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/>.

Whilst information in this document is believed to be true and accurate at the date of going to press, neither the author nor publisher can accept any legal responsibility or liability for any errors or omissions that may be made. Other CDM–related publications can be downloaded from <https://www.iges.or.jp/jp/climate-energy/database.html#guide>. For any queries relating to this document, please contact <ce-info@iges.or.jp>.

### Important changes from previous version (Ver. 28/November 2016)

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<td>PS-PoA ver.01, para1</td>
<td>Clean development mechanism project standard for programme of activities Version 01.0, paragraph 1</td>
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<td>VVS-PoA ver.01, para1</td>
<td>Clean development mechanism validation and verification standard for programme of activities Version 01.0, paragraph 1</td>
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</tr>
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</table>

Anx stands for Annex, Apx for Appendix, Att for Attachment, and Ann for Annotation.


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)
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>AAU</td>
<td>Assigned amount unit</td>
</tr>
<tr>
<td>ACM</td>
<td>Approved consolidated methodology</td>
</tr>
<tr>
<td>AE</td>
<td>Applicant entity</td>
</tr>
<tr>
<td>AM</td>
<td>Approved methodology</td>
</tr>
<tr>
<td>AMS</td>
<td>Approved small-scales methodologies</td>
</tr>
<tr>
<td>A/R</td>
<td>Afforestation and Reforestation</td>
</tr>
<tr>
<td>CCS</td>
<td>Carbon dioxide capture and storage</td>
</tr>
<tr>
<td>CDM</td>
<td>Clean development mechanism</td>
</tr>
<tr>
<td>CDM-AP</td>
<td>CDM Accreditation Panel</td>
</tr>
<tr>
<td>CEF</td>
<td>Carbon emission factor</td>
</tr>
<tr>
<td>CER</td>
<td>Certified emission reduction</td>
</tr>
<tr>
<td>CME</td>
<td>Coordinating/managing entity</td>
</tr>
<tr>
<td>CMP</td>
<td>Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol</td>
</tr>
<tr>
<td>COP</td>
<td>Conference of the Parties (to the UNFCCC)</td>
</tr>
<tr>
<td>CPA</td>
<td>CDM programme activity (Component project activity)</td>
</tr>
<tr>
<td>CPA-DD</td>
<td>Component project activity design document</td>
</tr>
<tr>
<td>CPR</td>
<td>Commitment period reserve</td>
</tr>
<tr>
<td>DNA</td>
<td>Designated national authority</td>
</tr>
<tr>
<td>DOE</td>
<td>Designated operational entity</td>
</tr>
<tr>
<td>EB</td>
<td>Executive Board of the clean development mechanism</td>
</tr>
<tr>
<td>DSB</td>
<td>Draft standardized baseline</td>
</tr>
<tr>
<td>EIT</td>
<td>Economies in Transition</td>
</tr>
<tr>
<td>ER</td>
<td>Emission Reduction</td>
</tr>
<tr>
<td>ERT</td>
<td>Expert Review Team</td>
</tr>
<tr>
<td>ERU</td>
<td>Emission Reduction Unit</td>
</tr>
<tr>
<td>GHG</td>
<td>Greenhouse gas</td>
</tr>
<tr>
<td>GWP</td>
<td>Global Warming Potential</td>
</tr>
<tr>
<td>HFCs</td>
<td>Hydro fluorocarbons</td>
</tr>
<tr>
<td>I-CER</td>
<td>Long-term certified emission reduction</td>
</tr>
<tr>
<td>LDC</td>
<td>Least developed country</td>
</tr>
<tr>
<td>IET</td>
<td>International emissions trading under the Kyoto Protocol</td>
</tr>
<tr>
<td>IPCC</td>
<td>Intergovernmental Panel on Climate Change</td>
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<tr>
<td>ITL</td>
<td>International Transaction Log</td>
</tr>
<tr>
<td>JI</td>
<td>Joint Implementation</td>
</tr>
<tr>
<td>KP</td>
<td>Kyoto Protocol</td>
</tr>
<tr>
<td>LULUCF</td>
<td>Land Use, Land-Use Change and Forestry</td>
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<tr>
<td>Meth Panel</td>
<td>Methodologies Panel (MP)</td>
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<tr>
<td>MoC</td>
<td>Modalities of communication</td>
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<tr>
<td>MP</td>
<td>Methodologies Panel</td>
</tr>
<tr>
<td>MR</td>
<td>Monitoring Report</td>
</tr>
<tr>
<td>NM</td>
<td>New Methodology</td>
</tr>
<tr>
<td>OE</td>
<td>Operational Entity</td>
</tr>
<tr>
<td>Party</td>
<td>Country or regional integration organization which has ratified the KP, unless otherwise specified</td>
</tr>
<tr>
<td>PCP</td>
<td>Project Cycle Procedure</td>
</tr>
<tr>
<td>PDD</td>
<td>Project design document</td>
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<td>PFCs</td>
<td>Per fluorocarbons</td>
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<tr>
<td>PoA</td>
<td>Programme of activities</td>
</tr>
<tr>
<td>PoA-DD</td>
<td>Programme of activities design document</td>
</tr>
<tr>
<td>PP</td>
<td>Project Participant</td>
</tr>
<tr>
<td>PS</td>
<td>Project Standard</td>
</tr>
<tr>
<td>RIT</td>
<td>Registration and issuance team</td>
</tr>
<tr>
<td>RMU</td>
<td>Removal Unit</td>
</tr>
<tr>
<td>SAR</td>
<td>(the IPCC) 2nd Assessment Report</td>
</tr>
<tr>
<td>SB</td>
<td>Standardized baseline</td>
</tr>
<tr>
<td>SBI</td>
<td>Subsidiary Body for Implementation</td>
</tr>
<tr>
<td>SBSTA</td>
<td>Subsidiary Body for Scientific and Technological Advice</td>
</tr>
<tr>
<td>SF₆</td>
<td>Sulfur Hexafluoride</td>
</tr>
<tr>
<td>SIDs</td>
<td>Small Island Developing states</td>
</tr>
<tr>
<td>SOP</td>
<td>Share of Proceeds</td>
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<tr>
<td>SSC</td>
<td>Small-Scale</td>
</tr>
<tr>
<td>SSC-WG</td>
<td>Small-scale Working Group</td>
</tr>
<tr>
<td>i-CER</td>
<td>Temporary certified emission reduction</td>
</tr>
<tr>
<td>UNFCC</td>
<td>United Nations Framework Convention on Climate Change</td>
</tr>
<tr>
<td>VR</td>
<td>Verification Report</td>
</tr>
<tr>
<td>VVS</td>
<td>Validation and Verification Standard</td>
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</table>
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. [FCCC/CP/2011/9/Add.2]

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” × “emission reduction target” × 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>


☞ 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 accessions.

☞ 55% of the total CO₂ emissions for 1990 of the Annex I Parties have ratified the Protocol.

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/Add.1, 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/Add.2, p2 para5]

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

- A total emission cap of an Annex I Party X
- A total emission cap of an Annex I Party X
- Specific place in a host Party
- Specific place in a host Party
- GHG emissions projection
- GHG emissions
-_baseline Scenario
- Project Scenario
- Annex I Party Y will get ERUs
- ERU
- Transferred ERUs are subtracted from ‘Assigned Amounts’
- Acquired ERUs are added to ‘Assigned Amounts’
- A total emission cap of Party X
- A total emission cap of Party Y
### 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.
  - Minimum trading unit is 1t-CO$_2$ equivalent.
- 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

<table>
<thead>
<tr>
<th></th>
<th>Annex I Party X</th>
<th>Annex I Party Y</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before ET: Emission cap</td>
<td>10</td>
<td>8</td>
<td>18</td>
</tr>
<tr>
<td>After ET: Emission cap</td>
<td>10</td>
<td>8</td>
<td>18</td>
</tr>
<tr>
<td>GHG emissions</td>
<td>12</td>
<td>10</td>
<td>22</td>
</tr>
<tr>
<td>Necessary reduction</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Unit cost of reduction</td>
<td>$200</td>
<td>$100</td>
<td>-</td>
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<tr>
<td>Total cost of reduction</td>
<td>$400</td>
<td>$200</td>
<td>$600</td>
</tr>
<tr>
<td>Trading cost</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total compliance cost</td>
<td>$400</td>
<td>$200</td>
<td>$600</td>
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### With International Emissions Trading

<table>
<thead>
<tr>
<th></th>
<th>Annex I Party X</th>
<th>Annex I Party Y</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before ET: Emission cap</td>
<td>10</td>
<td>8</td>
<td>18</td>
</tr>
<tr>
<td>After ET: Emission cap</td>
<td>11</td>
<td>7</td>
<td>18</td>
</tr>
<tr>
<td>GHG emissions</td>
<td>12</td>
<td>10</td>
<td>22</td>
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<tr>
<td>Necessary reduction</td>
<td>1</td>
<td>3</td>
<td>4</td>
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<tr>
<td>Unit cost of reduction</td>
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<tr>
<td>Total cost of reduction</td>
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<tr>
<td>Trading cost</td>
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<td>0</td>
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<tr>
<td>Total compliance cost</td>
<td>$350</td>
<td>$150</td>
<td>$500</td>
</tr>
</tbody>
</table>

Note: Party Y sold a KP unit to Party X at $150.
Annex I Parties can trade following types of Kyoto Protocol units.

- **Assigned 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.

\[
\text{Emission cap of Annex I Party} = \text{AAUs} + \text{RMUs} + \text{Acquired credits from JI and the CDM (ERUs+CERs+tCERs+ICERs)} \pm \text{Acquired and transferred KP units by International Emissions Trading}
\]

**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 | ♦ CDM project participants (PPs) plan a CDM project activity. ([chap.5])  
☞ There are several conditions in order to be registered as a CDM project activity, and PPs should consider those conditions from a planning stage. |
|-----------------------------------|---------------------------------------------------------------|
| (2) Making the project design document (PDD) | ♦ 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. |
| (3) Getting approval from each Party involved | ♦ 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 the participation of an entity(ies) in a CDM project activity or PoA and written approval of voluntary participation from the DNA of each Party involved. ([Glos ver.9, 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. |
| (4) Validation | ♦ 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]) |
| (5) Registration | ♦ 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 request 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]) |
3. CDM project cycle

- **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)

- **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.

- **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)]

- **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)** [PCP-PA ver.01; PCP-P0A ver.01]

- The “CDM project cycle procedure for project activities” and “CDM project cycle procedure for programmes of activities” describe 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 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.

Definition of host Party [Glos ver.9 p12] [EB94 Anx1]
  ➢ A non-Annex I Party 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.

BOX: Communication with EB (ver. 2) [EB82 Anx9 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.
  ➢ The EB shall also allocate time for interaction during the EB meetings with the global DNA forum through its co-chairs 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.
4. CDM-related bodies

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 the adoption of, or revision to, CDM rules and requirements to be followed by stakeholders.

☞ Rulings relating to the determination of whether the actions of PPs, AEs and DOEs are in compliance with the CDM rules and requirements

☞ Operational decisions relating to the functioning of the EB 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 members and alternate members 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.

Meetings and decisions 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.
### EB decisions [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.

**Regulatory decisions** relate to the adoption of, or revision to, CDM rules and requirements to be followed by stakeholders. Regulatory decisions are reflected in the adoption of, or revisions to standards, procedures, guidelines and clarifications;

**Operational decisions**: relate to the functioning of the regulatory body of the EB and its support structure (panels, working groups and secretariat) and include decisions on finance; 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 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]

### Documents [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** contain a mandatory series of actions that must be undertaken to 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 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 applicable standards or procedures.

**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 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.
4-4. The Support Structure of CDM EB

- 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]

CDM executive board (EB)

- Secretariat
- Methodological Bodies
  - Meth Panel (MP) (Methodologies Panel)
  - SSC WG (Working group for small-scale CDM project activities)
  - CCS WG (Working group on carbon dioxide capture and storage)
  - AR WG (Working group on afforestation and reforestation project activities)
- CDM-AP (CDM Accreditation Panel)
- CDM-AT (CDM accreditation assessment team)
- Appeal Panel

☞ 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 – 5 members and 1 MP member [EB73 Anx2, Apx1]

☞ The RIT assist the EB by preparing assessments of submissions 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 no 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]
  - PPs 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]
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, based on a recommendation 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)]

Procedures for accrediting OEs [EB93 Anx3 para 9.]

- 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 conducts 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.

There is “CDM accreditation standard for operational entities (ver.6)” [EB80 Anx43]
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) [VVS-PA ver.01; VVS-PoA ver.01]
☞ Validation 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 of DOEs [EB85 Anx24]
☞ Objective: 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.
⇒ There is no clear definition of “significant deficiencies.”
☞ Scope: To monitor the performance of DOEs through the monitoring, classification and rating of non-compliances identified at the requests for registration, issuance or post-registration changes submitted by DOEs.
⇒ 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.

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” (F-CDM-AAR) (ver. 02.1)
4-6. Project Participant (PP)

♦ Participation in a CDM project activity is voluntary. [CMP/2005/8/Ad1, p12 para28]

♦ A Party involved, or a private and/or public entity authorized by the DNA of a Party involved, that participates in a CDM project activity or a PoA, as applicable. [Glos ver.9, 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.9, p5]

♦ When submitting a request for registration (chap.13-1) of the proposed CDM project activity or PoA, all PPs or CMEs shall be listed in the PDD or PoA-DD. The list shall specify which PPs have a contractual relationship with the DOE for validation of the proposed CDM project activity or PoA. [PCP-PA ver.01, para 22; PCP-PoA ver.01, para 13]
4-7. Procedures for modalities of communication (MoC)

Modalities of communication statement [PCP-PA ver.01, para 39; PCP-PoA ver.01, para 29]
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-PA ver.01, para 39-43; PCP-PoA ver.01, para 29-33]
♦ 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 or PoA 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 valid version of the form (CDM-MOC-FORM), including its annex 1.
♦ The PPs shall grant the focal points 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.

Authorized signatory and signature [PCP-PA ver.01, para 44-46; PCP-PoA ver.01, para 34-36]
♦ 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. [Glos ver.9, p19]
♦ 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-PA ver.01 para 47; PCP-PoA ver.01 para 37]
♦ 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.
4-7. Procedures for modalities of communication (MoC)

Requirements on changes to focal points [PCP-PA ver.01, para 167-168; PCP-PoA ver.01, para 190-193]
☞ Designation of the focal points in a registered CDM project activity: Submitting a new MoC statement duly signed by all PPs, either (a) through the focal points for scope of authority, or (b) any of the PPs for changes to the MoC statement excluding its annexes.
☞ Designation of the focal points in a registered CDM PoA: submitting a new MoC statement duly signed the CME, either through: (a) the focal points for scope of authority, or (b) the incoming CME.
☞ A new MoC statement and its attachment of Annex 2 shall be submitted.

Requirements on changes of CME for PoA [PCP-PoA ver.1, para 195]
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, the DOE that submits the next request for issuance of CERs or the DOE that submits the next post-registration change request, whichever is earliest, shall submit a validation opinion regarding the compliance of the new CME with the applicable requirements in the “CDM project standard for programmes of activities”.

Requirements on changes to PPs [PCP-PA ver.1, para 172-175; PCP-PoA ver.1, para 198-199]
The focal points for scope of authority (b) shall submit annex 2 of the MoC statement 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; (e) addition of, or change to, the end-date of participation of a PP in the registered CDM PA or PoA.

BOX: Direct communication with stakeholders (ver. 02.0) [EB82 Anx9]
☞ This procedure provides for means of communication of the EB with stakeholders in the following two main areas:
   (a) Non-process-based communication: this area covers communication to be made outside the defined communication provisions in dedicated process procedures (e.g., CDM project cycle procedure, Procedure: Development, revision and clarification of baseline and monitoring methodologies and methodological tools, CDM accreditation procedure).
   (b) Process-based communication: this area covers communication to be made in accordance with the defined communication provisions in dedicated process procedures.
☞ 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 the 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) for project activities and programmes of activities [PS-PA ver.01; PS-PoA ver.0.1]

- These Standards 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 Anx26], “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

Identifying a type of CDM project activities

- Is it a GHG emission reduction project activity eligible for the CDM? (chap.5)
- Is it a GHG removal by afforestation and reforestation project activity eligible for the CDM? (chap.20-1)
- Is it a programme of activities eligible for the CDM? (chap.21)
- Is it eligible for a small-scale CDM project activity? (chap.19-1)
- Is it eligible for a small-scale afforestation and reforestation CDM project activity? (chap.20-3)

Identifying a PDD form

- Project Design Document (F-CDM-PDD)
- PDD for small-scale project activities (F-CDM-SSC-PDD)
- PDD for A/R project activities (F-CDM-AR-PDD)
- PDD for small-scale A/R project activities (F-CDM-SSC-AR-PDD)
- Programme of Activities Design Document (F-CDM-PoA-DD)
- CDM Programme Activity Design Document (F-CDM-CPA-DD)

Skip the rest (similar to the steps written in the below diagram)

Determining a baseline and monitoring methodology

- Is there an approved methodology (AM) applicable to the project activity? (Att. 1)
- No or not clear: There is "Clarifications to PPs on when to request revision, clarification to an AM or a deviation". (Version 2) [EB31 Anx12]
- Yes: Request for clarifications to an AM
- Approval
- Request for deviation
- Approval
- Request for a revision of an AM (chap.7-7)
- Approval
- Submission of a proposed new methodology (NM) (chap.7-6)

Writing the F-CDM-PDD by applying AMs
<table>
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<tr>
<th>Normal-scale CDM project activity</th>
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<td>F-CDM-MR ver.5.1</td>
<td>Guidelines for completing the monitoring report form ver.4 [EB75 Anx7]</td>
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There is information on actual emission reductions or net anthropogenic GHG removals by sinks during the first commitment period and the 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]

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

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, p16 para43]

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/investment additionality). [EB09 Anx3, para3]
7-2. Baseline scenario

♦ The baseline scenario for a CDM project (non-A/R) or CPA (non-A/R) is the scenario for the CDM project or CPA that reasonably represents the anthropogenic emissions by sources of GHGs that would occur in the absence of the CDM project or CPA. [Glos ver.9, 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-PA ver.01, para 63-64; PS-PoA ver.01, para 105-106]

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 emissions-intensive technologies (e.g. public subsidies to promote the diffusion of renewable energy or to finance energy efficiency programs).

☞ National 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.
7-3. Baseline methodology

- 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 (Ver. 1)”. [EB24 Anx16]

Baseline approach (para 48 of the CDM M&P) [Glos ver.9, 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 percent 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: 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”.

BOX: Temporarily result in “negative emission reductions” [EB21 Rep, para18]

In some cases and for some 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.
7-4. Standardized baselines (SBs)

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.
7-5. Procedure for the submission and consideration of SBs

**[Bottom-up process]**

1. A proponent (a Party, PP, international industry organization or admitted observer organization) may propose a SB through the DNA of a Party for which the SB is proposed.

**Note:** A SB shall be developed using one of the following approaches: (a) the approach of the “Guidelines for the establishment of a sector specific standardized baselines”; (b) a methodological approach contained in an approved, proposed new or revised baseline and monitoring methodology; (c) a methodological approach contained in an approved, proposed new or revised methodological tool; or (d) the approach of the “Guideline: Establishment of standardized baselines for afforestation and reforestation project activities under the CDM”.

**Note:** (a) If the proponent wishes to use a combination of the approaches, or deviate from the selected approach due to a specific issue of the sector or a geographical area, the proponent shall provide a justification for the necessity and the appropriateness of such combination or deviation in the submission of the SB. In case of deviation, the proponent shall also justify why a revision of the approved methodology or methodological tool is not necessary. (b) If the proponent wishes to use a new or revised approach, or if there is no approved methodology available to be used, it shall, through the DNA, request approval from the EB of a new or revised methodology or methodological tool in accordance with the “Procedure: Development, revision and clarification of baseline and monitoring methodologies and methodological tools”, through either proposing a new or revised methodology or methodological tool through the bottom-up process or requesting the secretariat to propose to the EB the top-down development of a new or revised methodology or methodological tool or the revision of an approved methodology or methodological tool.

**Note:** Data used to establish the proposed SB shall be provided in one of the following sector-specific data templates: (a) published by the secretariat on the UNFCCC CDM website. The proponent may request a revision or clarification of the published data template; or (b) prepared in accordance with an approved methodology or methodological tool.

**BOX: Initiation of the Top-down process**

☞ The secretariat may propose to the EB that the secretariat develops a draft SB (DSB) at any time following the receipt of an expression of interest by the DNA(s) of a Party(ies) for which the DSB will be proposed.

☞ The EB shall consider the proposal and decide on one of the following courses of action: (a) To approve the development of the DSB including an approach to develop the DSB and/or a methodology to be used together with the DSB for the purpose of estimation of emission reductions; (b) Not to approve the proposed development of the DSB; or (c) To continue the consideration of the proposed development of the DSB at the next EB meeting.

**UNFCCC secretariat**

(4) Undertake an initial assessment of the submission using the “Proposed standardized baseline initial assessment form (F-CDM-PSBA)” within 21 days of receipt of the submission to determine whether:

(a) The F-CDM-PSB, including the name and contact details of the proponent has been duly completed;

(b) The proposed standardized baseline was derived from a referred approach(es);

(c) DNA submitted all the information required for consideration of the proposed standardized baseline

(d) An assessment report including the DOE’s positive assessment opinion.

(5) Inform the DNA and the proponent 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 accordingly.

(7-1) The secretariat shall conclude the initial assessment within 42 days of receipt of missing documents or information and inform the DNA and the proponent of the conclusion of the initial assessment.

(8-1) The secretariat shall assign a reference number to the proposed SB and make the submitted documentation publicly available on the UNFCCC CDM website.

(7)-1 The secretariat shall conclude the initial assessment within 14 days of receipt of missing documents or information and inform the DNA and the proponent of the conclusion of the initial assessment.
The DNA should submit the requested input, using the F-CDM-PSB highlighting the revisions to the proposed SB, within 14 days of each notification on the findings by the secretariat.

(7)-2 If the submission of assessment report is omitted, the secretariat shall prepare an assessment report. With 14 days of the successful conclusion of the initial assessment, the secretariat shall request input from the DNA and the proponent on the secretariat’s findings.

(8)-2 The secretariat shall assess the input submitted by the DNA within 14 days of receipt of the input. Only upon conclusion on all the findings, the secretariat shall finalize the assessment report.

Within 28 days of successful conclusion of the initial assessment, or the completion of the assessment report by the secretariat, the secretariat shall prepare a draft recommendation on the proposed SB: (a) The “Proposed standardized baseline recommendation submission form” (F-CDM-PSBR) to approve or not to approve the proposed SB; or (b) The F-CDM-PSB to request further input.

(9) Select 2 members of a relevant panel or working group and forward its draft recommendation to them. 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.

If both of the selected members of a panel or working group agree to the draft recommendation to approve or not to approve the proposed SB:

-1 confirm that it is acceptable or request modifications to it within 7 days of receipt thereof.

-2 If no member of the EB objects to the recommendation received within 28 days of receipt of the recommendation, the recommended course of action shall be deemed to be the decision adopted by the EB.

-1 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.

If both of the selected members of the relevant panel or working group agree to the draft recommendation to approve or not to approve the proposed SB:

-1 agree to the DSB

-2 Finalize the DSB when the DNA doesn’t accept it

(11) Notify the DNA and the proponent accordingly using the F-CDM-PSB.

(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)

(15) Agree to the DSB

(16) 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

(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 within 28 days of receipt of the recommendation, the recommended course of action shall be deemed to be the decision adopted by the EB.

(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

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.

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

A proponent shall submit a proposed new sector-specific data template to the secretariat through a specified email account made available on the UNFCCC CDM website. The proposed data template shall be developed based on sector-specific situations and mitigation measures.

A proponent shall submit a proposed new sector-specific data template to the secretariat through a specified email account made available on the UNFCCC CDM website. The proposed data template shall be developed based on sector-specific situations and mitigation measures.

The DNA should submit the requested input, using the F-CDM-PSB highlighting the revisions to the proposed SB, within 14 days of each notification on the findings by the secretariat.
7-6. Procedure for development, revision and clarifications of baseline and monitoring methodologies and methodological tools

Development of a new methodology or methodological tool

Bottom-up process

1. Submission of a 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 using the relevant form (CDM-NM-FORM, CDM-SSC-NM-FORM, CDM-AR-NM-FORM or CDM-CCS-NM-FORM);
     c) The draft PDD or PoA-DD and 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
        ii. 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

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. 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 or 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
     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 on the UNFCCC website a publicly available list of all proposed new methodologies deemed qualified for consideration.

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.
   - If the EB approves the proposed new methodological tool, it shall request the relevant methodological panel and/or working group to prepare draft revised methodologies to introduce references to the new methodological tool in them.
Revised Procedure for Development, Revision and Clarifications of Baseline and Monitoring Methodologies and Methodological Tools

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

7. Baseline

Revision of an approved methodology or methodological tool

**Bottom-up process**

1. Submission of a 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
     b) The proposed revised methodology or methodological tool
     c) The draft PDD or PoA-DD and with at least the following sections. The submission of a draft PDD or PoA-DD is optional. However, it may be requested by the relevant panel or working group later.
        i. For a planned CDM project activity: a) Description of the project activity, b) Application of selected approved baseline and monitoring methodology, c) Duration of crediting period
        ii. For a planned CDM PoA: a) General description of the PoA, b) Demonstration of additionality and development of eligibility criteria, c) Duration of the 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 or 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
     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
     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 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.
   - If the EB approves the proposed revised methodological tool, it shall request the relevant method panel and/or working group to prepare draft revised methodologies to introduce or modify references to the revised methodological tool in them.

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

**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.
     c) 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.
   - **The secretariat** shall select two members of the relevant method 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
     a) Approve the proposed revised methodology or methodological tool;
     b) Reject the proposed revised 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 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.
   - If the EB approves the proposed revised methodological tool, it shall request the relevant method panel and/or working group to prepare draft revised methodologies to introduce or modify references to the revised methodological tool in them.
Clarification of an approved 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 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 F-CDM-AMC 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-ACIA within 15 days of the deadline for submissions to determine whether:
     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, specifying to which version(s) of the methodology or methodological tool the clarification applies.

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, specifying to which version(s) of the methodology or methodological tool the clarification applies; 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-PA ver.1, para31]
♦ 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 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-PA ver.01, para 92; PCP-PoA ver.01, para85]
♦ 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 one of the following: (a) the date when the DOE submitted a complete request for registration; or (b) the date when the latest revisions to the PDD or PoA-DD and/or validation report were submitted. [PCP-PA ver.01, para115; PCP-PoA ver.01, para107]
8-1. Starting date of a CDM project activity

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

In consideration of requests for registration, the EB takes note 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 6 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 or net anthropogenic GHG removals that would have resulted from that scenario. [PS-PA ver.01, para 287; PS-PoA ver.01, para 291]

Indicating the start date of the crediting period [PS-PA ver.01, para 84-85; PS-PoA ver.01, para 41]

PPs shall state the start date of the crediting period in the format dd/mm/yyyy, and shall not attach 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-PA ver.01, p18 footnote 15]
9. Monitoring plan

- **Monitoring** refers to collecting and archiving all data necessary for determining the baseline, and for measuring anthropogenic emissions by sources of GHGs within the project boundary, and leakage, as applicable. [Glos ver.9 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.9 p14]

- A **monitoring plan** sets out the methodology to be used by PPs or CMEs for the monitoring of, and by DOEs for verification of, the amount of GHG emission reductions or net anthropogenic GHG removals by sinks achieved by a CDM project activity or PoA, as applicable. [Glos ver.9 p14]

- 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 (GHGs) which occurs outside the project boundary, and which is measurable and attributable to the CDM project activity or PoA. [Glos ver.9 p13]

- For and A/R CDM project activity or A/R PoA, the increase in GHG emissions by sources or decrease in carbon stock in carbon pools which occurs outside the boundary of the A/R CDM project activity or A/R PoA, as applicable, which is measurable and attributable to the A/R project activity or A/R PoA. [Glos ver.9 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.9, 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.9, p15]

- A Party that has ratified the Kyoto Protocol and that provides written approval in accordance with the CDM rules and requirements

- **A proposed CDM project activity or PoA supported by a multilateral fund involving many host Parties does not necessarily require letters of approval from the DNAs of all Parties. 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 or PoA.** [PS-PA ver.01, footnote 16; PS-PoA ver.01, footnote 7]

**BOX: Contents of actual approval letters**

- An approval letter is addressed and sent to PPs.

- 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.

- 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 notices 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

- The DOE may, prior to the publication of the PDD or PoA-DD for global stakeholder consultation, or the submission of a request for registration of the proposed CDM project activity or PoA, seek guidance from the EB on the acceptability of a deviation from a selected approved methodology or methodological tool, if the DOE when performing validation for a proposed CDM project activity or PoA, or upon request from the PPs or the CME before the publication of the PDD or PoA-DD, finds that, due to a project- or programme-specific issue, implying that a revision of the selected methodology would not be required to address the issue, the PPs or the CME deviated from: (a) The selected methodology; or (b) Sections in the selected methodology that are not standardized by the selected SB, if the proposed CDM project activity or PoA applies a SB.

- 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-METH) through a dedicated interface on the UNFCCC CDM website. In the submission the DOE shall provide:
  (a) A clear and precise assessment of the case including demonstration that the deviation does not imply a revision of the methodology;
  (b) A description of the impact of the deviation on the GHG emission reductions or removal enhancements from the project activity or PoA.

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 for deviation 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 7 days a completeness check to determine whether the request submission is complete.
   - Upon 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 positive conclusion of the completeness check, the secretariat shall publish the request for deviation on the UNFCCC CDM website, and the request for deviation shall be deemed received by the EB for consideration.
   - The secretariat shall 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, within 14 days of the date of publication of the request for deviation.

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.

11-3. Finalizing request for deviation

- The course of action shall be: (a) Approve the deviation and allow submission of a request for registration with the deviation; (b) Decide that the deviation requires a revision of the methodology before submitting a request for registration; or (c) Reject the request.
- Once a decision has been made by the EB, the secretariat shall inform the DOE of the decision, the reasons thereof and any guidance provided by the EB as applicable, and make the decision, reasons and guidance publicly available on the UNFCCC CDM website by publishing a ruling note within 3 days of the decision of the EB.
12. Validation

12-1. Procedures for validation

**PPs or CME**

(1) Select a DOE for validation from a list of DOEs and contract with them. [CMP/2005/8/Ad1, p14 para 37]

(2) Submit a PDD or a PoA-DD and the PoA specific CPA-DD together with supporting documentation to the DOE.

**Note:** At any time before the submission of a request for registration, PPs or CME, through the DOE, may withdraw the PDD or PoA-DD published for global stakeholder consultation.

**Designated operational entity (DOE)**

(3) Review the PDD or PoA-DD to confirm that the requirements for the CDM have been met. [CMP/2005/8/Ad1, p14 para 37]

(4) Make the PDD or PoA-DD and CPA-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:
   - Reference to any previous publication of the PDD or PoA-DD for public comments on the UNFCCC CDM website;
   - The summary report of the comments received from local stakeholders during the local stakeholder consultation and how they have been taken into account;
   - A summary of the environmental impact assessment report of the proposed CDM project activity or PoA, if the environmental impact assessment was conducted in accordance with the PS;
   - In the case of PoA, the CPA inclusion template, using the form (F-CDM-CPA-INC-CME) if:
     - (i) it is indicated in a generic CPA-DD that the corresponding CPAs are deemed automatically additional in accordance with the “Methodological tool: Demonstration of additionality of microscale project activities”; and
     - (ii) The CME intends to include such CPAs without validation by a DOE prior to inclusion.

(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 publicly 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 via a dedicated interface on the UNFCCC CDM website.

(7) 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 with the VVS.

(8) Request the DNA(s) to forward local stakeholders’ complaints, if any, and promptly forward to the PPs or the CME during the validation in accordance with the VSS.

(9) Make a determination whether the project activity should be validated. [CMP/2005/8/Ad1, p15 para 40(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 publicly 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 via a dedicated interface on the UNFCCC CDM website.

(7) 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 with the VVS.

The secretariat shall inform the stakeholders, who submitted comments during the global stakeholder consultation and that the comments were considered by the DOE as authentic, about the update provided by the DOE, by sending them an email.

May be reconsidered for validation and subsequent registration, after appropriate revisions. [CMP/2005/8/Ad1, p16 para 42]

Note: At any time before the submission of a request for registration, PPs or CME, through the DOE, may withdraw the PDD or PoA-DD published for global stakeholder consultation.

Registration Procedure

On the later of 30 June or 31 December, subsequent to the end of the period for submission of comments on the PDD or PoA-DD, and on each 30 June and 31 December thereafter, the DOE shall provide an update of the status of its validation activity, unless the project activity has been submitted for registration.

(chap.13)
12-2. Validation requirements

♦ Means of validation, including:
  ✤ Standard auditing techniques
    (a) Document review: (i) a review of data and information; (ii) cross checks between information provided in the PDD or PoA-DD and CPA-DD and information from sources other than those used, the DOE’s sectoral or local expertise and, if necessary, independent background investigations;
    (b) Follow-up actions: (i) interviews with relevant stakeholders in the host country, personnel with knowledge of the project design and implementation; (ii) cross checks between information provided by interviewed personnel ensuring no relevant information been omitted;
    (c) Reference to available information relating to projects or technologies similar to the proposed CDM project activity or PoA and CPA under validation;
    (d) Review, based on the selected methodology and, where applicable, the selected SB, of the appropriateness of formulae and accuracy of calculations;
    (e) Sampling approach in accordance with the “Standard for sampling and surveys for CDM project activities and programme of activities”.
  ✤ Corrective action requests (CAR), clarification requests (CL) and forward action request (FAR)
    (i) The DOE shall raise a CAR if one of the following situations occurs: (a) the PPs or CME have made mistakes that will influence the ability to achieve real, measurable, verifiable and additional GHG emission reductions or net anthropogenic GHG removals; (b) the applicable CDM rules and requirements have not met; (c) There is a risk that GHG emission reductions or net anthropogenic GHG removals cannot be monitored or calculated.
    (ii) The DOE shall raise a CL if information is insufficient or note clear enough to determine whether the applicable CDM rules and requirements have been met.
    (iii) The DOE shall raise a FAR to identify issues related to project implementation that require review during the first verification of the proposed CDM project activity or PoA.
♦ Demonstration of prior consideration of the CDM: The DOE shall determine whether CDM benefits were considered necessary in the decision to undertake the project as a proposed CDM project activity or PoA if the starting date of the proposed CDM project activity or PoA is prior to the start of validation.
♦ Identification of project type: The DOE shall determine whether the PPs or CME identified the type of CDM project activity or PoA they intend to design and implement in accordance with the “CDM project standard for project activities or programmes of activities”.
♦ Description of project activity or programme of activities: The DOE shall determine whether project description is accurate, complete, and provides an understanding of the proposed CDM project activity or PoA and CPA.

♦ Selection of methodologies and standardized baselines: The DOE shall apply specific guidance and/or clarifications provided by the EB with respect to the approved methodology, any applicable tools, and/or the approved SB that is(are) selected by the PPs and the CME.
♦ Application of methodologies and standardized baselines: The DOE shall determine whether the selected methodology and, where applicable, the selected SBs apply to the proposed CDM project activity or PoA 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; and (e) Monitoring methodology.
♦ Start date, crediting period type and duration: The DOE shall determine whether the PPs or CME specified the following on start date and crediting type and duration of the proposed CDM project activity or CPA: (a) Start date of the proposed CDM project activity or CPA; (b) Expected operational lifetime; (c) Type and duration of the crediting period; (d) Start date of the crediting period.
♦ Environmental impacts: The DOE shall determine whether the PPs or the CME conducted an analysis of the environmental impacts of the proposed CDM project activity or PoA and CPA, including transboundary impacts, and whether those impacts are considered significant by the PPs or the CME or by the host Party.
♦ Local stakeholder consultation: The DOE shall determine whether the PPs or the CME have completed the local stakeholder consultation in accordance with the relevant requirements in the “CDM project standard for project activities or programmes of activities”.
♦ Sustainable development co-benefits: The DOE shall state whether a document describing how the PPs or CME intend to monitor sustainable development co-benefits was developed by the PPs or CME separately from the monitoring plan.
♦ Approval and authorization: The DOE shall determine whether the DNA of each Party indicated in the PDD or PoA-DD as being involved in the proposed CDM project activity or PoA has provided a written letter of approval. The DOE shall determine whether each PP of the proposed CDM project activity or PoA has been authorized to participate in the project activity or PoA by at least one Party involved in the letter of approval or in a separate authorization letter.
♦ Modalities of communication (MoC): The DOE shall validate the corporate identify of all PPs or the CME and focal points included in the MoC statement, as well as the personal identifies, including specimen signatures and employment status, of their authorized signatories.
♦ Global stakeholder consultation: The DOE shall determine whether authentic and relevant comments in the global stakeholder consultation were taken into due account in the PDD or PoA-DD.
♦ Specific requirements for small-scale and A/R project activities
13. Registration

13-1. Procedures for requests for registration

**DOE (and PPs)**

(1) The DOE, after validating that a proposed CDM project activity or PoA meets all applicable requirements in the "PS-PA or PS-PoA" by following the applicable provisions of the VVSPA or VVS-PoA and other applicable 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.

(2) If proposed small-scale CDM project activities are bundled for registration, the DOE shall submit a single request for registration of the bundle.

(3) 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.

(4) The secretariat shall inform the stakeholders, who submitted comments during the global stakeholder consultation and that the comments were considered by the DOE as authentic, that a request for registration has been submitted, by sending them an email.

(5) The secretariat shall prepare and send to the EB a summary note on the request for registration, within 14 days of date of publication of the request for registration.

(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 shall 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 them publicly available. Upon submission of the revised documentation, the request shall be treated as a new submission of a request for registration.

(8) Upon positive 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 cannot be processed any further and communicate the underlying reasons to the PPs or the CME, and the DOE, and make them publicly available. Upon submission of the revised documentation, the request shall be processed further.

(10) 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 14 days of date of publication of the request for registration.

(13) The EB shall register the proposed project activity or PoA.
13-2. Procedures for review of request for registration

(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;
☞ Mark the request for registration as "under review" on the UNFCCC CDM website and make publicly available an anonymous version of each CDM-REGR-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 (or sub-issue) raised in the request for review, the PPs or the CME, 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 or PoA-DD 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 the DOE, of the scheduled or altered commencement date, respectively. The date of commencement of the review shall be the date when the secretariat notifies the PPs or the CME, and the DOE, that the review has commenced.

(2) Assessment
☞ Concurrent with and independent from the secretariat’s assessment, the RIT team shall conduct an assessment of the request for registration in the context of the reasons for the request for review provided in CDM-REGR-Form and the applicable CDM requirements, taking into account the responses of the PPs or the CME, and the DOE. The secretariat and the RIT Team shall finalize assessments no later than 14 days after the commencement of the review.
☞ Assessment reports 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 report shall include 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 or PoA-DD, VR and/or other relevant documentation.

(3) Consideration by the EB
☞ If the respective assessment reports of the secretariat and the RIT Team contain the same proposed decision, then the proposed decision shall become the final decision of the EB after 20 days, unless an EB member objects to the proposed decision. An objection by an EB member 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 decisions 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 ruling
☞ If the EB’s 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 one of the following: (a) The date when the DOE submitted a complete request for registration; or (b) The date when the latest revisions to the PDD or PoA-DD and/or VR 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 shall provide the Chair of the EB with an information note containing a proposed ruling incorporating the final decision. The proposed ruling shall contain an explanation of the reasons and rationale for the final decision.
☞ Once approved by the Chair of the EB, the secretariat shall make the proposed 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 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).
☞ The secretariat shall publish a ruling note on the UNFCCC CDM website no later than 3 days after the ruling was finalized.
☞ After the publication of the ruling note, DOE, or the PPs or the CME may request the secretariat to provide clarifications on the ruling.
13-3. Registration fee

Rules applicable to project activities and PoAs and specific rules applicable to A/R project activities and PoAs.

Share of proceeds and registration fee:

The share of proceeds to cover administrative expenses (SOP-Admin) for project activities and PoAs is: (a) **USD 0.10/CER** issued for the first 15,000 t-CO₂ equivalent for which issuance is requested in a given calendar year. (b) **USD 0.20/CER** issued for any amount in excess of 15,000 t-CO₂ equivalent for which issuance is requested in a given calendar year. (c) 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 for a CDM project activity shall be the share of proceeds applied to the expected average annual CERs for the proposed CDM project activity over its crediting period, as identified in the project design document and as validated by the DOE. The maximum registration fee for a project activity payable based on this calculation shall be USD 350,000.

If a proposed CDM PoA only applies small-scale methodologies, the registration fee shall be USD 10,000; otherwise the registration fee shall be USD 20,000. For each CPA which is included subsequently, no registration fee is payable.

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.

No registration fee shall be payable until after the date of the first issuance of CERs in the countries with fewer than 10 registered CDM project activities and PoAs in total.

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.

No reimbursement of the registration fee shall be made in any circumstances.

Specific provisions for A/R project activities and PoAs:

The SOP-Admin shall be calculated based on one of the following: (a) If the selected approach for addressing non-permanence is Temporary CERs (tCERs), the SOP is based on the difference between the tCERs for which issuance is requested for a given verification period and the highest amount of tCERs previously issued in a verification period; (b) If the selected approach for addressing non-permanence is Long-Term CERs (lCERs), the SOP is based on the difference between the lCERs for which issuance is requested for a given verification period added to the sum of all previous issuances and reversals, and the highest among the sums of the issuances and reversals since the start of the project calculated for each previous verification period.

The SOP-Admin for A/R project activities or PoAs is due only if the amount calculated above is positive.

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13-4. Procedures for withdrawal of request for registration

Submission of request for withdrawal
For the following cases, the DOE shall submit a request for withdrawal of a request for registration by using the “Registration request withdrawal request form” (F-CDM-REGW) and uploading it through a dedicated interface on the UNFCCC CDM website:
⇒ The PPs or the CME voluntarily wish to withdraw a proposed CDM project activity or PoA, of which the DOE is requesting for registration;
⇒ The DOE has revised its validation 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, and if the request is complete, take the following actions:

a) If the DOE requests the withdrawal prior to the publication of the request for registration, the secretariat shall reimburse the registration fee in full to the PPs or the CME. The secretariat shall not mark the project activity or PoA as “withdrawn”, but shall block the unique reference number assigned to the withdrawn project activity or PoA from further use.
b) If the DOE requests the withdrawal as from the 28-day period for requesting a review of the request for registration, the secretariat shall reimburse any registration fee paid above USD 30,000 to the PPs or the CME, and mark the proposed CDM project activity or PoA as “withdrawn” on the UNFCCC CDM website.
14. Changes to registered CDM project activity or PoA

14-1. Submission for request for approval of changes

♦ If there are changes that have occurred or are expected to occur to a registered CDM project activity or PoA, the PPs or CME shall prepare a revised PDD or PoA-DD reflecting the changes and submit it together with supporting documentation to a DOE for validation. The changes shall be within the scope of the following acceptable changes, and meet the associated conditions, as specified in the PS:
   (a) Temporary deviation from a monitoring plan as described in the registered PDD or PoA-DD, or the applied methodologies or SBs;
   (b) Permanent changes:
      (i) Corrections;
      (ii) Changes to the start date of the crediting period of the project activity;
      (iii) Inclusion of a monitoring plan to the registered PDD or PoA-DD, if a monitoring plan was not included at the time of their registration;
      (iv) Permanent change to the registered monitoring plan, or permanent deviation of monitoring from the applied methodologies, SBs or other applied standards or tools;
      (v) Changes to the project design.
♦ For the changes referred to (b)(ii) above, if the change is up to one year (up to two years for a registered CDM project activity hosted by a LDC), the PPs are not required to request approval by the Board of the change but shall notify the secretariat, by e-mail through a dedicated e-mail address, of the change.
   If the change is more than one year (more than two years for a registered CDM project activity hosted by a LDC), the DOE shall submit a request for approval by the Board of the change. The change may be allowed only once for each registered CDM project activity.
♦ The DOE, after validating the changes to the registered CDM project activity or PoA meet all applicable requirements for post-registration changes in the “VVS-PA or VVS-PoA” and other applicable CDM rules and requirements, shall submit a request for approval by the Board of changes under the prior-approval track or together with the next request for issuance of CERs under the issuance track. The choice of whether the DOE submits the request for approval via the prior-approval track or the issuance track shall be at the discretion of the PPs or CME.
   Note1: For submitting a request for approval under the prior-approval track, the PPs or CME may appoint any DOE for the validation of the changes. The PPs or CME may also appoint this DOE to perform a verification for the same project activity or PoA if it has not not performed other validation activities for the CDM project activity or PoA (registration and renewal of the PoA, inclusion and renewal of crediting period of CPAs in the PoA), unless the project activity is a small-scale one or the DOE is authorized by the EB to do so.
   Note 2: Where more than one of the changes or addition of specific case CPA-DDs have occurred or are expected to occur to the project activity or PoA after its registration, the DOE shall, wherever possible, combine such changes or addition into one request for approval.
♦ For both the prior-approval track and the issuance track, the DOE shall be accredited for the validation function in the sectoral scope(s) of the registered CDM project activity or PoA in question.
♦ For both the prior-approval track and the issuance track, 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/notification form” (F-CDM-PRC);
   (b) A validation opinion on the changes by the DOE prepared in accordance with VVS-PA or VVS-PoA;
   (c) A revised PDD, or revised PoA-DD (in both clean and track-change versions), as applicable;
   (d) A specific CPA-DD for each of the additionally included host Parties in the CDM PoA, as applicable;
   (e) Letters of approval by the DNAs of the additionally included host Parties in the CDM PoA, as applicable;
   (f) Supplemental documentation, as appropriate.
14. Changes to registered CDM project activities or PoA

14-2. Processing request for approval of changes

(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, that is, monthly quotas, 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 7 days the completeness check to determine whether the request submission is complete.
☞ Upon conclusion of the completeness check stage, the secretariat shall notify the PPs or the CME and 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 PPs or the CME, and 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 approval of changes.
☞ Upon positive conclusion of the completeness check stage, the secretariat shall publish the request for approval of changes on the UNFCCC CDM website, and the request shall be deemed received by the EB for consideration.
☞ The secretariat shall, within 14 days of the date of publication of the request for approval of changes, prepare and send to the EB a summary note on the request for approval of changes 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.
☞ 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; otherwise the subsequent EB meeting.

14-3. Finalizing request for approval of changes

☞ The course of action for (b)(iv) and (v) above 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 or CPA, limit the CERs up to the level estimated in the originally registered PDD or specific case CPA-DD;
(c) Reject the proposed changes but allow subsequent requests for issuance for the project activity or PoA only if it is implemented as described in the registered PDD, PoA-DD or specific case CPA-DD.
☞ The course of action for (a) and (b)(i)-(iii) and (v) shall be: (a) Approve the changes; or (b) Reject the changes.
☞ Once a decision has been made by the EB, the secretariat shall inform the DOE of the decision, the reasons thereof, and any guidance provided by the EB as applicable, and make the decision, reasons and guidance publicly available on the UNFCCC CDM website by publishing a ruling note with 3 days of the decision of the EB.
☞ After the publication of the ruling, the DOE, or the PPs or the CME, may request the secretariat to provide clarifications on the ruling.
☞ The secretariat shall make the revised PDD, revised PoA-DD, or specific case CPA-DD, and the validation by the DOE publicly available on the UNFCCC CDM website. This version of PoA-DD shall be applied for future requests for issuance or for inclusion of new CPAs in the registered CDM PoA.
☞ The CPAs that were included before the changes to the registered CDM PoA shall apply the latest version of the PoA-DD only at the time of the renewal of their crediting period.
☞ At any time before the adoption of the decision by the EB on the request for approval of changes, the PPs or the CME may, through the DOE, withdraw the request.
15. Verification and certification

15-1. Publication of monitoring report (MR)

[PCP-PA ver.01, para 182-183; PCP-PoA ver.01, para 205-216]

Verification for a CDM project activity or PoA is the periodic independent review and ex post determination by a DOE of the monitored GHG emission reductions that have occurred as a result of the registered CDM project activity or PoA. Verification for an A/R CDM project activity or A/R PoA is the periodic independent evaluation and ex post determination by a DOE of monitored net anthropogenic GHG removals by sinks achieved by the AR CDM project activity or PoA. [Glos ver.9, p22]

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.

Reporting of verification status

On the later of 30 June or 31 December, subsequent to the publication of the monitoring report, and on each 30 June and 31 December thereafter, the DOE shall provide, through a dedicated interface on the UNFCCC CDM website, an update of the status of its verification activity, until it submits a request for issuance of CERs for the corresponding monitoring period for the registered CDM project activity or PoA. The DOE shall include at least one of the following statuses in the update:

- The verification contract has been terminated. In this case, the DOE shall also provide a reason for the termination to the secretariat on a confidential basis;
- The DOE has issued a negative verification opinion;
- 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;
- The DOE is still performing the verification activity and 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.

[PCP-PA ver.01, para 182-183; PCP-PoA ver.01, para 205-216]

Verification status

The DOE shall provide an update of the status of its verification activity as applicable in accordance with the PCP.

Verification and certification report (VCR): The VCR report shall give an overview of the verification process used by the DOE in order to arrive at its verification conclusions. All verification findings shall be identified and justified.
**Verification requirements**

**Verification approach**
- In carrying out its verification work, the DOE shall determine whether the project activity or PoA and CPA comply with the requirements of paragraph 62 of the CDM modalities and procedures.
- If the DOE has performed a validation activity for the registered CDM project activity or PoA and wishes to perform a verification for the same project activity or PoA, it shall obtain authorization to do so from the EB in accordance with the PCP. However, the same DOE may perform a verification without obtaining authorization from the EB to do so for: (a) A registered SSC CDM project activity and a registered SSC AR CDM project activity for which it has performed the validation activity; (b) Any registered CDM project activity or PoA for which it has performed the validation of post-registration changes.
- 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 assess both quantitative and qualitative information on emission reductions or net anthropogenic GHG removals provided in the project or programme documentation.
- The DOE shall assess and determine whether the implementation and operation of the registered CDM project activity or PoA and CPA, 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, as appropriate, an on-site inspection(s).
- For an on-site inspection(s), the DOE may apply a sampling approach in accordance with "Standard for sampling and surveys for CDM project activities and programmes of activities".
- The DOE shall assess whether the data collection system meets the requirements of the registered monitoring plan as per the applied methodology including applicable tool(s) and, where applicable, the applied SBs.
- In addition to the monitoring documentation the DOE shall review: (a) The registered PDD or PoA-DD and CPA-DD, including the registered monitoring plan and/or the changes from the registered PDD, PoA-DD or CPA-DD, and the corresponding validation opinion; (b) The validation report; (c) Previous verification and certification reports, if any; (d) The applied methodologies and, where applicable, the applied SBs; (e) The monitoring results of sustainable development co-benefits of the CDM project activity or PoA, if requested to verify this by the PPs or CME; (f) Any other information and references relevant to the emission reductions or net removals of the registered CDM project activity or included CDM CPA.
- In addition to reviewing the monitoring documentation, the DOE shall determine whether the PPs or the CME have addressed the forward action requests (FARs) identified during validation or previous verification(s).

**Verification of compliance**
- **Compliance of the monitoring report with the MR form:** The DOE shall determine whether the MR was completed using the valid version of the applicable MR form, taking into account the grace period of the form if it has been revised.
- **Compliance of the project or programme implementation with the registered project or programme design document:** The DOE shall identify any concerns related to the conformity of the actual project activity or programme activity and its operation with the registered design document or programme design document and determine whether: (a) The implementation and operation of the project activity or PoA and CPA has been conducted in accordance with the description contained in the registered PDD or PoA-DD and CPA-DD; or (b) Any deviation or the proposed or actual changes in the implementation or operation of the registered CDM project activity or PoA and CPA comply with the requirements of the PS.
- **Compliance of the registered monitoring plan with methodologies including applicable tools and the SBs:** The DOE shall determine whether the registered monitoring plan is in accordance with the applied methodologies including applicable tools and, where applicable, the applied SBs.
- **Compliance of monitoring activities with the registered monitoring plan:** The DOE shall determine whether the monitoring of parameters related to the GHG emissions reductions or net anthropogenic GHG removals in the registered PDD or PoA-DD has been implemented in accordance with the registered monitoring plan.
- **Compliance with the calibration frequency requirements for measuring instruments:** The DOE shall determine whether the calibration of the measuring equipment that has an impact on the claimed GHG emission reductions or net anthropogenic GHG removals is conducted by the PPs or the CME at a frequency specified in the applied monitoring methodology, the applied SBs and/or the registered monitoring plan.
- **Assessment of data and calculation of emission reductions or net removals:** The DOE shall assess the data and calculations of GHG emission reductions or net anthropogenic GHG removals achieved by from the registered CDM project activity or included CDM CPA by the application of the selected approved methodology and, where applicable, the selected SB.
- **Assessment of reported sustainable development co-benefits:** If the PPs or CME have monitored the sustainable development co-benefits of the registered CDM project activity or PoA, and requested the DOE to verify them, it shall assess whether: (a) The monitoring has been carried out in accordance with the document for monitoring sustainable development co-benefits, if such document was developed and published on the UNFCCC CDM website in accordance with the PS; (b) the reported monitoring results correspond to the sustainable development co-benefits of the project activity or PoA as observed by the DOE.
16. Issuance of CERs

16-1. Procedures for request for issuance of CERs

DOE (and PPs/CME)

(1) The DOE, after verifying the monitored GHG emission reductions or removal enhancements meet the relevant requirements in the PS and certifying the quantity of CERs claimed in the monitoring report, 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 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, and all the required documents listed in the completeness check checklist for requests for issuance.

(2-1) If the MR submitted with the request for issuance covers a different monitoring period covered by the original MR published on the UNFCCC CDM website: (a) the DOE shall indicate the change of monitoring period in the CDM-ISS-FORM or CDM-PoA-ISS-FORM; (b) If the final date of the changed monitoring period is after the date of the DOE’s onsite inspection, the DOE shall undertake an additional onsite inspection; or decide whether a new on-site inspection is necessary in order to duly perform its verification by following the applicable provisions of the VVS.

(2-2) For a CDM project activity, if the revised MR submitted with the request for issuance covers a different monitoring period from the period covered by the original MR published on the UNFCCC CDM website, the secretariat shall reflect the dates of the revised MRV in the view page of that project activity.

(3) 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.

(4) 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.

(5) 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.

(6) Upon positive 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.

(7) 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 cannot be processed any further 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.

(8) 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.

(9) The secretariat shall notify the PPs or CME, the DNA(s) of the Party(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.

(10) 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.

(11) The EB shall instruct the CDM registry administrator to issue a pending account of the EB in the CDM registry. The secretariat shall update the status of the request for issuance on the UNFCCC CDM website accordingly.

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

Yes

(16-2)

No
16. Procedures for review of request for issuance

(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
☞ Concurrent with and independent of the secretariat’s assessment, the RIT team established above 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 include 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, VR, and/or other relevant documentation.

(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 meeting (otherwise the subsequent EB meeting).
  ➢ At the EB meeting for which the matter is placed on the agenda, the EB shall decide to either: (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 this 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 10 days, 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 publish a ruling note on the UNFCCC CDM website no later than 3 days after the ruling was finalized.
  ➢ After the publication of the ruling note, the DOE, or the PPs or the CME, may request the secretariat to provide clarifications on the ruling.

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

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 of a request for issuance, the secretariat shall as soon as possible check the documents submitted, and if the request is complete, update the information in the project view page of the relevant project activity or PoA. If the DOE requests the withdrawal after the publication of the request for issuance was made, the request for issuance shall be marked as “withdrawn”. The DOE may resubmit the request for issuance at any time.
☞ If the PPs or the CME wish to change the monitoring period covered by the MR that corresponds to the withdrawn request for issuance, the DOE shall request the withdrawal of the published MR first, then publish and verify a revised MR. If the final date of the changed monitoring period is after the date of the DOE’s on-site inspection, the DOE shall undertake an additional on-site inspection; otherwise, the DOE shall decide whether a new on-site inspection is necessary in order to duly perform its verification. After the verification, the DOE may resubmit its request for issuance.

BOX: Guidance on a request for issuance of CERs
The EB clarified that only verification activities undertaken after the publishing of MR on the UNFCCC CDM website 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-PA ver.01, App1; PCP-PoA ver.01, 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 or the CME, the secretariat shall forward the CERs to the PPs or the CME accordingly. [PCP-PA ver.01 para218; PCP-PoA ver.01 para240]

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 

The PPs shall, using the valid version of the applicable PDD form, taking into account the grace period of the form, if it has been revised, update the sections of the PDD of the project activity relating to the baseline, estimated GHG reductions or net anthropogenic GHG removals, the monitoring plan and the crediting period using a baseline and monitoring methodology. The PPs are not required to reassess the additionality of the project activity and update the section relation to additionality. The required updates are as follows: (a) PPs shall use the valid version of the approved 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, PPs shall use the valid version of the respective approved consolidated methodology; or (c) If the registered project activity does not meet the applicability criteria of the options provided in subparagraphs (a) or (b) above, due to their revision or due to the update of the baseline, the PP shall either: (i) Select another applicable methodology; or (ii) Request, through the DOE, a deviation from the valid version of the methodology for the purpose of the renewal of the crediting period. [PS ver.8, para 288]

- 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.
- PPs 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.

(2) Submission of request for renewal of crediting period

- The PPs or the CME shall update PDD or PoA-DD including its generic CPA-DD part in accordance with the PS. The PPs or the CME shall ensure that any changes to the list of PPs in the PDD or PoA-DD have been communicated to the secretariat.
- The PPs or the CME shall submit the new version of PDD or PoA-DD to a DOE for its validation. The PPs or the CME may not appoint a DOE that has performed verification for the same project activity or PoA unless the project activity is a SSC one or the DOE is authorized by the EB to do so.
- If the new version of PDD or PoA-DD cannot apply the methodologies or methodological tool applied in the original PDD or PoA-DD because the registered project activity or PoA does not meet the applicability conditions of the valid version of that methodology or methodological tool at the time of the submission of the request for renewal of the crediting period, or, if applicable, of the consolidated methodology, the PPs or the CME may select another methodology or, request, through the DOE, a deviation from the methodology or methodological tool for the purpose of the renewal of the crediting period.

(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 by e-mail to the secretariat, using F-CDM-RENR. 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.

Whether the secretariat receives a request for review of request from a Party involved or at least 3 EB members before 5 p.m. GMT of the last day of the 28-day period following the publication of the request for renewal of crediting period.

No

Yes

(5) Finalizing request for renewal of crediting period

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 crediting period is deemed renewed on the day when the EB adopted the relevant decision.
Step 1: Assess the validity of the current baseline for the next crediting period

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?

Yes

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

Not 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

No

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

Not 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.

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.

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

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**Project activity type and eligibility** [PS-PA ver.01, para 114-116]

- **Type I**: Renewable energy project activities with a maximum output capacity of 15 MW (or an appropriate equivalent). In this context:
  - "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. The installed/rated capacity for renewable electricity generating units that involve turbine-generator systems shall be based on the installed/rated capacity of the generator;
  - 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, i.e. the eligibility limit in terms of aperture area is 64,000 m2 of the collector. The PPs may also use other conversion factors determined as per the requirements, but shall then justify why the chosen conversion factor is more appropriate to the project activity.

- **Type II**: Energy efficiency improvement project activities that reduce energy consumption, on the supply and/or demand side, with a maximum output of 60 GWh per year (or an appropriate equivalent) in any year of the crediting period. In this context, for thermal energy efficiency project activities, the maximum energy saving of 60 GWh(e) per year is equivalent to 180 GWh (th) per year saving;

- **Type III**: Other project activities not included in Type I or Type II that result in GHG emission reductions not exceeding 60 kt CO2e per year in any year of the crediting period.
  - The PPs shall consider that: (a) The three types referred above are mutually exclusive; (b) A SSC CDM project activity may contain more than one component, each belonging to one of the three project types referred above. In this case, the sum of the scale of components belonging to the same project type shall not exceed the limits of the project type.
  - Within each small-scale project activity type, if the scale of the proposed small-scale CDM project activity is under the corresponding threshold below, the PPs may benefit from simplified CDM rules and requirements for microscale project activities. In order to do so, the PPs shall indicate and demonstrate that the project activity qualifies for the microscale project type: (a) Type I: project activities with up to 5 MW output capacity that employ renewable energy as their primary technology; (b) Type II: project activities that aim to achieve energy savings at a scale of no more than 20 GWh per year; or (c) Type III: Other project activities not included in Type I or Type II that aim to achieve GHG emission reductions at a scale of no more than 20 kt CO2e per year.
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 para 9]
  - 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 ver.9 p.13]
- For an A/R CDM project or A/R PoA, the increase in GHG emissions by sources or decrease in carbon stock in carbon pools which occurs outside the boundary of the A/R CDM project or A/R PoA, as applicable, which is measurable and attributable to the A/R CDM project or A/R PoA, as applicable. [Glos ver.9 p.13]

Standard for sampling and surveys for CDM project activities and programmes of activities (ver. 07.0) [EB94 Anx2]
- 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 (ver. 04.0) [EB86 Anx4]
- 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 for SSC CDM methodologies”. (Ver. 21) [EB81 Anx 35]
- There is a “Guidelines for Completing F-CDM-SSC-PDD, F-CDM-SSC-Subm and F-CDM-SSC-BUNDLE”. (Ver. 5) [EB34 Anx9]
- There are approved methodologies for small scale CDM project activities (AMS). (Att.1)
Additionality for SSC project activities (Methodological tool: Demonstration of additionality of small-scale project activities) (ver. 10.0) [EB83 Anx14 para 11]

- 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:

  (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

- **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.

#### Requirements and guidance for any bundles

**Standard: General principles for bundling**  
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.
- A sub-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 sub-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 the sub-bundle goes beyond the limits of its type, the emission reductions that can be claimed for this particular year shall be capped at the amount calculated with the limit of its type.

### Debundling

**Methodological tool: Assessment of debundling for small-scale project activities**  
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.
- 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; and  
  - (c) Registered within the previous 2 years; and  
  - (d) Whose project boundary is within 1 km of the project boundary of the proposed small-scale activity at the closest point.
- The flowcharts of the step-wise approach for determining the occurrence of debundling and debundling under a PoA are described in the Methodological Tool.

### Letter of approval

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

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

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 a 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 released 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 (lCERs).

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 maximum of 20 years, may be renewed twice (total 60 years maximum)
  - A maximum of 30 years
- 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/lCERs 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]

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 lCER)

Temporary CERs (tCERs) and Long-term CERs (lCERs):
☞ 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 lCERs 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.

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 lCERs will be given based on the assumptions shown in the chart below.
☞ Trees are planted in 2007.
☞ 1st issuance of tCERs or lCERs takes place in 2011. Trees are left to grow during the 1st and 2nd commitment periods and 2nd issuance of tCERs or lCERs 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 lCER issued will be used for achieving a Party’s emission reduction target.
☞ Crediting period is 30 years without renewal.
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)]

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.” (Ver. 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.01.1) 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. [EB68 Anx31]

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]

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 CDM project activities created for the purpose of validation. [EB32 Rep, para42]
21. CDM Programme of activities (PoA)

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

A programme of activities (PoA) is [Glos ver.9, p15]:
☞ a 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);
☞ that 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.9, p10]:
☞ a single, or a set of interrelated measures under a CDM 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)
☞ 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. [Glos ver.9, p9]
☞ The PPs may designate separate entities for each scope of authority either in a sole or joint point role. 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-PoA ver.01, para 33]
☞ When the CME is changing, the incoming CME shall sign and submit the MoC statement to the secretariat. The incoming CME shall also attach letter(s) of authorization from each respective host Party stating the change of CME and 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, by using F-CDM-CME. [PCP-PoA ver.01,para 194]
☞ 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, the DOE that submits the next request for issuance or the DOE that submits the next post-registration change request, whichever is earliest, shall submit a validation opinion regarding the compliance of the new CME with the relevant requirements in the PS. [PCP-PoA ver.01, para 195]

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 programmes of activities” (ver. 07.0) [EB94 Anx2] and “Guidelines for sampling and surveys for CDM project activities and programme of activities” including examples (ver. 02.0) [EB69 Anx5]
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 Ann25].

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 (“General guidelines for SSC CDM methodologies” [ver. 21.0] [EB81 Ann35]).

If the proposed CDM PoA applies only small-scale methodologies, and if “cross effects” as defined in the PS-PoA 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 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 with completed sections for detailed technical descriptions. Where possible, such clarification requests shall be treated under the “fast track” of the procedure.

If the proposed CDM PoA applies a combination of only large-scale methodologies, or both large-scale and small-scale methodologies, the DOE may proceed with the publication of the PoA-DD for global stakeholder consultation or the request for registration without pre-approval by the EB of the application of the multiple methodologies: (a) If the combination is explicitly permitted in the methodologies; or (b) If all of the following conditions apply: (i) The multiple methodologies are used in CPAAs to realize the policy or goal of the PoA, and the implementation of the activities through CPAAs is integrated through the design of the PoA; (ii) Each CPA applies only one methodologies; (iii) There is no interaction between the different CPAAs. An interaction shall be deemed to occur in the following cases but is not limited to: a. One CPA is dependent on the implementation of another CPA or that one CPA impacts the profitability or emission reductions or removal enhancements achieved by another CPA; b. One CPA is interlinked with another CPA by the technologies applied or economic decisions taken.

If the proposed CDM PoA applies a combination of only large-scale methodologies or both large-scale and small-scale methodologies, and if the conditions set out above do not apply, the CME or the DOE shall seek clarification on the eligibility of the proposed combination, using the "Procedure: Development, revision and clarification of baseline and monitoring methodologies and methodological tools".

Start date and duration of a PoA [PS-PoA ver.01, para40-43]

The CME may notify the DNA of the host Party(ies) of the proposed CDM PoA, if such DNA exists, and the secretariat of the intention to seek the CDM status for the PoA in accordance with the PCP-PoA for the purpose of determining the start date of the PoA.

The CME shall determine the start date of the proposed CDM PoA and provide a description of how the start date has been determined in accordance with the definition of the start date in the “Glossary: CDM terms”.

The CME shall state the start date of the proposed CDM PoA in the format dd/mm/yyyy, and shall not attach any qualifications to the start date, such as “expected”.

The CME shall specify the duration of the proposed CDM PoA, which shall not exceed 28 years (60 years for the proposed CDM A/R PoA), counting from the start date of the PoA.

Start date, crediting period type and duration of a CPA [PS-PoA ver.01, para186-193]

- The CME shall determine the start date of the proposed CPA and provide a description of how the start date has been determined in accordance with the definition of start date in the “Glossary: CDM terms”.
- The CME shall confirm that the start date of the proposed CPA is on or after the start date of the registered CDM PoA.
- The CME shall specify the expected operational lifetime of the proposed CPA.
- The CME shall indicate the type (fixed or renewable) and the duration of the crediting period of the proposed CPA as specified in the corresponding generic CPA.
- The CME shall determine the start date of the crediting period of the proposed CPA, which shall be on or after the date of inclusion of the CPA in the registered CDM PoA.
- The CME shall determine only one start date for the crediting period of the proposed CPA, even in cases of phased implementation of the CPA.
- The CME shall state the start date of the crediting period of the proposed CPA in the format dd/mm/yyyy, and shall not attach any qualifications to the start date, such as “expected.”
- A CPA included in a registered CDM PoA may not be re-included in the same or different PoA, or registered as a CDM project activity after the expiry of its final crediting period.

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. [EB80 Ann27 para 3]

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. [EB83 Rep para40]
21. Procedures for programme of activities (PoA)

21-2. Validation requirements unique to PoAs [VVS-PoA ver.01, para 38-43, para 90-91; 136-137]

- The DOE shall conduct a thorough and independent assessment of a proposed CDM PoA against the applicable CDM rules and requirements.
- The DOE shall assess the PoA-DD submitted by the CME and shall confirm: (a) The framework developed for the implementation of the proposed CDM PoA; (b) The policy/measure or stated goal that the PoA seeks to promote; (c) That the PoA is a voluntary action by the CME.
- The DOE shall assess the boundary of the PoA in terms of geographical area (e.g. municipality, region within a country, country or several countries) within which all CPA(s) in the PoA will be implemented.
- The DOE shall determine whether, in establishing the boundary of the PoA, the CME has taken into consideration all applicable national and/or sectoral policies and regulations within that chosen boundary.
- The DOE shall confirm that a generic CPA part of a PoA-DD (referred to as generic CPA-DD) has been prepared for each technology/measure, each methodology and each combination thereof, or that technologies/measures have been combined in one generic CPA-DD in accordance with the relevant requirements in the PS.
- The DOE shall determine whether the description of the proposed CDM PoA in the PoA-DD is accurate and complete and whether it provides an understanding of the PoA.
- The DOE shall: (a) Describe the process undertaken to validate the accuracy and completeness of the description in the PoA-DD; (b) State its opinion on the accuracy and completeness of the description in the PoA-DD.
- The DOE shall determine whether the description of generic CPA(s) in the PoA-DD is accurate, complete, and provides an understanding of the generic CPA(s).
- The DOE shall: (a) Describe the process undertaken to validate the accuracy and completeness of description of the generic CPA(s); (b) Provide an opinion on the accuracy and completeness of the generic CPA(s) description.
- The DOE shall assess whether the eligibility criteria for inclusion of corresponding CPA(s) in the proposed CDM PoA are defined in accordance with the PS-PoA.
- The DOE shall assess how each eligibility criterion, including the conditions that corresponding CPA(s) meet the requirement pertaining to the demonstration of additionality in accordance with the applicable requirements in the PS-PoA, and is verifiable as well as sufficiently objective and comprehensive to permit the assessment of the inclusion of corresponding CPA(s) in the PoA.

Request for issuance of CERs for a PoA [PCP-PoA ver.01, para 217-219]

- The DOE, after verifying that the monitored GHG emission reductions or net anthropogenic GHG removals were determined in accordance with all applicable requirements for implementation and monitoring in the PS-PoA, and certifying that the quantity of CERs claimed in the MR, by following the applicable provisions of the VVS-PoA and other applicable CDM rules and requirements, shall submit, through a dedicated interface on the UNFCCC CDM website, a request of CERs by using the PoA-ISS-Form and all the required documents listed in the completeness check checklist for requests for issuance.
- (a) The request for issuance for a specified monitoring period shall either: i). Relate to all CPA(s) included in the PoA; or ii). In the case of multiple separate MRs for a monitoring period prepared in accordance with the PS, relate to all CPA(s) included in the batch of CPA(s) that the request covers. (b) The monitoring periods shall be consecutive. CPA(s) shall be included in issuance requests in a consecutive manner; (c) 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 CERs have been issued for all CPA(s) included in the PoA for the previous monitoring period.

Inclusion of CPA(s) in PoAs [PCP-PoA ver.01, para 119-127]

- The DOE shall forward a completed CPA-DD to a DOE, after having ensured that the proposed CPA complies with the corresponding generic CPA-DD in the latest version of the registered PoA-DD, including the eligibility criteria for inclusion of CPA(s) in the PoA, and relevant CDM rules and requirements. The DOE may forward more than one CPA-DD at one time.
- If the DOE confirms that the proposed CPA complies with the requirements for inclusion of CPA(s) in the registered CDM PoA, it shall include the CPA in the PoA by uploading the corresponding CPA-DD through a dedicated interface on the UNFCCC CDM website together with the CPA-INC-Form and the validation report. Such uploads shall be grouped, shall not occur more frequently than once per month and shall be submitted only after the registration of the PoA.
- The CPA identified in the CPA-DD uploaded by the DOE or the CME 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 host Party of the CPA of the change in the status of the CPA in the EB meeting at which the EB approved the revised or consolidated methodology. Consequent steps and implications of the outcome shall follow the provisions in paragraphs 132-140 below mutatis mutandis.
- If an approved methodology and/or an approved SB applied to the registered PoA is (are) put on hold or withdrawn for any reason other than for the purpose of including the methodology in a consolidated methodology, no new CPA(s) shall be included in the PoA.
- If the applied methodologies and/or SBs, subsequent to being placed on hold, are revised, the CME shall revise the PoA-DD by iner alia, updating the eligibility criteria for inclusion of CPA(s) in the registered PoA to be in line with the revised methodologies and or the revised SBs. Such revision to the PoA-DD is not required if the applied methodologies are revised or withdrawn to be included in consolidated methodologies 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 with the revised eligibility criteria for inclusion of CPA(s) in the registered PoA has been approved by the EB, the inclusion of all new CPA(s) shall be based on the new version of the generic PoA-DD.
- The CPA(s) that were included before the revision of the PoA-DD shall apply the latest version of the PoA-DD at the time of the renewal of their crediting periods.
Review of erroneous inclusion or renewal of crediting period of **CPAs** [PCP-PoA ver.01, para128-XX]

(1) Requesting a review of erroneous inclusion
☞ If a DNA of a Party involved in the registered PoA or an 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-CPA-IR.
☞ If the request is received from an 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 the DNA of a Party involved, the secretariat shall accordingly notify the CME, the DOE and the DNAs of all Parties involved. The CME and validating 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.

(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, CPA inclusion or verification functions with regard to this PoA, to review the CPAs. The DOE shall submit a review report to the secretariat **within 30 days**.
☞ The EB shall establish an assessment team to analyse the DOE’s review report and provide findings and recommendations to the EB **within 14 days**. 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 requirements for inclusion in the PoA was adequately assessed by the validating 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 registered PoA if it concludes that they have been erroneously included.
☞ Any CPA that has been excluded after having identified as erroneously included in the registered PoA may be re-included in the same or different registered PoA or registered as a CDM project activity.

(4) Consequence of erroneous inclusion
☞ The EB determines that the validating DOE failed to adequately assess their compliance with the requirements for inclusion in the PoA, the DOE shall acquire and transfer, **within 30 days** of the exclusion of the CPAs, ERUs, CERs, AAUs and/or RMUs 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.

Voluntary exclusion of **CPAs** from **PoAs** [PCP-PoA ver.01, para306-307]
- Any time after the inclusion of a CPA in a registered PoA, the CME of the PoA may voluntarily request the exclusion of the CPA from the PoA by submitting F-CDM-CPA-EX, attaching evidence that all PPs of the CPA agree with the exclusion, to the secretariat through a specific e-mail account made available on the UNFCCC CDM website.
- The secretariat shall conduct a completeness check of the documents submitted within **5 days** of receipt of the request, and if the form contains all required information, the secretariat shall mark the CPA as excluded on the UNFCCC CDM website.
21-3. Standard for the development of eligibility criteria

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/off-grid) 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 meets the small-scale or microscale threshold criteria and remains within those thresholds throughout the crediting period of the CPA. However, if a CPA solely consists of microscale CDM units, this condition is not required;
(l) Where applicable, the requirements for the debundling check, in case CPAs belong to small-scale or microscale project categories. However, if a CPA solely consists of microscale CDM units, the requirement regarding debundling is not applicable.

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

The CME shall revise the eligibility criteria and submit a request for post-registration changes, if:
(a) The version of methodology applied by the PoA is revised or replaced subsequent to being placed on hold;
(b) The boundary of the PoA is amended post-registration to expand the geographic coverage or to include one or more additional host Parties;
(c) The revision of the eligibility criteria of a registered PoA is initiated by the Board at any time during the lifetime of the PoA if an issue related to environmental integrity is identified;
(d) There is an addition or change of technologies/measures with or without addition or change of applied methodologies in registered PoA-DD as specified in the PCP;
(e) The eligibility criteria pertaining to the demonstration of additionality is revised.

For any other changes that are not explicitly covered by the PCP, the CME shall submit a request in accordance with the latest applicable procedure for "Modalities and procedures for direct communication with stakeholders" to check the eligibility of the proposed changes.

No action is required if 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 consolidated methodologies, unless otherwise indicated in the respective report of the meeting of the Board that has approved the new methodologies.

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 validated 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 revised 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.

<table>
<thead>
<tr>
<th>Description</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) One pending account for the EB, into which CERs are issued before being transferred to other accounts.</td>
<td>[CMP/2005/8/Ad1, p27 para3(a)]</td>
</tr>
<tr>
<td>(2) Holding accounts for non-Annex I Party of hosting a CDM project activity or requesting an account.</td>
<td>[CMP/2005/8/Ad1, p27 para3(b)]</td>
</tr>
<tr>
<td>(3) Cancellation accounts for excess CERs, to cancel KP units equal to excess CERs issued, as determined by the EB.</td>
<td>[CMP/2005/8/Ad1, p27 para3(c)]</td>
</tr>
<tr>
<td>(4) Cancellation account for tCERs and ICERs, that have expired in a holding account of the CDM registry, and ICERs that have become ineligible.</td>
<td>[CMP/2005/8/Ad1, p80 para3]</td>
</tr>
<tr>
<td>(5) Accounts for the share of proceeds, to hold and transfer CERs corresponding to the SOP-Adaptation.</td>
<td>[CMP/2005/8/Ad1, p27 para3(d)]</td>
</tr>
<tr>
<td>(6) Voluntary cancellation account: for the cancellation of CERs in the CDM registry for voluntary purposes.</td>
<td>“Procedure: Voluntary cancellation of CERs in the CDM registry” (ver. 02.0) [EB75 Anx34 para1]</td>
</tr>
</tbody>
</table>

- 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.  
  “Procedure: Voluntary cancellation of CERs in the CDM registry” (ver. 02.0) [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

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

   [EB21 Rep, para70]

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CDM in CHARTS Version 29 (October 2017)
### 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]

<table>
<thead>
<tr>
<th>Account Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>(1)</strong> Holding account for the Party</td>
<td>To hold KP units under its responsibility.</td>
</tr>
<tr>
<td><strong>(2)</strong> Holding account for each legal entity authorized by the Party</td>
<td>To hold KP units under its responsibility.</td>
</tr>
<tr>
<td><strong>(3)</strong> Cancellation account for LULUCF activities</td>
<td>To cancel the KP units in case such activities result in a net source of GHG emissions.</td>
</tr>
<tr>
<td><strong>(4)</strong> Cancellation account for non compliance</td>
<td>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.</td>
</tr>
<tr>
<td><strong>(5)</strong> Cancellation account for other cancellations by the Party</td>
<td>To cancel KP units for purposes of cancellations other than (3) and (4) above.</td>
</tr>
<tr>
<td><strong>(6)</strong> tCER replacement account</td>
<td>To cancel AAUs, CERs, ERUs, RMUs and/or tCERs for the purposes of replacing tCERs prior to expiry. [CMP/2005/8/Ad1, p71 para43]</td>
</tr>
<tr>
<td><strong>(7)</strong> ICER replacement account</td>
<td>To cancel AAUs, CERs, ICERs, ERUs and/or RMUs for the purposes of replacing ICERs. [CMP/2005/8/Ad1, p71 para47]</td>
</tr>
<tr>
<td><strong>(8)</strong> Retirement account</td>
<td>Used to retire KP units valid for that commitment period for use towards meeting the Party’s commitments. [CMP/2005/8/Ad2, p27 para14]</td>
</tr>
</tbody>
</table>

- 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]
**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]

<table>
<thead>
<tr>
<th>Identifier</th>
<th>Range or Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Originating Registry</td>
</tr>
<tr>
<td>2</td>
<td>Unit Type</td>
</tr>
<tr>
<td>3</td>
<td>Supplementary Unit Type</td>
</tr>
<tr>
<td>4</td>
<td>Unit Serial Block Start</td>
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<tr>
<td>5</td>
<td>Unit Serial Block End</td>
</tr>
<tr>
<td>6</td>
<td>Original Commitment Period</td>
</tr>
<tr>
<td>7</td>
<td>Applicable Commitment Period</td>
</tr>
<tr>
<td>8</td>
<td>LULUCF Activity</td>
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<tr>
<td>9</td>
<td>Project Identifier</td>
</tr>
<tr>
<td>10</td>
<td>Track</td>
</tr>
<tr>
<td>11</td>
<td>Expiry Date</td>
</tr>
</tbody>
</table>

PUBLICLY ACCESSIBLE INFORMATION THROUGH NATIONAL REGISTRY

Each national registry shall make non-confidential 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 1.1.10), 23 April, 2013, p F-2]
The UNFCCC secretariat establishes and maintains 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 lCER), 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]

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 record and make 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 lCER has to occur, 1 month prior to the expiry of each tCER or lCER. [CMP/2005/8/Ad1, p73 para55]

Where a Annex I Party does not replace tCERs or lCERs 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]

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 lCER has to occur, 1 month prior to the expiry of each tCER or lCER. [CMP/2005/8/Ad1, p73 para55]

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The ITL notifies the Annex I Party that a replacement of the tCER or lCER has to occur, 1 month prior to the expiry of each tCER or lCER. [CMP/2005/8/Ad1, p73 para55]

Where a Annex I Party does not replace tCERs or lCERs 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]

The Party shall perform any necessary corrective action within 30 days. [CMP/2005/8/Ad2, p32 para43(b)]

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

Start of the 1st commitment period

2006  2007  2008  2009  2010  2011  2012

Submission of the report for the calculated assigned amount
[CMP/2005/8/Ad2, p25 para 6-8]
<br>By the beginning of 2007
[CMP/2005/8/Ad2, p19 para3]

Reviewed by ERT (expert review team)
(Maximum 16 months)
[ CMP/2005/8/Ad2, p23 para2]

Recording of the assigned amounts
[ CMP/2005/8/Ad2, p26 para9]

Issuance of AAU
[ CMP/2005/8/Ad2, p29 para23]

Checked by International Transaction Log (ITL)
[ CMP/2005/8/Ad2, p31 para39]

Recording of emission and removals in 2008
[ CMP/2005/8/Ad3, p64 para72-78]

Reviewed by ERT
(Within 1 year)
[ CMP/2005/8/Ad2, p31 para39]

Recording of emission and removals in 2008

Issuance of RMU for 2008

The same schedule will be applied to the following years after 2008

Each Party shall elect for each activity, prior to the start of the commitment period, to issue such RMUs annually or for the entire commitment period. [CMP/2005/8/Ad2, p29 para25]

Emissions and removals in 2008 will be calculated and submitted to UNFCCC by 15 April 2010
[Decision 18/CP.8 para2]

By the beginning of 2007
[CMP/2005/8/Ad2, p23 para2]

2008

Holding account

National registry

Acquisition of AAU, ERU, CER, ICER, tCER, RMU

Transfer of AAU, ERU, CER, ICER, tCER, RMU

Checked by ITL

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

<table>
<thead>
<tr>
<th>End of the 1st commitment period</th>
<th>Additional period of the 1st commitment period</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>2013</td>
</tr>
<tr>
<td></td>
<td>2014</td>
</tr>
<tr>
<td></td>
<td>2015</td>
</tr>
</tbody>
</table>

#### Additional period

- **Emissions and removals in 2012 will be calculated and submitted to UNFCCC by 15 April 2014**
  - [Decision 18/CP.8 para 2](#)

- **The completion of the expert review process; 100th day after the date decided by CMP**
  - [CMP/2005/8/Ad3, p101 XIII](#)

#### Individual inventory review, including adjustment procedures by ERT (within one year)

- ERT shall list all the problems identified, indicating which would need an adjustment (within 25 weeks)
- A party shall comment on these questions (within 6 weeks)
- ERT shall prepare a draft individual inventory review report (within 8 weeks)
- A party shall be provided to comment on the draft (within 4 weeks)
- ERT shall prepare a final individual inventory review report (within 4 weeks)

#### Holding account

- Each Party may carry over Kyoto units held in its registry, that have not been cancelled or retired for a commitment period, to the subsequent commitment period.
  - [CMP/2005/8/Ad2, p30 para 36](#)

#### Retirement account for the 1st commitment period

- Prior to the end of the additional period, each Party shall retire Kyoto units by transferring Kyoto units to the retirement account.

#### Eligibility of Kyoto units during the 2nd commitment period

- **Party included in Annex I may continue to participate in ongoing project activities under Article 12 and in any 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 para 13](#)

- **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.**
  - [FCCC/KP/CMP/2012/L.9 para 14](#)
### Methodological Tools for Emission Reduction CDM Project Activities

<table>
<thead>
<tr>
<th>No.</th>
<th>Tool Description</th>
<th>Additional Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Tool for the demonstration and assessment of additionality (ver.7) [EB70 Anx8]</td>
<td>This tool provides a step-wise approach to demonstrate and assess additionality. (Att.3)</td>
</tr>
<tr>
<td>2.</td>
<td>Combined tool to identify the baseline scenario and demonstrate additionality (ver.7) [EB96 Anx3]</td>
<td>This tool provides a step-wise approach to identify the baseline scenario and simultaneously demonstrate additionality.</td>
</tr>
<tr>
<td>3.</td>
<td>Tool to calculate project or leakage CO₂ emissions from fossil fuel combustion (ver.3) [EB96 Anx4]</td>
<td>This tool provides procedures to calculate project and/or leakage CO₂ emissions from the combustion of fossil fuels. It can be used in cases where CO₂ emissions from fossil fuel combustion is calculated based on the quantity of fuel combusted and its properties.</td>
</tr>
<tr>
<td>4.</td>
<td>Emissions from solid waste disposal sites (ver.8) [EB94 Anx7]</td>
<td>This tool provides procedures to calculate baseline, project or leakage emissions of methane from solid waste disposed or prevented from disposal at a SWDS.</td>
</tr>
<tr>
<td>5.</td>
<td>Baseline, project and/or leakage emissions from electricity consumption and monitoring of electricity generation (ver.3) [EB96 Anx5]</td>
<td>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.</td>
</tr>
<tr>
<td>6.</td>
<td>Project emissions from flaring (ver.2) [EB68 Anx15]</td>
<td>This tool provides procedures to calculate project emissions from flaring of a residual gas.</td>
</tr>
<tr>
<td>7.</td>
<td>Tool to calculate the emission factor for an electricity system (ver.5) [EB87 Anx9]</td>
<td>This methodological tool determines the CO₂ emission factor for the displacement of electricity generated by power plants in an electricity system. (Att.6)</td>
</tr>
<tr>
<td>8.</td>
<td>Tool to determine the mass flow of a greenhouse gas in a gaseous stream (ver.3) [EB87 Anx10]</td>
<td>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: CO₂, CH₄, N₂O, SF₆ and/or PFCs.</td>
</tr>
<tr>
<td>9.</td>
<td>Determining the baseline efficiency of thermal or electric energy generation systems (ver.2) [EB87 Anx11]</td>
<td>The tool provides various options to determine the baseline efficiency of an energy generation system with the purpose of estimating baseline emissions.</td>
</tr>
<tr>
<td>10.</td>
<td>Tool to determine the remaining lifetime of equipment (ver.1) [EB50 Anx15]</td>
<td>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.</td>
</tr>
<tr>
<td>11.</td>
<td>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]</td>
<td>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.</td>
</tr>
<tr>
<td>12.</td>
<td>Project and leakage emissions from transportation of freight (ver.1.1.0) [EB70 Anx23]</td>
<td>This tool provides procedures to estimate project and/or leakage CO₂ emissions from road transportation of freight by vehicles.</td>
</tr>
<tr>
<td>13.</td>
<td>Project and leakage emissions from composting (ver.2) [EB96 Anx6]</td>
<td>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.</td>
</tr>
<tr>
<td>14.</td>
<td>Project and leakage emissions from anaerobic digesters (ver.2) [EB96 Anx7]</td>
<td>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.</td>
</tr>
<tr>
<td>15.</td>
<td>Upstream leakage emissions associated with fossil fuel use (ver.2) [EB81 Anx12]</td>
<td>This tool provides a procedure to calculate leakage upstream emissions associated with the use of fossil fuels.</td>
</tr>
<tr>
<td>16.</td>
<td>Project and leakage emissions from biomass (ver.4) [EB96 Anx8]</td>
<td>This tool provides procedures to calculate project and leakage emissions relevant for project activities which utilize biomass.</td>
</tr>
<tr>
<td>17.</td>
<td>Baseline emissions for modal shift measures in inter-urban cargo transport (ver.1) [EB79 Anx9]</td>
<td>This tool provides methodological guidance to determine baseline emissions for transport projects implementing modal shift measures in inter-urban cargo transport.</td>
</tr>
<tr>
<td>18.</td>
<td>Baseline emissions for modal shift measures in urban passenger transport (ver.1) [EB79 Anx10]</td>
<td>The tool provides methodological guidance to estimate baseline emissions for transport projects implementing modal shift measures in urban passenger transport.</td>
</tr>
</tbody>
</table>
## Methodological Tools for Emission Reduction CDM Project Activities

<table>
<thead>
<tr>
<th>Methodological Tool</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>19. Demonstrating additionality or microscale project activities (ver.8) [EB96 Anx10]</td>
<td>This methodological tool provides simplified modalities for demonstrating additionality for the project activity which meets one of the following criteria: (a) Type I: Project activities up to 5 MW that employ renewable energy as their primary technology; (b) Type II: Energy efficiency project activities that aim to achieve energy savings at a scale of no more than 20 GWh per year; or (c) Type III: Other project activities not included in Type I or Type II that aim to achieve GHG emissions reductions at a scale of no more than 20 kt CO2e per year.</td>
</tr>
<tr>
<td>20. Assessment of debundling for small-scale project activities (ver. 4) [EB 83 Anx 13]</td>
<td>This methodological tool provides a step-wise approach for the determination of the occurrence of debundling for small-scale project activities and small-scale component project activities (CPA).</td>
</tr>
<tr>
<td>21. Demonstration of additionality of small-scale project activities (ver. 11) [EB 94 Anx 11]</td>
<td>This methodological tool provides: (a) A general framework to demonstrate and assess the additionality of a small scale project activity; and (b) A positive list of technology and project activity types that are defined as automatically additional.</td>
</tr>
<tr>
<td>22. Leakage in biomass in small-scale project activities (ver.4) [EB 83 Anx 15]</td>
<td>This tool identifies potentially significant sources of leakage and project emissions for renewable biomass projects and suggests methodological approaches to address them.</td>
</tr>
<tr>
<td>23. Additionality of first-of-its-kind project activities (ver. 3.1) [EB 84 Anx 6]</td>
<td>This methodological tool provides a general approach for the demonstration of additionality of first-of-its-kind project activities.</td>
</tr>
<tr>
<td>24. Common practice (ver. 3.1) [EB 84 Anx 7]</td>
<td>This methodological tool provides a step-wise approach for the conduction of the common practice analysis as referred to in methodological tool “Tool for the demonstration and assessment of additionality”, the methodological tool “Combined tool to identify the baseline scenario and demonstrate additionality”, or baseline and monitoring methodologies that use the common practice test for the demonstration of additionality.</td>
</tr>
<tr>
<td>25. Apportioning emissions from production processes between main product and co and by-product (ver. 3) [EB 84 Anx 8]</td>
<td>This methodological tool is for situations where a product, which is a main product/co-product/by-product/residue (waste), is produced and/or consumed/used under a CDM project activity.</td>
</tr>
<tr>
<td>26. Accounting eligible HFC-23 (ver. 2) [EB 84 Anx 9]</td>
<td>The purpose of this methodological tool is to provide criteria for the determination of the quantity of HFC-23 eligible for crediting.</td>
</tr>
<tr>
<td>27. Investment analysis (ver. 7) [EB92 Anx 5]</td>
<td>This methodological tool is applicable to project activities that apply the methodological tool “Tool for the demonstration and assessment of additionality”, the methodological tool “Combined tool to identify the baseline scenario and demonstrate additionality”, the guidelines “Non-binding best practice examples to demonstrate additionality for SSC project activities”, or baseline and monitoring methodologies that use the investment analysis for the demonstration of additionality and/or the identification of the baseline scenario.</td>
</tr>
<tr>
<td>28. Calculation of baseline, project and leakage emissions from the use of refrigerants (ver.1) [EB96 Anx1]</td>
<td>The methodological tool provides procedures to consider emissions due to the use of refrigerants in CDM projects and PoAs involving refrigeration and air-conditioning systems (RAC).</td>
</tr>
<tr>
<td>Key word</td>
<td>Number</td>
</tr>
<tr>
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</tbody>
</table>

Classification based on the key words are made by the author, and not described in the UNFCCC documents.

**Tools***: Methodological tools which are referenced in the approved methodology. Please see p69-70 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 November 21, 2016.
<table>
<thead>
<tr>
<th>Key word</th>
<th>Number</th>
<th>Ver.</th>
<th>Name of the Approved Methodology</th>
<th>Tools*</th>
<th>Valid from</th>
<th>Reg*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biomass</td>
<td></td>
<td></td>
<td>17 Avoidance of methane production from decay of biomass through controlled combustion, gasification or mechanical/thermal treatment</td>
<td>4,12</td>
<td>28-Nov-14</td>
<td>36</td>
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<tr>
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<td>AMS-III.E</td>
<td>2</td>
<td>Switch from fossil fuel to biomass in existing manufacturing facilities for non-energy applications</td>
<td>3,5,15</td>
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<tr>
<td>Waste gas or heat</td>
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<tr>
<td></td>
<td></td>
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<tr>
<td><strong>Coal mine/bed methane</strong></td>
<td>ACM0008</td>
<td>8</td>
<td>Abatement of methane from coal mines</td>
<td>1,3,6,7</td>
<td>21-Feb-14</td>
<td>84</td>
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<tr>
<td>AM0064</td>
<td>3</td>
<td></td>
<td>Capture and utilisation or destruction of mine methane (excluding coal mines) or non mine methane</td>
<td>2,3,5,6,7,9,11,11</td>
<td>2-Mar-12</td>
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<tr>
<td><strong>Leak reduction</strong></td>
<td>AM0023</td>
<td>4</td>
<td>Leak detection and repair in gas production, processing, transmission, storage and distribution systems and in refinery facilities</td>
<td>2</td>
<td>29-Sep-11</td>
<td>14</td>
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<td>AM0043</td>
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<td>Leak reduction from a natural gas distribution grid by replacing old cast iron pipes or steel pipes without cathodic protection with polyethylene pipes</td>
<td>1</td>
<td>2-Nov-07</td>
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<td><strong>Other methane related</strong></td>
<td>AMS-III.K</td>
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<td>Avoidance of methane release from charcoal production</td>
<td>4</td>
<td>9-Dec-11</td>
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<td>AMS-III.L</td>
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<td>Avoidance of methane production from biomass decay through controlled pyrolysis</td>
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<td>10-Aug-07</td>
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Attachment 1. AMs and tools
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<th>Ver.</th>
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<th>Tools*</th>
<th>Valid from</th>
<th>Regs*</th>
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<td>Methane recovery in agricultural activities at household/small farm level</td>
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<td>Methane emission reduction by adjusted water management practice in rice cultivation</td>
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<td>AMS-III.BK</td>
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<td>Strategic feed supplementation in smallholder dairy sector to increase productivity</td>
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<td>ACM0019</td>
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<td>AM0021</td>
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<td>Baseline Methodology for decomposition of N2O from existing adipic acid production plants</td>
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<td>27-Feb-09</td>
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<td>AM0028</td>
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<td>N2O destruction in the tail gas of Caprolactam production plants</td>
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<td>31-May-13</td>
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<td>Avoidance of methane and nitrous oxide emissions from sugarcane pre-harvest open burning through mulching</td>
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<td>Reduction of N2O emissions from use of Nitrogen Use Efficient (NUE) seeds that require less fertilizer application</td>
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<td>Decomposition of fluoroform (HFC-23) waste streams</td>
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<td>25-Nov-11</td>
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<td>AM0030</td>
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<td>PFC emission reductions from anode effect mitigation at primary aluminium smelting facilities</td>
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<td>AM0035</td>
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<td>AM0059</td>
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<td>Reduction in GHGs emission from primary aluminium smelters</td>
<td>2,5,11</td>
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<td>AM0065</td>
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<td>Point of Use Abatement Device to Reduce SF6 emissions in LCD Manufacturing Operations</td>
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<td>AM0119</td>
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<td>SF6 emission reductions in gas insulated metal enclosed switchgear</td>
<td>2, 10</td>
<td>04-May-17</td>
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<td>AMS-III.N</td>
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<td>Avoidance of HFC emissions in rigid Poly Urethane Foam (PUF) manufacturing</td>
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<td>8-Apr-09</td>
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<td>AMS-III.X</td>
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<td>Energy Efficiency and HFC-134a Recovery in Residential Refrigerators</td>
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<td>AMS-III.AB</td>
<td>1</td>
<td>Avoidance of HFC emissions in Standalone Commercial Refrigeration Cabinets</td>
<td></td>
<td>28-May-09</td>
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### Methodological Tools for A/R CDM Project Activities (AR Tools)

1. Combined tool to identify the baseline scenario and demonstrate additionality in A/R CDM project activities (ver.1) [EB35 Anx19]

2. Calculation of the number of sample plots for measurements within A/R CDM project activities (ver.2.1) [EB58 Anx15]

3. Estimation of non-CO2 GHG emissions resulting from burning of biomass attributable to an A/R CDM project activity (ver.4) [EB65 Anx31]

4. Estimation of carbon stocks and change in carbon stocks in dead wood and litter in A/R CDM project activities (ver.3) [EB 85 annex 23]

5. Estimation of carbon stocks and change in carbon stocks of trees and shrubs in A/R CDM project activities (ver.4.2) [EB 85 annex 22]

6. 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]

7. 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]

8. Demonstrating appropriateness of allometric equations for estimation of aboveground tree biomass in A/R CDM project activities (ver.1) [EB65 Anx28]

9. Demonstrating appropriateness of volume equations for estimation of aboveground tree biomass in A/R CDM project activities (ver.1.0.1) [EB67 Anx24]

10. Demonstration of eligibility of lands for A/R CDM project activities (ver.2) [EB75 Anx25]

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**Key word** | **Number** | **Ver.** | **Name of the Approved A/R Methodology** | **AR Tools** | **Valid from** | **Reg**
--- | --- | --- | --- | --- | --- | ---
Afforestation and reforestation | AR-ACM0003 | 2 | Afforestation and reforestation of lands except wetlands | 1, 3, 4, 5, 6 | 04-Oct-13 | 6
AR-AM0014 | 3 | Afforestation and reforestation of degraded mangrove habitats | 1, 3, 4, 5, 6, 7 | 04-Oct-13 | 0
AR-AMS0003 | 3 | Simplified baseline and monitoring methodology for small scale CDM afforestation and reforestation project activities implemented on wetlands | 3, 4, 5, 6 | 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 | 3, 4, 5, 6, 7 | 04-Oct-13 | 10

**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 Nov 21, 2016.

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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]
Attachment 2. Guidelines on the consideration of suppressed demand in CDM methodologies

◆ 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

C. Determination of the minimum service level [EB68 Anx2 para16]

For establishing a minimum service level the following approaches 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.
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 analysis
☞ Document the costs associated 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.
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 3b. 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 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

Pass
Attachment 4. Methodological tool: Demonstrating additionality of microscale project activities

This methodological tool provides simplified modalities for demonstrating additionality for the project activity which meets one of the following criteria: (a) Type I: Project activities up to 5 MW that employ renewable energy technology as their primary technology; (b) Type II: Energy efficiency project activities that aim to achieve energy savings at a scale of no more than 20 GWh per year; or (c) Type III: Other project activities not included in Type I or Type II that aim to achieve GHG emissions reductions at a scale of no more than 20 kt CO2e per year.

Projects that meet the requirements above are termed ‘Microscale CDM project activities’

This methodological tool is applicable to CPAs under PoAs

The project size <=5 MW of installed capacity of renewable energy (additional if any one of the conditions below is satisfied)

Is the geographic location of the project in one of LDCs/SIDs or in a special underdeveloped zone (SUZ) of the host country?

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)

No

Is the project for distributed energy generation (not connected to a national or regional grid) with both conditions (i) and (ii) satisfied?

☞ (i) Each of the independent subsystems/measures in the project <=1500 kW;
☞ (ii) End users of the subsystems or measures are households/communities/SMEs.

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 technologies 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;
(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).

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 $\leq 20$ GWh energy savings per year

- All technologies/measures included in approved Type II SSC methodologies are eligible to be considered. ([Footnote13 of EB83 Anx12 para 9])

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

- No

Are both conditions (i) and (ii) satisfied?

- (i) Each of the independent subsystem/measure in the project annually saves $\leq 600$ MWh;
- (ii) End users of the subsystem or measure are households/communities/SME

- Yes

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 ERs $\leq 20$ ktCO$_2$e per year

- All 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 EB83 Anx12 para 10])

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

- Yes

Are the following two conditions satisfied?

- (i) Each of the independent subsystem/measure in the project annually ERs $\leq 600$ tCO$_2$e per year;
- (ii) End users of the subsystem or measure are households/communities/SME

- Yes

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

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**BOX: Procedure: Submission and consideration of microscale renewable energy technologies for automatic additionality**

(ver. 2) [EB70 Anx37]

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

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**BOX: Special underdeveloped zone (SUZ)**

[EB83 Anx12 para 8 (a) (i)]

- 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. at<http://cdm.unfccc.int/DNA/submissions/index.html>). In the case of these SUZ listed on the CDM website there is no need for the project proponents to provide proof.

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**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 “Methodological tool: Assessment of debundling for small-scale 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)
Attachment 5. Procedure for the submission and consideration of microscale renewable energy technologies for automatic additionality

DNA

(1) Propose specific renewable technologies/measures to be approved by the EB as conferring automatic additionality on microscale CDM project activities [EB70 Anx37, para 7]

(2) Upload to the UNFCCC CDM website the following documentation: [EB70 Anx37, para 8]
   (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 grid-connected 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.

(3) Undertake initial assessment on whether: [EB70 Anx37, para 10]
   (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. [EB70 Anx37, para 11]

(5) Provide the missing documents or information within 28 days of the notification. [EB70 Anx37, para 11]

(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. [EB70 Anx37, para 12]

(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 [EB70 Anx37, para 13]

(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 [EB70 Anx37, para 14]

With in 14 days

(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 [EB70 Anx37, para 17]

(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. [EB70 Anx37, para 18]

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

External Experts (DOE, Panels)

Include in its draft recommendation one of the following courses of actions: [EB70 Anx37, para 15]
   (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
   (c) Not to approve the proposed specific renewable technologies/measures

(11) Forward it as the recommendation to the EB and make it publicly available on the UNFCCC website. [EB70 Anx37, para 19]

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

(12) Notify the DNA accordingly. [EB70 Anx37, para 20]

Continue to the next page
(13) 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. [EB70 Anx37, para20]

(14) Revise the draft recommendation to recommend either to approve or not to approve the proposed specific renewable technologies/measures, forward it as the recommendation to the EB, and make it publicly available on the UNFCCC website. [EB70 Anx37, para22]

(15) In its finalization of consideration, the SSC WG shall conclude to recommend either to approve or not to approve the proposed specific renewable technologies/measures. [EB70 Anx37, para24]

(16) Forward it as the recommendation to the EB and make it publicly available on the UNFCCC website. [EB70 Anx37, para24]

(17) Notify the DNA. [EB70 Anx37, para25]

Yes

If the SSC WG finds that further input from the DNA is required

(18) Submit the requested input within **28 days** of the notification DNA. [EB70 Anx37, para25]

(19) Revise the draft recommendation to recommend either to approve or not to approve the proposed specific renewable technologies/measures, and forward it as the recommendation to the EB and make it publicly available on the UNFCCC website. [EB70 Anx37, para27]

(20)-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. [EB70 Anx37, para35]

No

(20)-2. If a member of the EB objects to the recommendation more than two (2) weeks prior to the next EB, the case shall be placed on the agenda of the next EB meeting. [EB70 Anx37, para30]

(21) Inform the DNA of the decision and make the decision and guidance publicly available on the UNFCCC CDM website. [EB70 Anx37, para33]

The approved specific renewable technologies/measures are valid for three (3) years from the date of approval by the EB. [EB70 Anx37, para35]
Attachment 6. Tool to calculate the emission factor for an electricity system

This tool determines the CO$_2$ emissions 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**

<table>
<thead>
<tr>
<th>EF$_{\text{grid,OM},y}$</th>
<th>Operating margin (OM) CO$_2$ emission factor for project electricity system in year $y$</th>
</tr>
</thead>
<tbody>
<tr>
<td>OM refers to the group of existing power plants whose current electricity generation would be affected by the proposed CDM project activity.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EF$_{\text{grid,BM},y}$</th>
<th>Build margin (BM) CO$_2$ emission factor for project electricity system in year $y$</th>
</tr>
</thead>
<tbody>
<tr>
<td>BM refers to the group of prospective power plants whose construction and future operation would be affected by the proposed CDM project activity.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EF$_{\text{grid,CM},y}$</th>
<th>Combined margin (CM) CO$_2$ emission factor for project electricity system in year $y$.</th>
</tr>
</thead>
<tbody>
<tr>
<td>The result of a weighted average of two emission factors pertaining to the electricity system.</td>
<td></td>
</tr>
</tbody>
</table>

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**

- **A grid/project electricity system (the reference system)**: 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.

**BM emission factor calculation:**

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 CO$_2$/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 CO$_2$ emission factor (0.8 t CO$_2$/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**

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
<th>Applicability of Simple OM method:</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Simple OM</td>
<td>Calculated as the generation-weighted average CO(_2) emissions per unit net electricity generation of all generating power plants serving the system, not including low-cost/must-run power plants/units.</td>
<td>simple OM method can be used if any one of the following requirements is satisfied: a) 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, which shall be determined by using one of the approaches described; or 2) based on long-term averages for hydroelectricity production (minimum time frame of 15 years); b) The average amount of load (MW) supplied by low-cost/must-run resources in a grid in the most recent three years is less than the average of the lowest annual system loads (LASL) in the grid of the same three years.</td>
<td>Ex ante option: The emission factor is determined once at the validation stage. Use a 3-year generation-weighted average for grid power plants. Use a single calendar year within the five most recent calendar years for off-grid power plants.</td>
</tr>
<tr>
<td>(b) Simple adjusted OM</td>
<td>A variation of the simple OM. The power plants/units are separated in low-cost/must-run power sources and other power sources.</td>
<td></td>
<td>Ex post option: The emission factor is determined for the year in which the project activity displaces grid electricity, requiring the emissions factor to be updated annually during monitoring.</td>
</tr>
<tr>
<td>(c) Dispatch data analysis OM</td>
<td>Determined based on the grid power units that are actually dispatched at the margin during each hour where the project is displacing grid electricity.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(d) Average OM</td>
<td>Calculated as the generation-weighted average CO(_2) emissions per unit net electricity generation of all generating power plants serving the system, but also including the low-cost/must-run power plants in all equations.</td>
<td></td>
<td>Use the year in which the project activity displaces grid electricity and update the emission factor annually during monitoring.</td>
</tr>
</tbody>
</table>

**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 CO\(_2\) emission factor and net calorific value of the fuel type used
    - **Option A2:** Determined based on the CO\(_2\) emission factor of the fuel type used and the efficiency of the power unit
    - **Option A3:** An emission factor of 0 \(t\) CO\(_2\) /MWh can be assumed as a simple and conservative approach
  - **Option B:** Calculation based on total fuel consumption and electricity generation of the system. It can only be used if: (a) The necessary data for Option A is not available; and (b) Only nuclear and renewable power generation are considered as low-cost/must-run power sources and the quantity of electricity supplied to the grid by these sources is known; and (c) Off-grid power plants are not included in the calculation

**Step 5. Calculate the build margin (BM) emission factor**

Procedure to determine the sample group of power units \(m\) used to calculate BM

1. Identify the 5 most recent power units, excluding CDM
2. Identify the units that comprise at least 20% of the system generation, excluding CDM
3. Select the set of power units that comprises the larger annual generation
4. Is there at least one power unit older than 10 years in the set?
   - Yes
     - Exclude power units older than 10 years and include power units registered in the CDM
     - Does the set comprise at least 20% of generation?
       - Yes
         - Use the resulting set to calculate The BM
       - No
         - Include power units older than 10 years until the set comprises 20% of generation
5. The BM emissions factor is the generation-weighted average emission factor of all power units during the most recent year \(y\).
The steps defined below shall be applied to each CPA of the PoA.

The CME shall describe in the CDM-PoA-DD the following information:
(a) Electricity system(s) covered by the PoA; and
(b) Sources of data used to determine the emission factor(s) for all electricity system(s) to be covered in the PoA; and
(c) Equations and options used to calculate the emission factor.

The choice of which option to use shall be determined and documented in the CDM-PoA-DD, and the selected options shall be consistently applied to all CPAs connected to a given electricity system. The CME may however select different options for different electricity systems in the case of a PoA covering more than one electricity systems.

**Step 6. Calculate the combined margin emissions factor**

\[
EF_{grid,CM,y} = EF_{grid,OM,y} \times w_{OM} + EF_{grid,BM,y} \times w_{BM} \quad (w_{OM} + w_{BM} = 1)
\]

The calculation of CM is based on one of the following methods:

1) **Weighted average CM** should be used as the preferred option;

The following default values should be used for \(w_{OM}\) and \(w_{BM}\):
(a) Wind and solar power generation project activities: \(w_{OM} = 0.75\) and \(w_{BM} = 0.25\) (owing to their intermittent and non-dispatchable nature) for the first crediting period and for subsequent crediting periods;
(b) All other projects: \(w_{OM} = 0.5\) and \(w_{BM} = 0.5\) for the first crediting period, and \(w_{OM} = 0.25\) and \(w_{BM} = 0.75\) for the second and third crediting period, unless otherwise specified in the approved methodology which refers to this tool.

2) **Simplified CM** can only be used if the data requirements for the application of Step 5 above cannot be met.

If the project activity is located in: (i) a LDC; or in (ii) a country with less than 10 registered CDM projects at the starting date of validation; or (iii) a SIDS, the CM calculated using the equation above with the following conditions: (a) \(w_{BM}=0\); (b) \(w_{OM}=1\).

If the project activity is located in a country other than those mentioned above, the CM may be calculated using equation above with the following provisions:

**Case 1**: If the share of renewable energy in total installed capacity in a grid/project electricity system is less than or equal to 20 per cent, take the default values of:
- \(EF_{grid,BM,y} = 0.326\) tCO₂/MWh (NG-fired CCGT, based on best available technology) - if natural gas has been used for electricity production in country/region in which project is implemented; or
- \(EF_{grid,BM,y} = 0.568\) tCO₂/MWh (oil-fired CCGT based on best available technology) - if natural gas has not been used for electricity production in country/region in which project is implemented;

**Case 2**: If the share of renewable energy in total installed capacity in a grid/project electricity system is more than or equal to 20 per cent, take the default values for BM emission factor as zero.
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.

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) it generates.

**Steps for establishing SB**

1. **Identify host country (ies), sectors, output(s) and measures**
2. **Establish additionality criteria for the identified measures**
   - e.g. positive lists of fuels / feedstocks and technologies
3. **Identify the baseline for the measures**
   - e.g. baseline fuel, technology, level of GHG destruction
4. **Determine the baseline emission factor where relevant**

**Thresholds for additionality**

<table>
<thead>
<tr>
<th>Sectors</th>
<th>Energy* sectors</th>
<th>Other sectors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xa</td>
<td>80%</td>
<td>90%</td>
</tr>
<tr>
<td>Xb</td>
<td>80%</td>
<td>90%</td>
</tr>
<tr>
<td>Ya</td>
<td>80%</td>
<td>90%</td>
</tr>
<tr>
<td>Yb</td>
<td>80%</td>
<td>90%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Data vintage</th>
<th>Most recent 3 years</th>
<th>Most recent 3 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency of updates</td>
<td>3 years</td>
<td>3 years</td>
</tr>
</tbody>
</table>

*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.

Material information is a piece of information the omission, misstatement or erroneous reporting of which could change a decision by the EB [Glos. ver. 8, p13]

Reasonable level of assurance is a high, but not absolute, level of assurance; [Glos. ver. 9, p16]

The flowchart below illustrates how to apply materiality in verifications in accordance with the VVS.
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. 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 GWP's adopted by the CMP, in accordance with decision 4/CMP.7. This requirement shall apply from 1 January 2013.

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.

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. 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.

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**Global Warming Potential**

<table>
<thead>
<tr>
<th>Species</th>
<th>Chemical formula</th>
<th>GWP</th>
<th>Species</th>
<th>Chemical formula</th>
<th>GWP</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO₂</td>
<td>CO₂</td>
<td>1</td>
<td>HFC-23</td>
<td>CHF₃</td>
<td>11,700</td>
</tr>
<tr>
<td>Methane *</td>
<td>CH₄</td>
<td>25</td>
<td>HFC-236fa</td>
<td>C₃H₂F₆</td>
<td>6,300</td>
</tr>
<tr>
<td>Nitrous oxide</td>
<td>N₂O</td>
<td>310</td>
<td>HFC-143a</td>
<td>C₂H₃F₃</td>
<td>3,800</td>
</tr>
<tr>
<td>Perfluoroethane</td>
<td>C₂F₆</td>
<td>9,200</td>
<td>HFC-134a</td>
<td>C₂H₄F₃</td>
<td>1,300</td>
</tr>
<tr>
<td>Perfluoropentane</td>
<td>C₅F₁₂</td>
<td>7,500</td>
<td>HFC-134</td>
<td>C₂H₂F₄</td>
<td>1,000</td>
</tr>
<tr>
<td>Perfluorohexane</td>
<td>C₆F₁₄</td>
<td>7,400</td>
<td>HFC-32</td>
<td>C₂H₂F₂</td>
<td>650</td>
</tr>
<tr>
<td>Sulphur hexafluoride</td>
<td>SF₆</td>
<td>23,900</td>
<td>HFC-41</td>
<td>CH₃</td>
<td>150</td>
</tr>
<tr>
<td>Nitrogen trifluoride</td>
<td>NF₃</td>
<td>17,200</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Carbon Emission Factor**

<table>
<thead>
<tr>
<th>Fuel</th>
<th>CO₂ emission factor (kg/TJ)</th>
<th>Net caloric value (TJ/Gg)</th>
<th>CO₂ emission factor (t-CO₂/t (Fuel))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crude Oil</td>
<td>73,300</td>
<td>42.3</td>
<td>3.101</td>
</tr>
<tr>
<td>Motor Gasoline</td>
<td>69,300</td>
<td>44.3</td>
<td>3.070</td>
</tr>
<tr>
<td>Other Kerosene</td>
<td>71,900</td>
<td>43.8</td>
<td>3.149</td>
</tr>
<tr>
<td>Gas/Diesel Oil</td>
<td>74,100</td>
<td>43.0</td>
<td>3.186</td>
</tr>
<tr>
<td>Liquefied Petroleum Gases</td>
<td>63,100</td>
<td>47.3</td>
<td>2.985</td>
</tr>
<tr>
<td>Anthracite</td>
<td>98,300</td>
<td>26.7</td>
<td>2.625</td>
</tr>
<tr>
<td>Sub-Bituminous Coal</td>
<td>96,100</td>
<td>18.9</td>
<td>1.816</td>
</tr>
<tr>
<td>Lignite</td>
<td>101,000</td>
<td>11.9</td>
<td>1.202</td>
</tr>
<tr>
<td>Natural Gas</td>
<td>56,100</td>
<td>48.0</td>
<td>2.693</td>
</tr>
</tbody>
</table>

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

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**General Conversion Factors for Energy**

<table>
<thead>
<tr>
<th>From:</th>
<th>TJ</th>
<th>Gcal</th>
<th>Mtoe</th>
<th>GWh</th>
</tr>
</thead>
<tbody>
<tr>
<td>To:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TJ</td>
<td>1</td>
<td>238.8</td>
<td>2.388 x 10⁻⁵</td>
<td>0.2778</td>
</tr>
<tr>
<td>Gcal</td>
<td>4.1868 x 10⁻³</td>
<td>1</td>
<td>10⁻⁷</td>
<td>1.163 x 10⁻³</td>
</tr>
<tr>
<td>Mtoe</td>
<td>4.1868 x 10⁴</td>
<td>10⁷</td>
<td>1</td>
<td>11630</td>
</tr>
<tr>
<td>GWh</td>
<td>3.6</td>
<td>860</td>
<td>8.6x10⁻⁵</td>
<td>1</td>
</tr>
</tbody>
</table>


[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.

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