	
	AM0097	1	Installation of high voltage direct current power transmission line	2,7,11	29-Sep-11	
efficiency - supply side Energy efficiency - demand side	AM0105	1	Energy efficiency in data centres through dynamic power management	2,7	20-Jul-12	(

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Key word	Number	Ver.	Name of the Approved Methodology	Tools*	Valid from	Reg
	AM0106	2	Energy efficiency improvements of a lime production facility through installation of new kilns	2,3,5,7,11	13-Sep-12	0
	AM0113	1	Distribution of compact fluorescent lamps (CFL) and light-emitting diode (LED) lamps to households	1,7,11	8-Nov-13	0
	AM0114	1	Shift from electrolytic to catalytic process for recycling of chlorine from hydrogen chloride gas in isocyanate plants	2,3,5,10,1	01-Jun-14	0
	AMS-II.C	14	Demand-side energy efficiency activities for specific technologies	5,9,10	3-Aug-12	13
	AMS-II.D	13	Energy efficiency and fuel switching measures for industrial facilities	5,9,10	04-Oct-13	56
	AMS-II.E	10	Energy efficiency and fuel switching measures for buildings		2-Nov-07	14
	AMS-II.F	10	Energy efficiency and fuel switching measures for agricultural facilities and activities		16-Mar-12	1
	AMS-II.G	6	Energy efficiency measures in thermal applications of non-renewable biomass		21-Feb-14	32
Energy	AMS-II.H	3	Energy efficiency measures through centralization of utility provisions of an industrial facility	3,5,9,10	29-Apr-11	3
efficiency -	AMS-II.J	5	Demand-side activities for efficient lighting technologies		31-May-13	37
demand	AMS-II.L	2	Demand-side activities for efficient outdoor and street lighting technologies	11	04-Oct-13	0
side	AMS-II.M	2	Demand-side energy efficiency activities for installation of low-flow hot water savings devices	11	04-Oct-13	0
	AMS-II.N	2	Demand-side energy efficiency activities for installation of energy efficient lighting and/or controls in buildings	11	04-Oct-13	0
	AMS-II.O	1	Dissemination of energy efficient household appliances	11	02-Mar-12	0
	AMS-II.P	1	Energy efficient pump-set for agriculture use		20-Jul-12	0
	AMS-II.R	1	Energy efficiency space heating measures for residential buildings	7, 15	31-May-13	0
	AMS-III.V	1	Decrease of coke consumption in blast furnace by installing dust/sludge recycling system in steel works	2,3,5	26-Sep-08	0
	AMS-III.AE	1	Energy efficiency and renewable energy measures in new residential buildings		17-Jul-09	0
	AMS-III.AR	4	Substituting fossil fuel based lighting with LED/CFL lighting systems		7-Dec-12	1
	AMS-IIIAW	1	Electrification of rural communities by grid extension	7,9	2-Mar-12	0
	ACM0017	2.1	Production of biodiesel for use as fuel	1,3,5,6	17-Sep-10	1
	AM0089	1.1	Production of diesel using a mixed feedstock of gasoil and vegetable oil	1,3,5,6,7, AR13	17-Sep-10	0
Biofuel	AMS-I.G	1	Plant oil production and use for energy generation in stationary applications	3,5	30-Jul-10	0
	AMS-I.H	1	Biodiesel production and use for energy generation in stationary applications	3,5,AR13	30-Jul-10	0
	AMS-III.T	2	Plant oil production and use for transport applications	3,5	13-Aug-10	1
	AMS-III.AK.	1	Biodiesel production and use for transport applications	3,5,AR13	30-Jul-10	0

Key word	Number	Ver.	Name of the Approved Methodology	Tools*	Valid from	Reg*
	ACM0016	3	Mass Rapid Transit Projects	1,3,5	25-Nov-11	9
	AM0031	5	Bus rapid transit projects	1,3,5,11	23-Nov-12	10
	AM0090	1.1	Modal shift in transportation of cargo from road transportation to water or rail transportation	2,3,5	17-Sep-10	0
	AM0101	1	High speed passenger rail systems	1,5	02-Mar-12	0
	AM0110	1	Modal shift in transportation of liquid fuels	2,3,5,11	23-Nov-12	0
	AMS-III.C	13	Emission reductions by electric and hybrid vehicles	5	17-Jun-11	6
Transporta	AMS-III.S	4	Introduction of low-emission vehicles/technologies to commercial vehicle fleets	3,5	7-Dec-12	0
tion	AMS-III.U	1	Cable Cars for Mass Rapid Transit System (MRTS)	5,7	26-Sep-08	1
	AMS-III.AA	1	Transportation Energy Efficiency Activities using Retrofit Technologies		28-May-09	0
	AMS-III.AP	2	Transport energy efficiency activities using post - fit Idling Stop device		4-Mar-11	0
	AMS-III.AQ	2	Introduction of Bio-CNG in transportation applications	3,5,15,16	01-Jun-14	1
	AMS-III.AT	2	Transportation energy efficiency activities installing digital tachograph systems to commercial freight transport fleets		16-Mar-12	1
	AMS-III.AY	1	Introduction of LNG buses to existing and new bus routes		02-Mar-12	0
	AMS-III.BC	2	Emission reductions through improved efficiency of vehicle fleets		04-Oct-13	0
	ACM0003	8	Partial substitution of fossil fuels in cement or quicklime manufacture	2,3,4,5,12 ,15,16	08-Nov-13	33
Cement	ACM0005	7.1	Increasing the blend in cement production	1,7,11,12	02-Mar-12	17
	ACM0015	4	Emission reductions from raw material switch in clinker production	1,5,7, 11	01-Jun-14	0
	AM0027	2.1	Substitution of CO_2 from fossil or mineral origin by CO_2 from renewable sources in the production of inorganic compounds	1	5-Oct-06	1
Material use	AM0050	3	Feed switch in integrated Ammonia-urea manufacturing industry	2,3,5,11	20-Jul-12	0
usc	AM0057	3.0.1	Avoided emissions from biomass wastes through use as feed stock in pulp and paper, cardboard, fibreboard or bio-oil production	1,3,4,5,6, 11	13-Aug-10	1

Key word	Number	Ver.	Name of the Approved Methodology	Tools*	Valid from	Reg*
	AM0063	1.2	Recovery of CO ₂ from tail gas in industrial facilities to substitute the use of fossil fuels for production of CO ₂	1,2,3,5,7	29-Nov-07	1
	AM0096	1	CF ₄ emission reduction from installation of an abatement system in a semiconductor manufacturing facility	2,3,5,11	29-Sep-11	(
Matarial	AMS-III.J	3	Avoidance of fossil fuel combustion for carbon dioxide production to be used as raw material for industrial processes		10-Aug-07	,
Material use	AMS-III.O	1	Hydrogen production using methane extracted from biogas	3.6	19-Oct-07	_
uoc	AMS-III.AD	1	Emission reductions in hydraulic lime production		28-May-09	
	AMS-III.AI	1	Emission reductions through recovery of spent sulphuric acid		25-Mar-10	
	AMS-III.BA	1	Recovery and recycling of materials from E-waste	7	11-May-12	
	AMS-III.BD	1	GHG emission reduction due to supply of molten metal instead of ingots for aluminium castings	3,5	20-Jul-12	(
	AM0082	1	Use of charcoal from planted renewable biomass in the iron ore reduction process through the establishment of a new iron ore reduction system	2,3,5,AR7, AR8,AR13	16-Jul-09	
Others	AMS-III.A	2	Offsetting of synthetic nitrogen fertilizers by inoculant application in legumes-grass rotations on acidic soils on existing cropland	2	31-Jul-09	(
	AMS-III.AJ	4	Recovery and recycling of materials from solid wastes	4,7	7-Dec-12	
	AMS-III.AV	4	Low greenhouse gas emitting safe drinking water production systems	3,5	31-May-13	
	ACM0010	8	GHG emission reductions from manure management systems	2,3,5,8,9,11,14	04-Oct-13	1
	ACM0014	6	Treatment of wastewater	1,7,9,11,14	21-Feb-14	2
	ACM0022	1	Alternative waste treatment processes	2,3,4,5,6,8,9,11, 13,14	13-Sep-12	
	ACM0024	1	Natural gas substitution by biogenic methane produced from the anaerobic digestion of organic waste	2,3,11,12, 14,15	21-Feb-14	
Biogas	AM0053	4	Biogenic methane injection to a natural gas distribution grid	2,3,5,6,11	13-Sep-12	
	AM0069	2	Biogenic methane use as feedstock and fuel for town gas production	1,2,3,5	18-Dec-09	
	AM0073	1	GHG emission reductions through multi-site manure collection and treatment in a central plant	1,3,5,6,7	27-Nov-08	2
	AM0075	1	Methodology for collection, processing and supply of biogas to end-users for production of heat	1,3,5,6	12-Feb-09	
	AM0080	1	Mitigation of greenhouse gases emissions with treatment of wastewater in aerobic wastewater treatment plants	2,3,5,6,7	27-May-09	

Key word	Number	Ver.	Name of the Approved Methodology	Tools*	Valid from	Reg*
	AM0112	1	Less carbon intensive power generation through continuous reductive distillation of waste	2,3,4,5,11,14	4-Oct-13	0
	AMS-I.I	4	Biogas/biomass thermal applications for households/small users		3-Aug-12	0
	AMS-III.AO	1	Methane recovery through controlled anaerobic digestion	3,4,6,7	26-Nov-10	6
Biogas	AMS-III.D	19	Methane recovery in animal manure management systems	3,6,14	7-Dec-12	181
_	AMS-III.H	16	Methane recovery in wastewater treatment	3,4,5,6	10-Dec-10	237
	AMS-III.I	8	Avoidance of methane production in wastewater treatment through replacement of anaerobic systems by aerobic systems		31-Jul-09	8
	AMS-III.Y	3	Methane avoidance through separation of solids from wastewater or manure treatment systems		16-Mar-12	3
	ACM0001	15	Flaring or use of landfill gas	2,3,4,5,6,8,9, 10,12	08-Nov-13	231
مرما الكامر م	AM0083	1.01	Avoidance of landfill gas emissions by in-situ aeration of landfills	1,3,4,5,8	16-Jul-09	1
Landfill gas	AM0093	1.01	Avoidance of landfill gas emissions by passive aeration of landfills	1,3,4,5	15-Jul-11	0
	AMS-III.G	8	Landfill methane recovery	3,4,5,6	28-Sep-12	41
	AMS-III.AX	1	Methane oxidation layer (MOL) for solid waste disposal sites	3,4,5	25-Nov-11	0
	AMS-III.F	11	Avoidance of methane emissions through composting	3,4,5,13	25-May-12	56
Composting	AMS-III.AF	1	Avoidance of methane emissions through excavating and composting of partially decayed municipal solid waste (MSW)	4	16-Oct-09	0
Coal	ACM0008	8	Abatement of methane from coal mines	1,3,6,7	21-Feb-14	84
mine/bed methane	AM0064	3	Capture and utilisation or destruction of mine methane (excluding coal mines) or non mine methane	2,3,5,6,7,9,	2-Mar-12	1
Leak	AM0023	4	Leak detection and repair in gas production, processing, transmission, storage and distribution systems and in refinery facilities	2	29-Sep-11	13
reduction	AM0043	2	Leak reduction from a natural gas distribution grid by replacing old cast iron pipes or steel pipes without cathodic protection with polyethylene pipes	1	2-Nov-07	0
Other	AMS-III.K	5	Avoidance of methane release from charcoal production	4	9-Dec-11	1
methane related	AMS-III.L	2	Avoidance of methane production from biomass decay through controlled pyrolysis	4	10-Aug-07	0

Key word	Number	Ver.	Name of the Approved Methodology	Tools*	Valid from	Reg*
	AMS-III.R	3	Methane recovery in agricultural activities at household/small farm level	3,5	28-Sep-12	34
Other	AMS-III.W	2	Methane capture and destruction in non-hydrocarbon mining activities	3,5,6,7,9	9-Dec-11	0
methane related	AMS-III.AU	3	Methane emission reduction by adjusted water management practice in rice cultivation		3-Aug-12	0
	AMS-III.BK	1	Strategic feed supplementation in smallholder dairy sector to increase productivity	3,5,12	01-Jun-14	0
	ACM0019	2	N₂O abatement from nitric acid production	3,8	31-May-13	30
	AM0021	3	Baseline Methodology for decomposition of N ₂ O from existing adipic acid production plants	1,3,5	27-Feb-09	4
N_2O	AM0028	6	N ₂ O destruction in the tail gas of Caprolactam production plants	1,3	31-May-13	19
2	AMS-III.BE	1	Avoidance of methane and nitrous oxide emissions from sugarcane pre-harvest open burning through mulching	3,5	23-Nov-12	0
	AMS-III.BF	1	Reduction of N2O emissions from use of Nitrogen Use Efficient (NUE) seeds that require less fertilizer application		23-Nov-12	0
	AM0001	6	Decomposition of fluoroform (HFC-23) waste streams	3,5,11	25-Nov-11	19
	AM0030	4	PFC emission reductions from anode effect mitigation at primary aluminium smelting facilities	1	11-May-12	3
	AM0035	2	SF ₆ emission reductions in electrical grids	1	23-Nov-12	2
	AM0059	1.1	Reduction in GHGs emission from primary aluminium smelters	2,5,7	18-Oct-07	4
	AM0065	2.1	Replacement of SF ₆ with alternate cover gas in the magnesium industry	2	16-Aug-08	3
HFCs,	AM0071	2	Manufacturing and servicing of domestic refrigeration appliances using a low GWP refrigerant	2	8-Apr-10	0
PFCs, and SF ₆	AM0078	2	Point of Use Abatement Device to Reduce SF6 emissions in LCD Manufacturing Operations	2,3,5,11	2-Mar-12	4
O1 6	AM0079	2	Recovery of SF6 from Gas insulated electrical equipment in testing facilities	2,3,5	18-Dec-09	1
	AM0092	2	Substitution of PFC gases for cleaning Chemical Vapour Deposition (CVD) reactors in the semiconductor industry	2,10,11	23-Nov-12	0
	AM0111	1	Abatement of fluorinated greenhouse gases in semiconductor manufacturing	2,3,5,10,11	23-Nov-12	0
	AMS-III.N	3	Avoidance of HFC emissions in rigid Poly Urethane Foam (PUF) manufacturing		8-Apr-09	3
	AMS-III.X	2	Energy Efficiency and HFC-134a Recovery in Residential Refrigerators	7	01-Oct-10	0
	AMS-III.AB	1	Avoidance of HFC emissions in Standalone Commercial Refrigeration Cabinets		28-May-09	0

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Methodological Tools for A/R CDM Project Activities (AR Tools)

- 1. Tool for the demonstration and assessment of additionality in A/R CDM project activities (ver.2) [EB35 Anx17]
- 2. Combined tool to identify the baseline scenario and demonstrate additionality in A/R CDM project activities (ver.1) [EB35 Anx19]
- 3. Calculation of the number of sample plots for measurements within A/R CDM project activities (ver.2.1) [EB58 Anx15]
- 5. Estimation of GHG emissions related to fossil fuel combustion in A/R CDM project activities (ver.1) [EB33 Anx14]
- 6. Procedure to determine when accounting of the soil organic carbon pool may be conservatively neglected in CDM A/R project activities (ver.1) [EB33 Anx15]
- 7. Estimation of direct nitrous oxide emission from nitrogen fertilization (ver.1) [EB33 Anx16]
- 8. Estimation of non-CO2 GHG emissions resulting from burning of biomass attributable to an A/R CDM project activity (ver.4) [EB65 Anx31]
- 11. Tool for calculation of GHG emissions due to leakage from increased use of non-renewable woody biomass attributable to an A/R CDM project activity (ver.1) [EB39 Anx11]
- 12. Estimation of carbon stocks and change in carbon stocks in dead wood and litter in A/R CDM project activities (ver.3) [EB75 Anx27]
- 13. Tool for the identification of degraded or degrading lands for consideration in implementing CDM A/R project activities (ver.1) [EB41 Anx15]
- 14. Estimation of carbon stocks and change in carbon stocks of trees and shrubs in A/R CDM project activities (ver.4.1) [EB75 Anx26]
- 15. Estimation of the increase in GHG emissions attributable to displacement of pre-project agricultural activities in A/R CDM project activity (ver.2) [EB75 Anx28]
- 16. Tool for estimation of change in soil organic carbon stocks due to the implementation of A/R CDM project activities (ver.1.1) [EB60 Anx12]
- 17. Demonstrating appropriateness of allometric equations for estimation of aboveground tree biomass in A/R CDM project activities (ver.1) [EB65 Anx28]
- 18. Demonstrating appropriateness of volume equations for estimation of aboveground tree biomass in A/R CDM project activities (ver.1.0.1)

 [EB67 Anx24]
- 19. Demonstration of eligibility of lands for A/R CDM project activities (ver.1)[EB75 Anx25]

There are guidance and guidelines for A/R methodologies. http://cdm.unfccc.int/Reference/Guidclarif/ar/index_guid.html There are also clarifications for A/R methodologies. http://cdm.unfccc.int/Reference/Guidclarif/ar/index_clarif.html

AR Tools*: Methodological tools for A/R CDM project activities which are referenced in the approved A/R methodology. Please see p79 to identify the exact name of the tools.

Reg*: Total number of registered CDM projects which applies the listed methodology, including previous versions, as of Jan 31, 2014.

Attachment 1. AMs and tools

Key word	Number	Ver.	Name of the Approved A/R Methodology	AR Tools*	Valid from	Reg*
	AR-ACM0003	2	Afforestation and reforestation of lands except wetlands	2,8,12,14,15, 16	04-Oct-13	2
Afforestation	AR-AM0014	3	Afforestation and reforestation of degraded mangrove habitats	2,8,12,14,15	04-Oct-13	0
and reforestation	AR-AMS0003	3	Simplified baseline and monitoring methodology for small scale CDM afforestation and reforestation project activities implemented on wetlands	8,12,14,15	04-Oct-13	1
	AR-AMS0007	3	Simplified baseline and monitoring methodology for small-scale A/R CDM project activities implemented on grasslands or croplands	2,8,12,14,15, 16	04-Oct-13	0

- ♦In decision 3/CMP.6, Parties reiterated their encouragement to the EB to "further explore the possibility of including in baseline and monitoring methodologies, as appropriate, a scenario where future anthropogenic emissions by sources are projected to rise above current levels due to specific circumstances of the host Party." [EB68 Anx2 para3]
- ♦In decision 8/CMP.7, Parties requested the EB to accelerate the implementation of guidelines on suppressed demand in baselines and monitoring methodologies, prioritizing those that are more applicable to the least developed countries, small island developing States, African countries and countries underrepresented in the clean development mechanism. [EB68 Anx2 para4]

Definitions [EB68 Anx2 para7]

- ◆Income effect: This effect occurs when the demand for a service, such as energy services, would increase in the baseline scenario over time as a result of the increase of the income of the user of the service, even without access to a better quality service.
- ◆Rebound effect: This effect occurs when the demand for a service, such as energy services, increases as a result of the decreased cost of the service per unit in the project scenario. For example, the benefits from savings in energy demand due to technical efficiency improvement and hence reductions in greenhouse gas (GHG) emissions may result in an increase in the demand (e.g. extended operating hours in lighting).
- ♦ Minimum service level (MSL): A service level that is able to meet basic human needs. In some situations, this service level may not have been provided prior to the implementation of the CDM project activity, indicating suppressed demand with a consequent future emissions increase due to income effect, rebound effect or other technical factors such as limited availability of a service (e.g. connection to a very weak grid) or low quality of a service (e.g. aversion to pollution caused by kerosene lanterns)
- ◆Basic human needs: For the purpose of these guidelines, these include physical and physiological needs such as basic housing, basic energy services (including lighting, cooking, drinking water supply and space heating), sanitation (waste treatment/disposal) and transportation.

Methodological approaches

A. Identification of the baseline technology/measure [EB68 Anx2 para13]

Step 1. identify the various alternative technologies/measures

Step 2. Identify which alternatives technologies/measures identified in Step 1 are in compliance with the local regulations.

Step 3. Rank the alternatives remaining after Step 2

Step 4. Assess the alternatives in the sequence identified in Step 3 and eliminate in that sequence those alternatives that face barriers such as the ones listed right

Step 5. The first alternative not eliminated by Step 4 and that is able to meet the minimum service level under realistic conditions is deemed as the baseline technology/measure.

B. Identification of the baseline service level

[EB68 Anx2 para14]

In baseline and monitoring methodologies, the service level used to determine baseline emissions can correspond to the following levels:

- (a) The service level provided prior to the implementation of the project activity:
- (b) The service level provided under the project activity:
- (c) A minimum service level:
- (a) Income barrier, i.e. inability to meet the capital cost;
- (b) Lack of infrastructure (e.g. non-existence of supply/service infrastructure);
- (c) Lack of skills to operate the alternative;
- (d) Technological barrier, e.g. technologies

Box1: Example of applied methodologies for scope and applicability

AMS-I.A, AMS-I.L, AMS-III.AV, AMS-III.F [EB68 Anx2 para8]

C. Determination of the minimum service level

[EB68 Anx2 para16]

For establishing a minimum service level the following approached may be used:

- (a) National/international peer-reviewed research or relevant studies
- (b) Benchmarks that take into account that emissions will rise to achieve the international/national development goals.

Further, in setting the minimum service level, the following should be taken into account:

- (a) Environmental integrity of the emission reductions has to be safeguarded;
- (b) Climatic zones may be taken into account where feasible:
- (c) Normative decisions have to be clearly referenced and explained;
- (d) Decisions regarding suppressed demand have to be re-evaluated and updated periodically based on recent data to ensure they are based on realistic assumptions.

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Attachment 3. Tool for the demonstration and assessment of additionality

(Version 7) [EB70 Anx8]

The use of this tool is not mandatory for PPs when proposing new methodologies. PPs may propose alternative methods to demonstrate additionality for consideration by the EB, or submit revisions to approved methodologies(AMs) using this tool. But once this tool is included in an AM, its application by PPs using this methodology is mandatory.

Measure

Fuel and feedstock switch / Switch of technology with or without change of energy source / Methane destruction / Methane formation avoidance

Step 0. Demonstration whether the proposed project activity is the first-of-its-kind (Optional)

- If the proposed CDM project activity(ies) apply the defined measure(s), the latest version of the "Guidelines on additionality of first-of-its-kind project activities" shall be applied. [EB69 Anx7]
- other measure(s), the project activity(ies) apply other measure(s), the project proponents shall propose approach for demonstrating that a project is a "first-of-its-kind".

Pass

Not applicable

Step 1. Identification of alternatives to the project activity consistent with current laws and regulations

Sub-step 1a. Define alternatives to the project activity:

Identify realistic and credible alternative scenario(s) available to the PPs or similar project developers that provide outputs or services comparable with the proposed CDM project activity.

Sub-step 1b. Consistency with mandatory laws and regulations:

- The alternative scenario(s) shall be in compliance with all mandatory applicable legal and regulatory requirements. If an alternative does not comply with all mandatory applicable legislation and regulations, then show that those applicable legal or regulatory requirements are systematically not enforced;
- If the proposed project activity is the only alternative amongst the ones considered by the PPs that is in compliance with all mandatory regulations with which there is general compliance, then the proposed CDM project activity is not additional.

Pass

Step 2 or Step 3, or both step 2 and step 3

Step 2. Investment analysis (also see "Guidance on the Assessment of Investment Analysis ver.5" [EB62 Anx5])

Determine whether the proposed project activity is not the most economically or financially attractive, or economically or financially feasible, without the revenue from the sale of CERs.

Sub-step 2a. Determine appropriate analysis method:

If the CDM project activity and the alternatives identified in Step 1 generates no financial or economic benefits other than CDM related income, then apply Option I below. Otherwise, use Option II or Option III.

Sub-step 2b.

Option I. Apply simple cost

with the CDM project activity and demonstrate that there is at least one alternative which is less costly than the project activity.

Option II. Apply investment comparison analysis

 □Identify the financial indicator, such as IRR, NPV, cost benefit ratio, or unit cost of service most suitable for the project type and decision-making context.

Option III. Apply benchmark analysis

- Identify the financial/economic indicator, such as IRR. The financial/economic analysis shall be based on parameters that are standard in the market but not linked to the subjective profitability.
- Only in the particular case where the project activity can be implemented by the PP, the specific financial/economic situation of the company undertaking the project activity can be considered.

Sub-step 2c. Calculation and comparison of financial indicators (only applicable to options II and III):

- Present in the F-CDM-PDD a clear comparison of the financial indicator for the proposed CDM activity and:
 - ⇒ (a) The alternatives, if Option II (investment comparison analysis) is used, or (b) the financial benchmark, if Option III (benchmark analysis) is used. If the CDM project activity has a less favourable indicator, then the CDM project activity cannot be considered as financially attractive.

Sub-step 2d. Sensitivity analysis (only applicable to options II and III):

Include a sensitivity analysis that shows whether the conclusion is robust to reasonable variations in the critical assumptions.

Attachment 3. Tool for the demonstration and assessment of additionality

Step 3. Barrier analysis (also see the "Guidelines for objective demonstration and assessment of barriers" [EB50 Anx13]) Determine whether the proposed project activity faces barriers that prevent the implementation of this type of proposed project activity, and do not prevent the implementation of at least one of the alternatives. Provide transparent and documented evidence, and offer conservative interpretations of this documented evidence, as to how it demonstrates the existence and significance of the identified barriers.

If the CDM does not alleviate the identified barriers that prevent the proposed project activity from occurring, then the project activity is not additional.

Sub-step 3a. Identify barriers that would prevent the implementation of type of the proposed project activity:

Establish that there are realistic and credible barriers that would prevent the implementation of the type of proposed project activity from being carried out if the project activity was not registered as a CDM activity. Such barriers may include, among others, investment barriers other than the economic/financial barriers in Step 2 above, technological barriers and other barriers.

Sub-step 3 b. Show that the identified barriers would not prevent the implementation of at least one of the alternatives (except the proposed project activity):

If the identified barriers also affect other alternatives, explain how they are affected less strongly than they affect the proposed CDM project activity.

Pass

Step 4. Common practice analysis

The above generic additionality tests shall be complemented with an analysis of the extent to which the proposed project type has already diffused in the relevant sector and region. This test is a credibility check to complement the investment analysis (**Step 2**) or barrier analysis (**Step 3**).

Sub-step 4a. The proposed CDM project activity(ies) applies the listed measure(s):

The latest version of the "Guidelines on common practice" available shall be applied. [EB69 Anx8]

Sub-step 4b. The proposed CDM project activity(ies) does not apply any of the listed

Sub-step 4b. The proposed CDM project activity(ies) does not apply any of the listed measures

Provide an analysis to which extent similar activities to the proposed CDM project activity have been implemented previously or are currently underway. Similar activities are defined as activities that are of similar scale, take place in a comparable environment, inter alia, with respect to the regulatory framework and are undertaken in the applicable geographical area, as defined above. Other CDM project activities are not to be included in this analysis. Provide documented evidence and, where relevant, quantitative information. On the basis of that analysis, describe whether and to which extent similar activities have already diffused in the applicable geographical area

The proposed CDM project activity is additional

Jilai

Pass

Stepwise approach for common

practice [EB69 Anx8]

Step 1: calculate applicable capacity or output range as +/-50%.

Step 2: identify similar projects (both CDM and non-CDM)

Step 3: identify those that are neither registered CDM, request for registration, nor under validation. Note their number Nall

Step 4: identify those that apply technologies that are different to the technology applied in the proposed activity. Note their number Naiff

Step 5: calculate factor F=1-Ndiff/Nall The proposed project is a "common practice" if the factor F is greater than 0.2 and N all -N diff is greater than 3.

Attachment 4. Guidelines for demonstrating additionality of microscale project activities

(Version 4) [EB68 Anx26]

- ◆ Projects up to 5 MW that employ renewable energy technology are additional if any one of the conditions below is satisfied
- ◆Energy efficiency projects that aim to achieve energy savings at a scale of <u>no more than 20GWh/yr</u> are <u>additional</u> if any <u>one</u> of the conditions below is satisfied
- ◆Other projects (i.e. Type III projects) that aim to achieve ERs at a scale of <u>no more than 20 ktCO2e per year</u> are <u>additional</u> if any one of the conditions below is satisfied
- ◆ Projects that meet the requirements above are termed 'Microscale CDM project activities'
- ◆The guidelines are applicable to CPAs under PoAs [EB68 Anx26 para6]

The project size <=5 MW of installed capacity of renewable energy Is the geographic location of the project in one of LDCs/SIDs or in a special underdeveloped zone(SUZ) of the host country? Yes No Is the project an off grid activity supplying energy to households/communities? (<12 hrs grid availability per 24 hrs is also considered as "off grid" for this assessment) Yes No Is the project for **distributed energy generation** (not connected to a national or regional grid) with both condition satisfied? □ Each of the independent subsystems/measures in the project <=1500 kW;
</p> End users of the subsystems or measures are households/communities/SMEs. Yes No Does the project employ specific renewable energy technologies/ measures recommended by the host country DNA and approved by the EB? The following conditions shall apply for DNA recommendations: (i) Specific renewable energy technologies/measures. refers to grid connected renewable energy technologies5 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 3 per cent; (iii) Most recent available data on the percentage of contributions of specific renewable energy technologies shall be provided to demonstrate compliance with the 3 per cent threshold. In no case shall data older than three years from the date of submission be used; Yes (vi) Technologies/measures recommended by DNAs and approved by the EB 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 guidelines 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). No Use other means of additionality demonstration (e.g. Tool for demonstration of additionality (Att. 3). Guidelines on the demonstration of additionality of small-scale project activities(chap.19-2) **Project is additional**

The project size <=20 GWh energy savings per year

SSC methodologies are eligible to be considered.

[Footnote13 of EB68 Anx26 para3]

Is the geographic location of the project in LDCs/SIDs or SUZ of the host?

No

Are the following two conditions satisfied?

Each of the independent subsystem/measure in the project annually saves <=600 MWh;

End users of the subsystem or measure are households/communities/SME

No

Use other means of additionality demonstration (e.g. Tool for demonstration of additionality (Att.3), Guidelines on the demonstration of additionality of small-scale project activities (chap.19-2)

The project ERs <=20 ktCO2e per year

SAll technologies/measures included in approved Type III SSC methodologies are currently eligible to be considered, except for AMS-III.V, III.P, III.Q, III.W (Att.2). [Footnote14 of EB68 Anx26 para4]

Is the geographic location of the project in LDCs/SIDs or **SUZ** of the host? Yes No Are the following two conditions satisfied? Each of the independent subsystem/measure in the project annually ERs <=600 tCO2e per year; End users of the subsystem or measure are households/communities/SME Yes No Use other means of additionality demonstration (e.g. Tool for demonstration of additionality (Att.3), Guidelines on the demonstration of additionality of small-scale project activities (chap.19-2) **Project is additional**

BOX: Procedure: Submission and consideration of microscale renewable energy technologies for automatic additionality [EB70 Anx37]

The document contains the process for the submission of proposed specific renewable energy technologies/measures and proposed SUZs by DNAs.

Project is additional

BOX: Special underdeveloped zone (SUZ) [EB68 Anx26]

- 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:
 - •The proportion of population with income less than USD 2 per day (PPP) in the region is greater than 50%;
 - •The GNI per capita in the country is less than USD 3000 and the population of the region is among the poorest 20% in the poverty ranking of the host country as per the applicable national policies and procedures;
- In cases where, based on the recommendation of the designated national authority of the host country the SUZ in the host country has been approved by the EB, the list of such SUZ shall be maintained on the UNFCCC website (e.g. <a href="mailto:at<a href="mailto

BOX: Other guidance on PoA, bundled projects and Eligibility

- " 'Project activity' means a small scale or large scale CDM project activity or a project activity under a PoA (CPA of a PoA). [EB60 Anx25 para6]
- In the case of bundled projects, individual projects within the bundle and these guidelines are applied in conjunction with the "Guidelines on assessment of debundling for SSC project activities" (chap. 19-3 Bundling of SSC)
- Eligibility as microscale CDM project activities will be determined in accordance with the principle laid out in the "General Guidelines to SSC CDM methodologies" (chap. 19-1 Definition of small-scale CDM)

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Attachment 5. Procedure for the submission and consideration of microscale renewable energy technologies for automatic additionality

(Version 1) [EB65Anx33]

DNA

- (1) Propose specific renewable technologies/measures to be approved by the EB as conferring automatic additionality on microscale CDM project activities [EB65 Anx33, para6]
- (2) Upload to the UNFCCC CDM website the following documentation: [EB65 Anx33, para7]
 - (a) The duly completed Proposed specific renewable technologies /measures submission form (form F-CDM-PRT);
 - (b) The most recent available data. and in any case not older than three years from the date of submission, on the percentage of contributions of specific renewable energy technologies in the total installed gridconnected power generation capacity in the country, clarifying the source of the data;
 - (c) Any additional documentation supporting the submission (e.g. relevant data, documentation. statistics, studies, etc.), where applicable.
- (5) Provide the missing documents or information within 28 days of the notification. [EB65 Anx33, para10]

UNFCCC secretariat

- (3) Undertake initial assessment on whether: [EB65 Anx33, para9]
- (a) The form F-CDM-PRT has been duly completed:
- (b) The DNA submitted all the information required;
- (4) Inform the DNA of the outcome of the initial assessment. If the secretariat finds that the required documentation or information is incomplete, it shall notify the DNA..[EB65 Anx33, para10]
- (6) Conclude the initial assessment within 14 days of receipt of missing documents or information and inform the DNA of the conclusion of the initial assessment. [EB65 Anx33, para11]
- (7) Make the submitted documentation publicly available on the UNFCCC CDM website with the exception of the information declared confidential and/or proprietary information by the DNA, and invite the public to provide inputs on the submission for a period of 14 days [EB65 Anx33, para12]

With in 14 days

(8) Prepare a draft recommendation on the proposed specific renewable technologies/measures, taking into account the public comments received as appropriate, using the form F-CDM-PRT-REC [EB65 Anx33, para13]

Include in its draft recommendation one of the following courses of actions: [EB65] Anx33, para14]

- (a) Approve the proposed specific renewable technologies/measures as conferring additionality on microscale CDM project activities; or
- (b) Requires further input (e.g. additional information or modification to the submitted documentation) from the DNA; or
- Not to approve the proposed specific renewable technologies/measures
- (9) Appoint two (2) members of the Small-scale Working Group (SSC WG) and forward its draft recommendation, together with public comments received in accordance with paragraph 12 above, to them.[EB65 Anx33, para16]
- (11) Forward it as the recommendation to the EB and make it publicly available on the UNFCCC website, IEB65 Anx33. para18]
- (12) Notify the DNA accordingly. [EB65 Anx33, para19]

Continue to the next page

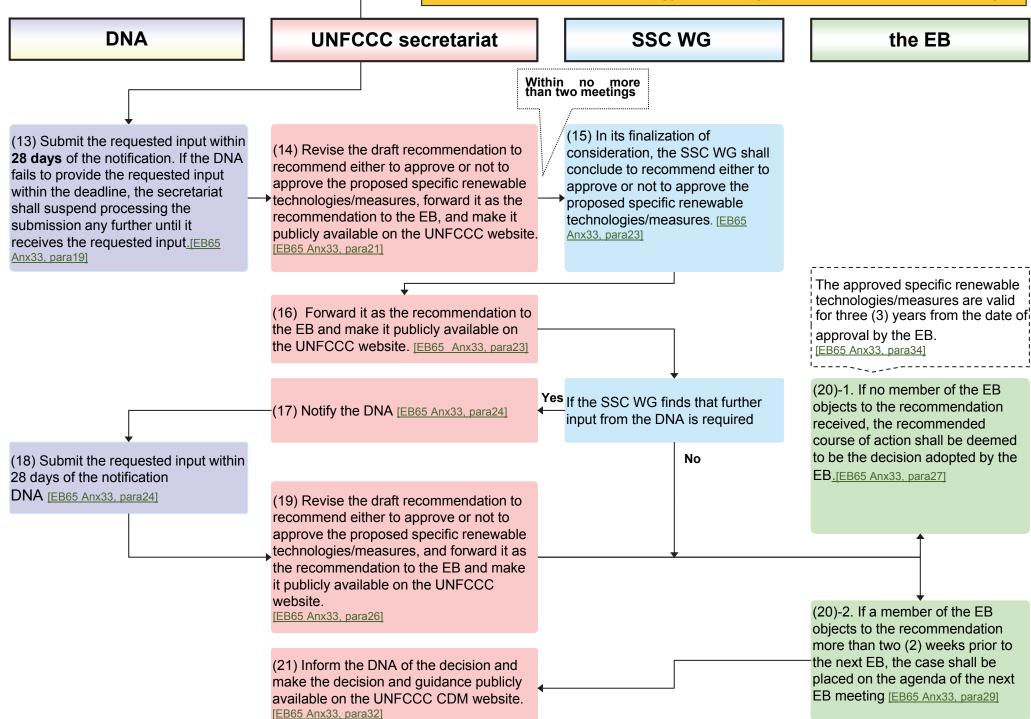
External Experts (DOE, Panels)

(10) The two appointed members of the SSC WG shall, within seven (7) days of receipt of the draft recommendation. independently assess the proposed specific renewable technologies/measures and the draft recommendation, and inform the secretariat of the outcome of their assessment, IEB65 Anx33. para17]

Both of the appointed members of the SSC WG agree to the draft recommendation to approve or not to approve the proposed specific renewable technologies/measures

Both of the appointed members of the SSC WG agree to the draft recommendation to require further input from the DNA

Attachment 5. Procedure for the submission and consideration of microscale renewable energy technologies for automatic additionality



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This methodological tool determines the CO2 emission factor for the displacement of electricity generated by power plants in an electricity system, by calculating the "combined margin" emission factor (CM) of the electricity system.

Scope and applicability Operating margin (OM) CO₂ emission factor for OM refers to the group of existing power plants whose current electricity $\mathsf{EF}_{\mathsf{grid},\mathsf{OM},\mathsf{y0}}$ project electricity system in year v generation would be affected by the proposed CDM project activity. Build margin (**BM**) CO₂ emission factor for BM refers to the group of prospective power plants whose construction and future $\mathsf{EF}_{\mathsf{grid},\mathsf{BM},\mathsf{y}}$ project electricity system in year v operation would be affected by the proposed CDM project activity

- ♦ This tool may be applied to estimate the OM, BM and/or CM when calculating baseline emissions for a project activity that substitutes grid electricity that is where a project activity supplies electricity to a grid or a project activity that results in savings of electricity that would have been provided by the grid
- ♦ The emission factor for the project electricity system can be calculated either for grid power plants only or, as an option, can include off-grid power.

Step 1. Identify the relevant electric power system

project electricity system in year y.

A grid/project electricity system (the reference system) La Electricity import The spatial extent of the power plants that are physically connected through transmission and distribution lines to the project activity

Combined margin (CM) CO₂ emission factor for

Electricity export

A connected electricity system An electricity system that is connected by transmission

lines to the project electricity system.

The result of a weighted average of two emission factors pertaining to the electricity system:

BM emission factor calculation:

 $\mathsf{EF}_{\mathsf{grid},\mathsf{CM},\mathsf{y}}$

Significant transmission constraint

The spatial extent is limited to the project electricity system, except where recent or likely future additions to the transmission capacity enable significant increases in imported electricity.

Options for CO2 emission factor for net electricity imports in OM emission factor calculation:

(a) 0 t CO2/MWh; (b) The simple operating margin emission rate of the exporting grid, (c) The simple adjusted operating margin emission rate of the exporting grid, or (d) The weighted average operating margin (OM) emission rate of the exporting grid,

Step 2. Choose whether to include off-grid power plants in the project electricity system (optional)

Option I: Only grid power plants are included in the calculation

Option II: Both grid power plants and off-grid power plants are included in the calculation

Option IIa: Collecting data on off-grid power generation and can only be used if the conditions outlined therein are met

- Option IIb: The default CO2 emission factor (0.8 t CO2/MWh) and the default value of the electricity generated by the off-grid power plants (10% of the total electricity generation by grid power plants in the electricity system for OM determination, and 10% of the electricity generation by grid power plants included in the sample group as per Step 5 for BM determination) can be applied for the first crediting, when the following conditions apply:
- (a) The project activity is located in (i) LDC; (ii) a SIDS or (iii) a country with less than 10 registered CDM projects at the starting date of validation; and
- (b) The project activities consist of grid-connected renewable power generation; and
- (c) It can be demonstrated that there is a load shedding program in place to compensate the deficit of the generation capacities.

Step 3. Select a method to determine the operating margin (OM) Calculation method and data vintage Calculated as the generation-weighted average CO2 emissions per unit (a) Simple OM net electricity generation of all generating power plants serving the system Ex ante option: The emission factor is determined once at the not including low-cost/must-run power plants/units validation stage. Use a 3-year generation-weighted average for grid power plants. Use a single calendar year within the A variation of the simple OM. The power plants/units are separated in (b) Simple five most recent calendar years for off-grid power plants. low-cost/must-run power sources and other power sources. adjusted OM Calculated as the generation-weighted average CO2 emissions per unit Ex post option The emission factor is determined for the year (d) Average OM net electricity generation of all generating power plants serving the system in which the project activity displaces grid electricity, requiring but also including the low-cost/must-run power plants in all equations. the emissions factor to be updated annually during monitoring. Determined based on the grid power units that are actually dispatched at Use the year in which the project activity displaces grid (c) Dispatch data the margin during each hour where the project is displacing grid electricity, electricity and update the emission factor annually during analysis OM monitoring.

Applicability of Simple OM method: Low-cost/must-run resources constitute less than 50 % of total grid generation (excluding electricity generated by off-grid power plants) in: 1) average of the five most recent years, or 2) based on long-term averages for hydroelectricity production.

Step 4. Calculate the operating margin emission factor according to the selected method

Simple OM (Only one method out of four methods is introduced here)

Option A: Calculation based on average efficiency and electricity generation of each plant

Option A1: Determined based on data of fuel consumption and electricity generation, and the CO2 emission factor and net calorific value of the fuel type used

Option A2: Determined based on the CO2 emission factor of the fuel type used and the efficiency of the power unit

Option A3: An emission factor of 0 t CO2 /MWh can be assumed as a simple and conservative approach

Option B: Calculation based on total fuel consumption and electricity generation of the system

Step 5. Calculate the build margin (BM) emission factor Procedure to determine the sample group of power Identify the 5 most recent power | Identify the units that comprise at least 20% of the system generation, excluding CDM units, excluding CDM Select the set of power units that comprises the larger annual generation Use the Is there at least one power unit older than 10 years in the set? No resulting set to calculate Exclude power units older than 10 years and The BM include power units registered in the CDM Yes 7 Does the set comprise at least 20% of generation? Include power units older than 10 years until the set comprises 20% of generation The BM emissions factor is the generation-weighted average emission factor of all power units during the most recent year y.

Step 6. Calculate the combined margin emissions factor

 $\mathsf{EF}_{\mathsf{grid},\mathsf{CM},\mathsf{y}} = \mathsf{EF}_{\mathsf{grid},\mathsf{OM},\mathsf{y}} \mathsf{x} \mathsf{w}_{\mathsf{OM}} + \mathsf{EF}_{\mathsf{grid},\mathsf{BM},\mathsf{y}} \mathsf{x} \mathsf{w}_{\mathsf{BM}} (\mathsf{w}_{\mathsf{OM}} + \mathsf{w}_{\mathsf{BM}} = 1)$

	Application	W ом	W вм
Waightad	Wind power and solar power	0.75	0.25
	Others for 1st crediting period	0.5	0.5
average CM	Others for 2 nd & 3 rd crediting period	0.25	0.75
Simplified CM	 The project activity is located in LDC, a country with less than 10 registered CDM projects at the starting date of validation or SIDS The data requirements for the application of Step5 cannot be met. 	1	0

BOX: Low-cost/must-run resources

Power plants with low marginal generation costs or dispatched independently of the daily or seasonal load of the grid. They include hydro, geothermal, wind, low-cost biomass, nuclear and solar generation. If a fossil fuel plant is dispatched independently of the daily or seasonal load of the grid and if this can be demonstrated based on the publicly available data, it should be considered as a low-cost/must-run

Attachment 7. Guidelines for the establishment of sector specific standardized baselines

◆This framework allows for setting baselines that are not necessarily specific to one type of project activity in a sector, but can be applicable to most of the possible project activities in a sector.

◆Additionality is not to be demonstrated for each individual project activity ex-post (after its formulation) but rather for types of measures and ex-ante.

[EB65 Anx23]

Definitions

- ◆Level of aggregation: The level of aggregation measures the extent to which consolidation of information from any parts or units to form a collective whole is undertaken. This consolidation is usually done within a common sector, to provide information at a broader level to that at which detailed observations are taken. Information on categories can be grouped or aggregated to provide a broader picture when this does not lead to misrepresentation. It can also be split or disaggregated when finer details are required by too much non-homogeneity
- ◆ Measure: a broad class of GHG emission reduction activities possessing common features. 4 types of measures are currently covered in the framework
- (i) Fuel and feedstock switch, (ii) Switch of technology with or without change of energy source (including energy efficiency improvement), (iii) Methane destruction; (iv) Methane formation avoidance
- ◆Output: goods or services with comparable quality, properties, and application areas (e.g. clinker, lighting, residential cooking)
- ◆Positive lists: lists of emission reduction activities that are considered automatically additional under certain conditions (e.g. location, technology / measure, size)
- ◆ Sector: a segment of a national economy that delivers defined output(s) (e.g. clinker manufacturing, domestic / household energy supply). The sector is characterized by the output(s) Oi it generates

Steps for establishing SB [EB65 Anx23 para15]

Step 1. Identify host country (ies), sectors, output(s) and measures

Step 2. Establish additionality criteria for the identified measures

e.g. positive lists of fuels /feed stocks and technologies

Step 3. Identify the baseline for the measures

e.g. baseline fuel, technology, level of GHG destruction

Step 4. Determine the baseline emission factor where relevant

- Selecting an appropriate level of aggregation is important to ensuring that the SB is representative of the applicable projects. Geographical parameters may account for a substantial portion of the differences in GHG intensities and the cost of and potential for emission reductions. [EB65 Anx23 para9]
- For project activities that include multiple types of independent measures, the additionality of each measure is demonstrated by checking against the positive list of measures.

 [EB65 Anx23 para13]
 - The baseline technology and the baseline energy source are to be identified simultaneously and the
 - positive list is a positive list of technologies using given energy sources. [EB65 Anx23 para11]

For grid connected electricity generation where information on the output and the fuels consumed by individual power plants are available, it may be preferable to establish the baseline emission factor for the sector based on the actual emissions of the connected power plants instead of baseline technology under the design conditions [EB65 Anx23 para13]

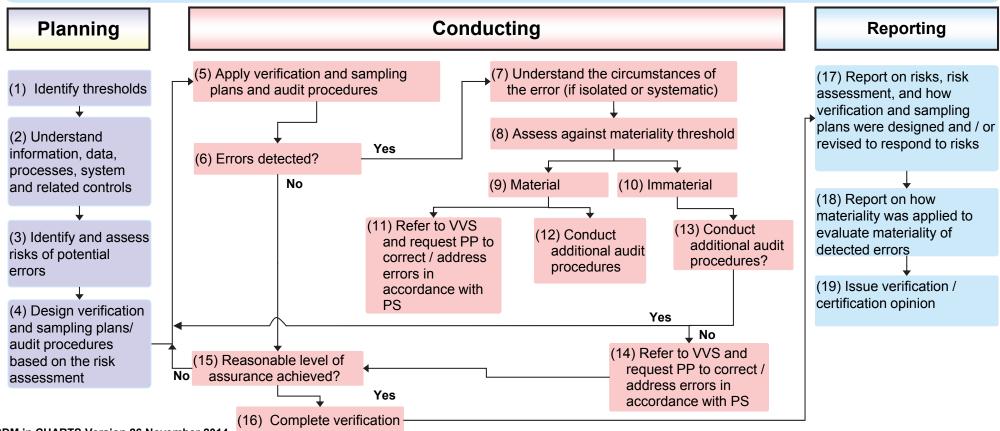
Thresholds for additionality

[EB65 Anx23 p9]

Sectors	Energy* sectors	Other sectors
Xa	80%	90%
Xb	80%	90%
Ya	80%	90%
Yb	80%	90%
Data vintage	Most recent 3 years	Most recent 3 years
Frequency of updates	3 years	3 years

*Energy for household; Energy generation in isolated systems; Agriculture

- ◆Decision 9/CMP.7 decided that the scope of materiality under the CDM initially covers the stage of verification by DOEs.
- ◆Materiality is an auditing concept to be applied by DOEs in verifications in order to detect errors, omissions or misstatements in emission reductions (ERs) or removals being claimed by PPs in MRs for CDM projects.
- ◆Terms and definitions
 - > "Material information" is a piece of information for which its omission, misstatement or erroneous reporting could change a decision by the EB;
 - > "Reasonable level of assurance" is a high, but not absolute, level of assurance;
- ◆The application of materiality and reasonable level of assurance imply that some data or information <u>may not be checked</u>. However, DOE should design their verification and sampling plans <u>to detect</u> all material errors, omissions, or misstatements, and any unchecked data or information should not contain any material errors, omissions or misstatements.
- ◆The decision prescribes the thresholds for the application of materiality in verifications, by defining that information is material if it might lead, at an aggregated level, to an overestimation of the total emission reductions or removals achieved by a CDM project equal to or higher than:
 - (a) 0.5 % of the ERs or removals for project achieving a total ER or removal of equal to or more than 500,000 t-CO2e/y;
 - (b) 1 % of the ERs or removals for project achieving a total ER or removal between 300,000 and 500,000 t-CO2e/y;
 - (c) 2 % of the ERs or removals for large-scale project achieving a total ER or removal of 300,000 t-CO2e/y or less;
 - (d) 5 % of the ERs or removals for small-scale project other than project covered under subparagraph (e) below;
 - (e) 10 % of the ERs or removals for the type of project referred to in decision 3/CMP.6, paragraph 38 (referred to as microscale project activities)



Attachment 9. Global warming potential (GWP) and carbon emission factor (CEF)

- ♦ Global warming potential (GWP) is a measure of the relative radioactive effect of GHGs compared to CO₂. GWP used by Parties should be those provided by the IPCC 2nd Assessment Report ("1995 IPCC GWP values") based on the effects of the GHGs over a 100-year time horizon [CP/1997/7/Ad1, p31 para3]. The value of GWP is fixed for the 1st commitment period, but it is subject to change for the subsequent commitment periods depending on new scientific findings.
- ♦ All emission reductions and removals achieved by CDM project and PoAs in the second commitment period of the Kyoto Protocol shall be calculated using the GWPs adopted by the CMP, in accordance with decision 4/CMP.7. This requirement shall apply from 1 January 2013. [EB69 Anx3 para2]
- ♦ PDDs for project activities and PoA-DDs for PoAs registered before 1 January 2013 are not required to be amended, re-published for global stakeholder consultation, or re-validated. [EB69 Anx3 para5]
- ◆Carbon Emission Factor (CEF) is the estimated average carbon (or CO₂) emission rate for a given source, relative to units of activity. The EB agreed that the IPCC default values should be used only when country or project specific data are not available or difficult to obtain [EB25 Rep., para59]. The EB further clarified that the '2006 IPCC Guidelines for National Greenhouse Gas Inventories' was published on the IPCC website on 24 October 2006 after which this version shall be considered as the latest version. [EB28 Rep. para68]

Global Warming Potential

Species	Chemical formula	GWP	Species	Chemical formula	GWP
CO ₂	CO ₂	1	HFC-23	CHF₃	11,700
Methane *	CH₄	25	HFC-236fa	C ₃ H ₂ F ₆	6,300
Nitrous oxide	N ₂ O	310	HFC-143a	C ₂ H ₃ F ₃	3,800
Perfluoroethane	C ₂ F ₆	9,200	HFC-134a	CH ₂ FCF ₃	1,300
Perfluoropentane	C ₅ F ₁₂	7,500	HFC-134	C ₂ H ₂ F ₄	1,000
Perfluorohexane	C ₆ F ₁₄	7,400	HFC-32	CH ₂ F ₂	650
Sulphur hexafluoride	SF ₆	23,900	HFC-41	CH₃F	150
Nitrogen trifluoride	NF ₃	17,200			

Revision of the UNFCCC reporting guidelines on annual inventories for Parties included in Annex I to the Convention_[FCCC/CP/2011/9/Add.2]

General Conversion Factors for Energy

				•
To:	TJ	Gcal	Mtoe	GWh
TJ	1	238.8	2.388 x 10 ⁻⁵	0.2778
Gcal	4.1868 x 10 ⁻³	1	10 ⁻⁷	1.163 x 10 ⁻³
Mtoe	4.1868 x 10 ⁴	10 ⁷	1	11630
GWh	3.6	860	8.6x10 ⁻⁵	1

Carbon Emission Factor

	Fossil fuel	CO ₂ emission factor (kg/TJ)	Net calorific value (TJ/Gg) Gg=1000t	CO ₂ emission factor (t-CO ₂ /t (Fuel))
	Crude Oil	73,300	42.3	3.101
	Motor Gasoline	69,300	44.3	3.070
Liquid Fossil	Other Kerosene	71,900	43.8	3.149
	Gas/Diesel Oil	74,100	43.0	3.186
	Liquefied Petroleum Gases	63,100	47.3	2.985
	Anthracite	98,300	26.7	2.625
Solid Fossil	Sub-Bituminous Coal	96,100	18.9	1.816
	Lignite	101,000	11.9	1.202
Gaseous Fossil	Natural Gas	56,100	48.0	2.693

2006 IPCC Guidelines for National Greenhouse Gas Inventories, p. 1.18-1.24, Intergovernmental Panel on Climate Change, 2006.

[Default carbon oxidation factor is 1] [CO₂ emission factors t-CO₂/t (Fuel) are calculated for this document and do not appear in the IPCC guideline]

Glossary

Examples of abbreviated titles used in this document and corresponding formal document symbols and titles

Examples of abbreviated titles used in this charts, shown in []	I Orresponding formal ancilment symbols and titles	
KP Art.2 para1(a)	The Kyoto Protocol, Article2, paragraph1(a)	
CP/2001/13/Ad2, p1 para2(a)	FCCC/CP/2001/13/Add.2, page 1 paragraph 2(a)	
CMP/2005/8/Ad1, p1 para2(a)	FCCC/KP/CMP/2005/8/Add.1, page 1 paragraph 2(a)	
EB01 Rep, para1(a)	Executive Board of the Clean Development Mechanism, 1st Meeting Report, paragraph 1(a)	
EB01 Anx1, para1(a)	Executive Board of the Clean Development Mechanism, Annex 1 to the 1st Meeting Report, paragraph 1(a)	
PDD GL ver.7, p1	Guidelines for Completing the Project Design Document (CDM-PDD), and the Proposed New Baseline and Monitoring Methodologies (CDM-NM) Version 7, page 1 (ver.7 was published on 2 August 2008)	
SSC GL ver.5, p1	Guidelines for Completing CDM-SSC-PDD, F-CDM-SSC-Subm and F-CDM-SSC-BUNDLE, Version 05, page 1 (Ver.5 was published on 14 September 2007)	
Glos ver.7, p1	Glossary of CDM terms Version 07, page 1 (ver.7 was published on 23 November 2012)	
PCP ver.5, para1	Clean development mechanism project cycle procedure Version 05.0, paragraph 1	
PS ver.5, para1	Clean development mechanism project standard Version 05.0, paragraph 1	
VVS ver.5, para1	Clean development mechanism validation and verification standard Version 05.0, paragraph 1	
Anx stands for Annex, Apx for Appendix, Att for Attachment, and Ann for Annotation.		
CDM M&P means CDM Modalities and Procedures (Annex to Decision 17/CP.7) (FCCC/CP/2001/13/Add.2, p26-41)		
CDM A/R M&P means Modalities and Procedures for Afforestation and Reforestation project activities under the CDM (Annex to Decision 19/CP.9) (FCCC/CP/2003/6/Add.2, p16-27)		



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