Ministry of the Environment, Japan

Institute for Global Environmental Strategies

# CDM and JI in CHARTS

## Ver. 5.0

**January 2006**

**Updated up to the results of the COP/MOP1**

This document aims to give a comprehensive and easy-to-understand description of the Clean Development Mechanism (CDM) and other Kyoto Mechanisms. 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.

Therefore, this document is to be updated according to the developments in the international negotiations and rule-setting.

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/>.

# Contents

# Contents

## Examples of abbreviated titles used in this document and corresponding formal document symbol and titles

| *Examples of abbreviated titles used in this charts, shown in [ ]* | *Corresponding formal document symbol and title* |
|---|---|
| **KP Art.2 para1(a)** | The **K**yoto **P**rotocol, **Art**icle**2, para**graph**1(a)** |
| **CP/2001/13/Ad2, p1 para2(a)** | FCCC/**CP/2001/13/Ad**d.**2, p**age **1 para**graph **2(a)** |
| ***CMP/2005/18/AdUe, p1 para2(a)*** | *Examples contain [**AdUe**] mean documents agreed in COP/MOP1 and are currently **Ad**vanced **Un**edited version. These examples will be replaced after formal document symbol is put.* |
| **CDM M&P** | **CDM M**odalities **and P**rocedures (Annex to Decision 17/CP.7) (FCCC/CP/2001/13/Add.2, p26-41) |
| **CDM A/R M&P** | **M**odalities and **P**rocedures for **A**fforestation and **R**eforestation project activities under the **CDM** (Annex to Decision 19/CP.9) (FCCC/CP/2003/6/Add.2, p16-27) |
| **EB01 Rep, p2 para3(a)** | **E**xecutive **B**oard of the Clean Development Mechanism, **1**st Meeting **Rep**ort**, p**age **2 para**graph **3(a)** |
| **EB01 Anx1, p2 para3(a)** | **E**xecutive **B**oard of the Clean Development Mechanism, **Anne**x **1** to the **1**st Meeting **Rep**ort**, p**age **2 para**graph **3(a)** |
| **PDD guidelines ver4, p1** | **Guidelines** for Completing CDM-**PDD**, CDM-NMB and CDM-NMM **Ver**sion 0**4**, **p**age **1** |
| **SSC guidelines ver1, p1** | **Guidelines** for Completing CDM-SSC-PDD and the forms for submission on methodologies for **small-scale CDM** project activities, **Ver**sion 0**1**, **p**age **1** |
| **AR CDM guidelines ver2, p1** | **Guidelines** for Completing CDM-**AR**-**PDD**, CDM-**AR**-NMB and CDM-**AR**-NMM **Ver**sion 0**2**, **p**age **1** |
| **MP01 Rep, p2 para3(a)** | **Rep**ort of the **1**st Meeting of the **M**ethodologies **P**anel**, p**age **2 para**graph **3(a)** |
| **Anx** stands for **Anne**x, **Apx** for **Ap**pendi**x**, **Att** for **At**tachmen**t**, and **Ann** for **An**notatio**n**. | |

# 1. The Kyoto Protocol

## 1-1. Overview

- 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 (p3) for Annex I Parties.

GHGs defined by the Protocol are carbon dioxide ($CO_2$), methane ($CH_4$), nitrous oxide ($N_2O$), HFCs, PFCs, and $SF_6$.

Countries have different targets for the 5-year period of 2008-2012 (1st commitment period)

- ☞For example, EU countries commit to reduce their emissions by 8%, the USA by 7% and Japan by 6%, from their base-year emissions.
- ☞The base-year emissions are the Party's aggregate GHG emissions in 1990 (whereas, countries may use 1995 as its base year for HFCs, PFCs, and $SF_6$).
- ☞'Assigned amounts' for each Party is calculated from the base-year emissions and emission reduction target.

Annex I Parties means those listed in Annex I of the UNFCCC (p3). They are developed countries including Economies in Transitions, e.g. Russia and Eastern Europe.

- The Protocol introduces 3 market mechanisms, namely the Kyoto Mechanisms. Annex I Parties would be able to achieve their emission reduction targets cost-effectively, by using these mechanisms.

| Joint Implementation(JI) <Article 6 of the Protocol> | Clean Development Mechanism (CDM) <Article 12 of the Protocol> | International Emissions Trading <Article 17 of the Protocol> |
|---|---|---|

- Besides countries, private firms can use the Kyoto Mechanisms.
  - ☞Provided the private firms meet eligibility requirements for using the Kyoto Mechanisms (p60).

**BOX: Global Warming Potential (GWP)**

GWP is a measure of the relative radiative effect of greenhouse gases compared to $CO_2$. GWP used by Parties should be those provided by the IPCC 2nd Assessment Report ("1995 IPCC GWP values") based on the effects of the greenhouse gases over a 100-year time horizon [CP/1997/7/Ad1, p31 para3]. GWP of methane is 21, nitrous oxide is 310, HFCs is 140-11700, PFCs is 6500-9200, and $SF_6$ is 23900. Thus,1t of methane emissions is equivalent to 21t of $CO_2$ emissions. 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.

# 1-2. History

♦ Negotiation history of the Kyoto Protocol is as follows:

**May. 1992** — Adoption of **the United Nations Framework Convention on Climate Change (UNFCCC)**
☞The ultimate objective of the Convention is stabilization of GHG concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system

**Mar. 1994** — Entry into force of the UNFCCC

*International negotiations for setting quantified emission reduction targets of Annex I Parties for post-2000 have started*

**Dec. 1997** — Adoption of **the Kyoto Protocol** at COP3

*International negotiations for establishing operational rules for the Protocol, including the Kyoto Mechanisms have started*

**Jul. 2001** — Political agreement on outline rules of the Protocol (**Bonn Agreement**) at COP6 bis

*US Bush administration announced its withdrawal from the Protocol in March 2001*

**Nov. 2001** — Adoption of legal documents of operational rules of the Protocol (**Marrakech Accords**) at COP7
1st meeting of the CDM Executive Board

**Dec. 2003** — Adoption of operational rules for the Sink-CDM at COP9

*Russian Federation ratified the Protocol in December 2004*

**Feb. 2005** — Entry into force of the Kyoto Protocol

**Dec. 2005** — The 1st session of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (COP/MOP1) in Montreal

**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 $CO_2$ emissions for 1990 of the Annex I Parties, have deposited their instruments of ratification, acceptance, approval or accession. [KP Art.25 para1]

☞As of 24 November 2005, 157 Parties have ratified the Protocol.

☞61.6% of the total $CO_2$ emissions for 1990 of the Annex I Parties have ratified the Protocol.

⇒The Protocol entered into force on 16 February 2005.

# 1-3. List of Annex I Parties

♦ Quantified GHG emissions reduction targets (in other words, emission caps) for Annex I Parties are as follows.

☞ Reduction targets stipulated in the Kyoto Protocol are -8% for each EU (15) member state Parties. However, the table below shows their reduction targets after adjusting the targets amongst the EU (15) member state Parties.

[Council decision of 25 April 2002 (2002/358/CE)]

| European Union (15 member states) | | | Economies in Transition (EIT) | | | Other Parties | | |
|---|---|---|---|---|---|---|---|---|
| Party | Target | GHG emissions in 1990 | Party | Target | GHG emissions in 1990 | Party | Target | GHG emissions in 1990 |
| Portugal | 27.0% | 59.3 | Russian Federation | 0% | 3,046.6 | Iceland | 10% | 3.3 |
| Greece | 25.0% | 109.4 | Ukraine | 0% | 978.9 | *Australia* | 8% | 417.9 |
| Spain | 15.0% | 283.9 | *Croatia* | -5% | 31.8 | Norway | 1% | 50.1 |
| Ireland | 13.0% | 53.8 | Poland | -6% | 564.4 | New Zealand | 0% | 61.5 |
| Sweden | 4.0% | 72.2 | Romania | -8% | 265.1 | Canada | -6% | 595.9 |
| Finland | 0.0% | 70.4 | Czech Republic | -8% | 192.0 | Japan | -6% | 1,187.2 |
| France | 0.0% | 568.0 | Bulgaria | -8% | 138.4 | *USA* | -7% | 6,082.5 |
| Netherlands | -6.0% | 211.7 | Hungary | -6% | 122.2 | Switzerland | -8% | 52.4 |
| Italy | -6.5% | 511.2 | Slovakia | -8% | 72.1 | Liechtenstein | -8% | 0.3 |
| Belgium | -7.5% | 145.7 | Lithuania | -8% | 50.9 | *Monaco* | -8% | 0.1 |
| UK | -12.5% | 748.0 | Estonia | -8% | 43.5 | *Turkey* | | |
| Austria | -13.0% | 78.6 | Latvia | -8% | 25.4 | | | |
| Denmark | -21.0% | 70.7 | Slovenia | -8% | 20.2 | | | |
| Germany | -21.0% | 1,243.7 | Belarus | | 129.2 | | | |
| Luxembourg | -28.0% | 13.4 | | | | | | |
| EU | -8.0% | 4,240.0 | | | | | | |

⇒*Countries written in Italic have not ratified the Kyoto Protocol as of January 2006.*

⇒Source of of GHG emissions in 1990 (unit:million t-$CO_2$ equivalent) is FCCC/SBI/2005/17, and those figures are different from the base-year emissions under the Kyoto Protocol.

⇒EIT Parties, which do not set 1990 as their base-year for the GHG emissions are Bulgaria(1988), Hungary(1985-87Average), Poland(1988), Romania(1989) and Slovenia(1986).

⇒Croatia, Slovenia, Liechtenstein and Monaco have GHG emission reduction targets as Annex B Parties to the Kyoto Protocol; but they are not Annex I Parties to the UNFCCC.

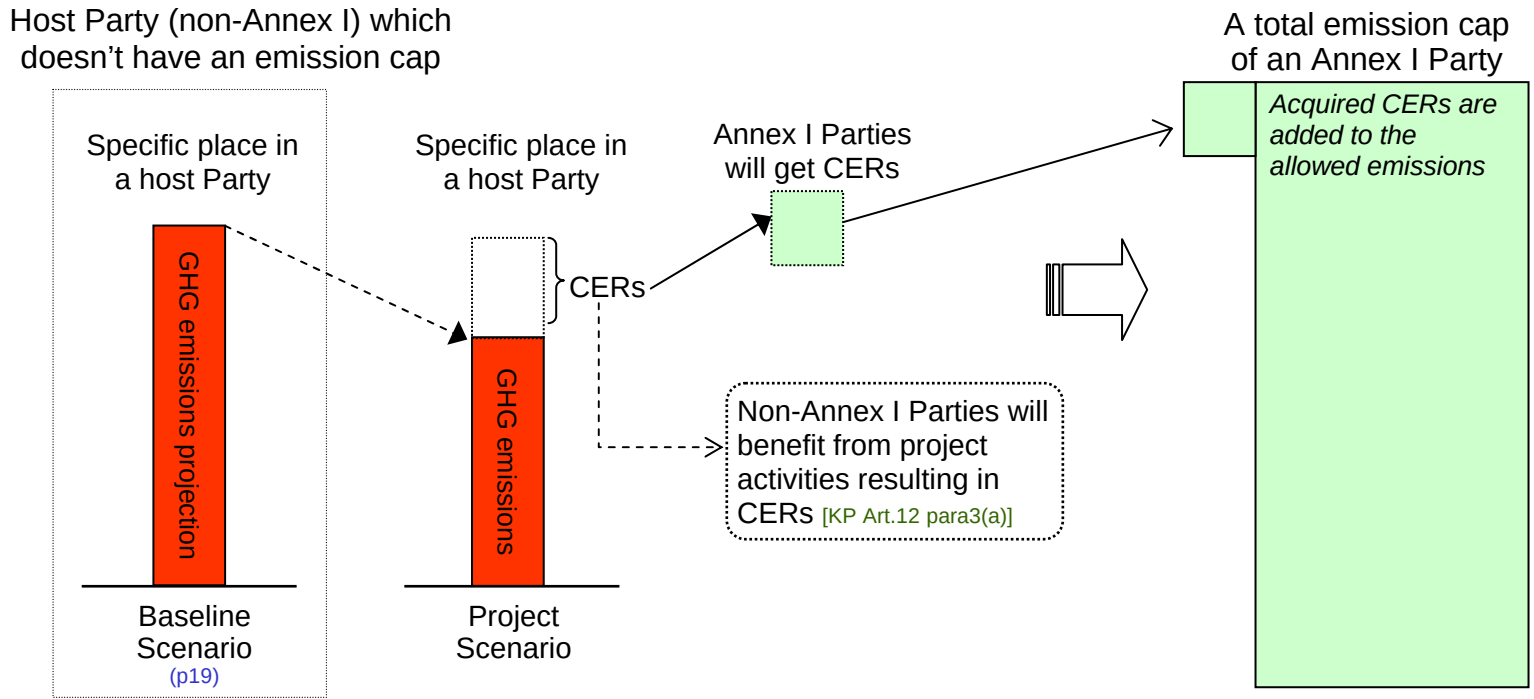
♦ There is no quantified GHG emissions reduction targets for non-Annex I Parties.

☞ There are 124 non-Annex I Parties which have ratified the UNFCCC, and the Kyoto Protocol, as of 24 November 2005.

# 2. The Kyoto Mechanisms

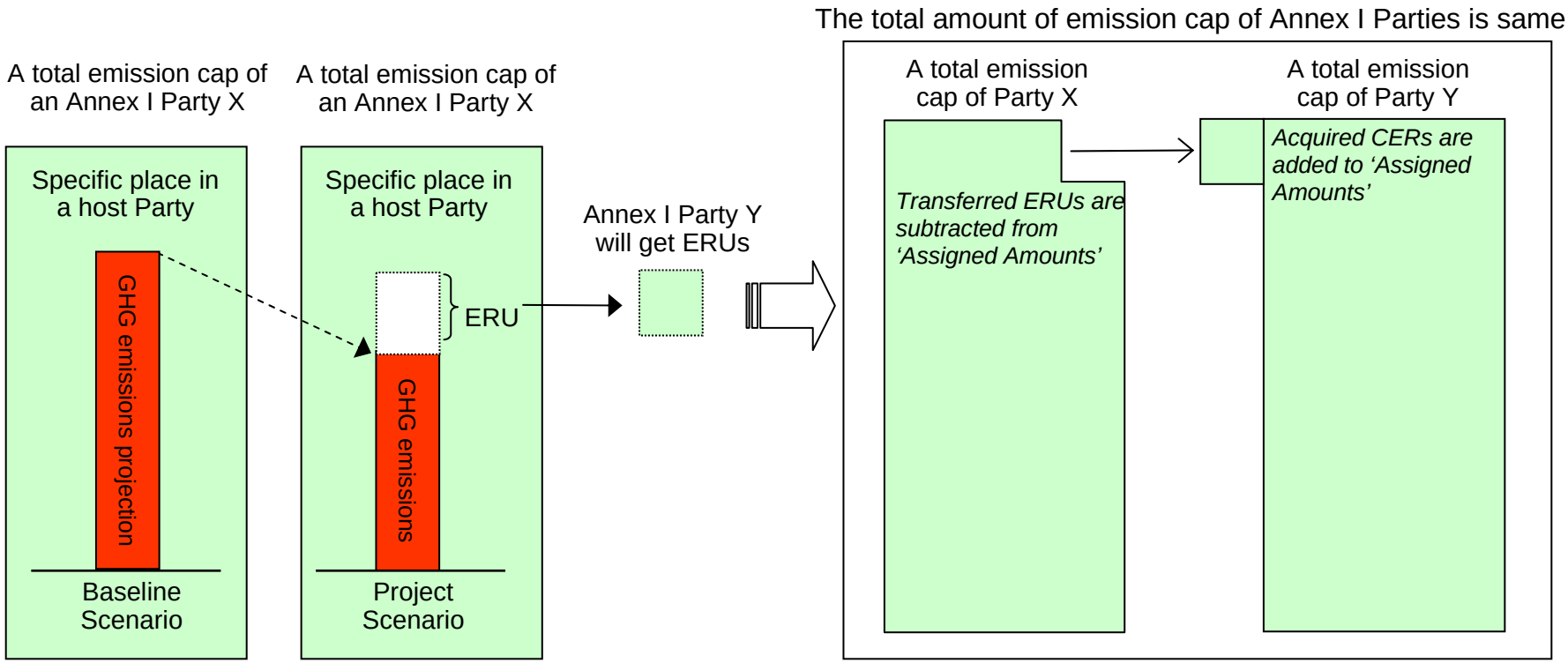
## 2-1. The Clean Development Mechanism (CDM)

- ♦ Annex I Parties which have 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). [CDM M&P, p26 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 total amount of emission cap of Annex I Parties will increase.
- ♦ The CDM will issue credits before the 1st commitment period.
  - ☞ CERs issued based on emission reductions during the period from the year 2000 up to 2007 can be used to assist in achieving compliance of Annex I parties in the 1st commitment period. [KP Art.12 para10]



# 2-2. Joint Implementation (JI)

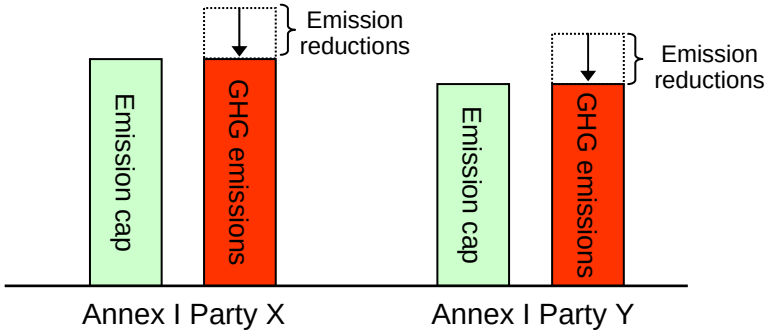
- Annex I Parties which have emission caps, assist other Annex I Parties to implement project activities to reduce GHG emissions (or remove by sinks), and credits will be issued based on emission reductions (or removals by sinks) achieved by the project activities.
  - ☞ A Party where JI project is implemented, is called a host Party.
  - ☞ The credit from the JI is called emission reduction unit (ERU). [CP/2001/13/Ad2, p8 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 after 2008. [CP/2001/13/Ad2, p6 para5]



# 2-3. International Emissions Trading

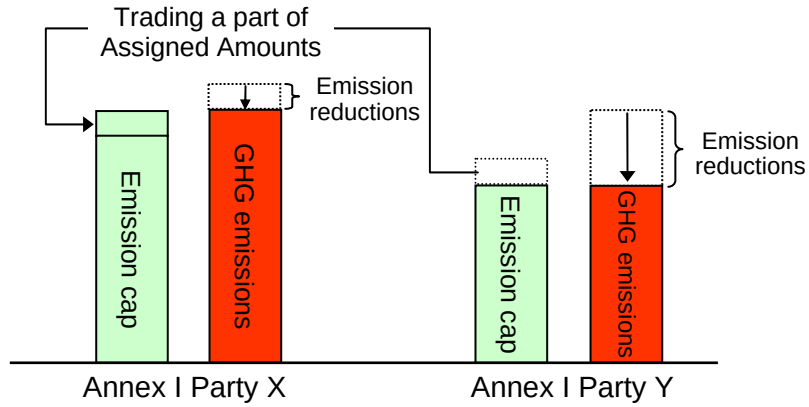
- ♦ International Emissions Trading is to trade a part of emission cap between Annex I Parties.
  - ☞ The total amount of emission cap of Annex I Parties will not change.
  - ☞ Only Annex B Parties of the Kyoto Protocol can participate International Emissions Trading.
- ♦ Through market mechanism, International Emissions Trading can decrease total cost of Annex I Parties to achieve their collective emission reduction targets.

Without International Emissions Trading




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

With International Emissions Trading




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

Note: Party Y sold part of its assigned amount (AA) to Party X at $150.

♦ Annex I Parties can trade following types of Kyoto Protocol units.
- ☞**Assigned amount unit (AAU)** [CP/2001/13/Ad2, p52 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)** [CP/2001/13/Ad2, p52 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 [CP/2001/13/Ad1, p58 para1(a)-(d)] and additional activities related to GHG removals by sinks [CP/2001/13/Ad1, p58 para1(e)-(h)]
- ☞**Emission reduction unit (ERU)** from JI
- ☞**Certified emission reduction (CER)** from the CDM
- ☞**Temporary CER (tCER)** and **long-term CER (lCER)**
  - ⇒tCER and lCER are issued from A/R project activities under the CDM.[CP/2003/6/Ad2, p16 para1(g)-(h)]

♦ Minimum trading unit is 1t-$CO_2$ equivalent.

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

| Emission cap of Annex I Party | = | AAUs | + | RMUs | + | Acquired credits from JI and CDM (ERUs+CERs+tCERs+lCERs) | ± | Acquired and transferred KP units by International Emissions Trading |
|---|---|---|---|---|---|---|---|---|

**BOX: Carry-over**

If an emission cap of an Annex I Party at the end of additional period (p69) is more than its GHG emissions during the 1st commitment period, the surplus can be carried over to the subsequent commitment period.
[CP/2001/13/Ad2, p61 para15][CP/2001/13/Ad2, p64 para36]
- ☞The end of additional period is the 100th day after the date set by the COP/MOP. [CP/2001/13/Ad3, p74 XIII]
- ☞There are several restrictions depending on the type of KP units (p62).

**BOX: tCER and lCER**

"tCER and lCER" will expire in the end in order to address non-permanence of an A/R project activity under the CDM (p43).

# 3. CDM project cycle

Sections 3 to 12 describe about large-scale emission reduction CDM project activity. For small-scale emission reduction CDM project activity, see section 13. For afforestation and reforestation CDM (A/R CDM) project activity, see section 14.

**(1)Planning a CDM project activity**

- ♦ CDM project participants (PPs) plan a CDM project activity
  - ☞ There are several conditions in order to be registered as a CDM project activity (p17), and PPs should consider those conditions from a planning stage.

**(2)Preparing the project design document (PDD)**

- ♦ PPs prepare the project design document (PDD) for a CDM project activity
  - ☞ There is the standard format for the PDD, and PPs must fill in all the contents as necessary (p70).

**(3)Getting approval from each Party involved**

- ♦ PPs shall get written approvals (p15) of voluntary participation from the designated national authority (DNA) (p10) of each Party involved, including host Party.
  - ☞ The written approval from host Party should include confirmation by the host Party that a project activity assists it in achieving sustainable development. [CDM M&P, p35 para40(a)]
  - ☞ A Party involved is a Party that provides a written approval. [PDD guidelines ver4, p10]
  - ☞ The registration of a project activity can take place without an Annex I Party being involved at the stage of registration (p15). [EB18 Rep, p8 para57]
  - ☞ The details of approval procedure is up to each Party.
- ♦ PPs may get written approvals in step (1), (2) or even (4)
  - ☞ But they must get written approvals 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. [CDM M&P, p34 para35]
  - ☞ Validation is carried out by a designated operational entity (DOE) (p13).
  - ☞ There is a formal procedure for validation (p28).

**(5)Registration**

- ♦ Registration is the formal acceptance of a validated project as a CDM project activity. [CDM M&P, p34 para36]
  - ☞ Registration is done by the CDM executive board (EB) (p11).
  - ☞ There is a formal procedure for request for registration (p30).
  - ☞ PPs shall pay registration fee at registration stage (p17).

**(6)Monitoring a CDM project activity**

- ♦ PPs collect and archive all relevant data necessary for calculating GHG emission reductions by a CDM project activity, in accordance with the monitoring plan written in the PDD (p25).
  [CDM M&P, p38 para56][CDM M&P, p39 para58]

**(7)Verification and certification**

- ♦ Verification is the periodic independent review and *ex post* determination of the monitored GHG emission reductions. [CDM M&P, p39 para61]Verification is carried out by a designated operational entity (DOE).
  - ☞There is a formal procedure for verification (p32).
- ♦ Certification is the written assurance by a DOE that a project activity achieved the reductions in GHG emissions as verified. [CDM M&P, p39 para61]
  - ☞Certification is also done by a DOE (p32).

**(8)Issuance of CERs**

- ♦ The EB will issue certified emission reductions (CERs) equal to the verified amount of GHG emission reductions. [CDM M&P, p40 para64]
  - ☞There is a formal procedure for issuance of CERs (p32, 35).
  - ☞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. [CP/2001/13/Ad2, p23 para16]*[CMP/2005/24/AdUe, p6 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). [CDM M&P, p23 para15(a)]

**(9)Distribution of CERs**

- ♦ CERs will be distributed among PPs (p35).
  - ☞The decision on the distribution of CERs from a CDM project activity shall exclusively be taken by PPs. [PDD guidelines ver4, p11]

# 4. CDM-related entities

## 4-1. COP/MOP

♦ The Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (COP/MOP) [CDM M&P, p26 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 COP/MOP;
- ☞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;
- ☞Assists in arranging funding of CDM project activities, as necessary.

♦ The COP (to the UNFCCC) shall assume the responsibilities of the COP/MOP before the entry into force of the Kyoto Protocol. [CP/2001/13/Ad2, p21 para2]

**BOX: Revision of the modalities and procedures for the CDM**

[CP/2001/13/Ad2, p23 para19][CP/2001/13/Ad2, p25 para4]

☞ Revision of the modalities and procedures for the CDM shall be decided in accordance with the rules of procedure of the COP/MOP.
- ⇒ The 1st review shall be carried out no later than 1 year after the end of the 1st commitment period
- ⇒ The 1st review shall be carried out based on recommendations by the EB and by the SBI drawing on technical advice from the SBSTA, as needed.
- ⇒ Further reviews shall be carried out periodically thereafter.

☞ Any revision of the decision shall not affect clean development mechanism project activities already registered

## 4-2. Designated National Authority (DNA)

♦ Parties participating in the CDM shall set up a designated national authority (DNA) for the CDM. [CDM M&P, p32 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. [CDM M&P, p35 para40(a)]
- ☞The details of approval procedure is up to each Party.

# 4-3. CDM Executive Board (EB)

♦ The EB supervises the CDM, under the authority and guidance of the COP/MOP [CDM M&P, p27 para5], and shall:
- ☞Make recommendations to the COP/MOP on further modalities and procedures for the CDM and/or any amendments or additions to rules of procedure for the EB, as appropriate;
- ☞Approve new methodologies (p20) related to, *inter alia*, baselines, monitoring plans and project boundaries;
- ☞Review provisions with regard to simplified modalities, procedures and the definitions of small scale CDM (SSC) project activities, and if necessary, makes appropriate recommendations to the COP/MOP;
- ☞Be responsible for the accreditation of operational entities (OEs), and make recommendations to the COP/MOP for the designation of OEs (p13).
- ☞Make any technical reports to the public and provide a period of at least 8 weeks for public comments on draft methodologies and guidance;
- ☞Develop and maintain the CDM registry (p65);
- ☞Formally accept a validated project as a CDM project activity (registration); [CDM M&P, p34 para36]
- ☞Instruct to issue CERs for a CDM project activity to the CDM registry administrator; [CDM M&P, p40 para66]
- ☞Etc.

♦ Activities of the EB, and approved rules, procedures, methodologies and standards related to the CDM can be downloaded from <http://cdm.unfccc.int/>.

**Members of the EB** [CDM M&P, p28 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 COP/MOP.
  - ⇒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 COP/MOP 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.
- ☞After the entry into force of the KP, any member of the EB whose country has not ratified the KP shall be replaced. [CP/2001/13/Ad2, p21 para 3(b)]

**Meeting and decision of the EB** [CDM M&P, p30 para13-16]
- ☞The EB meets as necessary but no less than 3 times a year.
- ☞At least 2/3 of the members of the EB, representing a majority of members from Annex I Parties and a majority of members from non-Annex I Parties, must be present to constitute a quorum.
- ☞Decisions by the EB is taken by consensus, whenever possible. If that is not possible, decisions shall be taken by 3/4 majority of the members present and voting at the meeting. Members abstaining from voting shall be considered as not voting.
- ☞Meetings of the EB are open to attendance, as observers, except where otherwise decided by the EB.

# 4-4. Panels and Working Groups

- 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. In this context, it shall take fully into account the consideration of regional balance. [CP/2001/13/Ad2, p30 para18]
- The EB has established following panels and working groups so far. <http://cdm.unfccc.int/EB/Panels>

## CDM executive board (EB)

### Meth Panel (MP)
(Methodologies Panel)

- The Meth Panel shall:
  - Prepare draft reformatted versions of proposed new baseline and monitoring methodologies (NMs) approved by the EB;
  - Elaborate recommendations for consideration and adoption by the EB, as appropriate, on, *inter alia*:
    - ⇒Revisions to the PDD;
    - ⇒Amendments on the annex on indicative simplified methodologies for small-scale CDM.
  - Etc. [EB13 Anx1, para2-3]
- 2 members of the EB will act as Chair and vice Chair of the panel, respectively. [EB13 Anx1, p2 para5]
- In addition to the designated EB members, the panel shall be composed of 15 members. [EB19 Rep, p7 para43]

### AR WG
(Working group on afforestation and reforestation project activities)

- The AR-WG shall:
  - Prepare draft reformatted versions of proposed new baseline and monitoring methodologies for A/R CDM project activities approved by the EB;
  - Elaborate precise and workable recommendations for consideration and adoption by the EB, as appropriate, on, *inter alia*:
    - ⇒Development and revisions of the PDD for A/R CDM project activities.
  - Etc. [EB14 Anx8, para2-3]
- 2 members or alternate members of the EB will act as Chair and Vice-Chair of the WG, respectively.
- In addition to the Chair and Vice-Chair, the WG shall be composed initially of 5 members. [EB14 Anx8, p2 para5]

### SSC WG
(Working group for small-scale CDM project activities)

- The SSC WG shall prepare recommendations for consideration and adoption by the EB on proposed new small-scale project activity categories and new simplified baseline and monitoring plans and etc.[EB15 Anx11, para1]
- 2 members or alternate members of the EB will act as Chair and Vice-Chair of WG, respectively.
- In addition to the Chair and Vice-Chair, the WG shall be composed of 5 members, 2 of whom are members from the Meth Panel. [EB15 Anx11, para3]

### EB-RT
(Registration Team)

- EB-RT serves the purpose to prepare appraisals of requests for registration (p30) submitted by DOEs assessing whether the validation requirements are met and/or appropriately dealt with by DOEs. [EB22 Anx19, para2]
- The EB-RT is composed of 6 members and a Chair. Members, and alternate members, of the EB assume the role of the Chair on a rotating basis after every 10 cases. [EB22 Anx19, para4]

### CDM-AP
(CDM accreditation panel)

- The CDM-AP shall make recommendations to the EB regarding:
  - The accreditation of an applicant OE;
  - The suspension, withdrawal and/or re-accreditation of accreditation of a DOE;
  - Etc [EB03 Anx1, para4-5]
- The CDM-AP also carries out selecting the members of a CDM accreditation assessment team (CDM-AT) and etc.
- In addition to the designated EB members who act as chair and vice chair, the panel shall be composed of 5 members. [EB03 Anx1, para12]

### CDM-AT
(CDM accreditation assessment team)

- 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]

# 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 COP/MOP, by the EB.
- ☞ Has two key functions:
  - ⇒It validates (p28) and subsequently requests registration of a proposed CDM project activity
  - ⇒It verifies (p32) emission reduction of a registered CDM project activity, certifies as appropriate and requests the EB to issue Certified Emission Reductions (CERs) (p4) accordingly.

♦ Upon request, the EB may allow a single DOE to perform all these functions within a single CDM project activity. [CDM M&P, p31 para27]

The terms used in DOE related official documents are:
- ☞ Entity = prior to application;
- ☞ Applicant entity (AE)= once application has been duly submitted/subject to a procedure;
- ☞ Designated operational entity (DOE)= after designation by COP/MOP.

[CDM-ACCR-01, p2 footnote]

**Procedure for accrediting OEs** [CDM-ACCR-01, p2 para3]

♦ A CDM-AT (p12), under the guidance of the CDM-AP (p12), undertakes the detailed assessment of an AE and/or DOE, identifies non-conformities and reports to the CDM-AP.
- ☞ A CDM-AT shall be established by the CDM-AP which draws members from a roster of experts established by the EB for this purpose.

♦ The CDM-AP is responsible for preparing a recommendation to the EB regarding the accreditation of an AE based on assessment work conducted by a CDM-AT.
- ☞ The CDM-AP is also responsible for preparing recommendations regarding unscheduled surveillance, re-accreditation and accreditation for additional sectoral scope(s).

♦ The EB takes the decision whether or not to accredit an AE and recommend it to the COP/MOP for designation.

♦ The COP/MOP designates operational entities based on a recommendation by the EB.

♦ The secretariat supports the implementation of the CDM accreditation procedure.

**Sectoral scope(s) of accreditation** [CDM-ACCR-01, p4 para6]
- ☞The scope of accreditation of a DOE is defined by the EB to be composed of sectoral scope(s) of accreditation.
- ☞A sectoral scope(s) (p88) of accreditation sets the limits for work which a DOE may perform under the CDM with regard to validation as well as verification and certification related to identified sector(s).

**Spot-check** [CDM-ACCR-01, p3 para5]
- ☞"Spot-check" is an unscheduled assessment activity of a DOE involving the CDM-AP and CDM-AT on the basis of which the CDM-AP shall prepare a recommendation to the EB.
- ☞The EB shall conduct a "spot-check" at any time with a view to assessing whether a DOE still meets the accreditation requirements.
- ☞The EB shall take a final decision on the status of accreditation of a DOE which has undergone a "spot-check".

**Suspension or withdrawal of a DOE** [CDM M&P, p31 para21]

♦ The EB may recommend to the COP/MOP 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 COP/MOP.

- ☞ 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 COP/MOP.
- ☞ 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 COP/MOP on such a case shall be made public.
  - ⇒It is assumed that if the COP/MOP 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** [CDM M&P, p31 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, an amount of reduced tonnes of $CO_2$ equivalent equal to the excess CERs issued, as determined by the EB, to a cancellation account in the CDM registry (p65).
- ☞ 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.

# 4-6. Project participants (PPs)

♦ Participation in a CDM project activity is voluntary. [CDM M&P, p32 para28]

♦ A PP is (a) a Party involved, and/or (b) a private and/or public entity authorized by a Party involved to participate in a CDM project activity. [PDD guidelines ver4, p11]

**A Party**

☞ Parties participating in the CDM shall designate a national authority (DNA) for the CDM. [CDM M&P, p32 para29]

☞ A non-Annex I Party may participate in a CDM project activity if it is a Party to the Kyoto Protocol. [CDM M&P, p32 para30]

**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. [CDM M&P, p33 para33]

☞ A written approval constitutes the authorization by a designated national authority (DNA) of specific entity(ies)' participation as project proponents in the specific CDM project activity. [PDD guidelines ver4, p5]

**A change of PPs** [PDD guidelines ver4, p11]

☞A change of PPs shall immediately be communicated to the EB through the secretariat in accordance with the modalities of communication (p16).

☞The indication of change shall be signed by all PPs of the previous communication and by all new and remaining PPs.

☞Each new PP needs authorization, as required.

**Participation by a fund** [PDD guidelines ver4, p6]

☞Multilateral funds do not necessarily require written approval from each participant's DNA. However those not providing a written approval may be giving up some of their rights and privileges in terms of being a Party involved in the project.

**Approval by Parties involved** [PDD guidelines ver4, p5]

♦ The DNA of a Party involved in a proposed CDM project activity shall issue a statement including the following:

☞ The Party has ratified the Kyoto Protocol.

☞ The approval of voluntary participation in the proposed CDM project activity

☞ In the case of Host Party(ies): statement that the proposed CDM project activity contributes to sustainable development of the Host Party(ies).

♦ The written approval shall be unconditional with respect to the above.

♦ A written approval from a Party may cover more than one project provided that all projects are clearly listed in the letter.

♦ The DOE shall receive documentation of the approval.

☞The registration of a project activity can take place without an Annex I Party being involved at the stage of registration.

☞Before an Annex I Party acquires CERs from such a project activity from an account within the CDM registry (p6), it shall submit a letter of approval to the EB in order for the CDM Registry administrator to be able to forward CERs from the CDM registry to the Annex I national registry (p63). [EB18 Rep, p8 para57]

# 4-7. Modalities of communication

**Procedures for public communication with the EB** [EB21 Anx27]

- ♦ Relevant communications received by the EB which are not responding to a call for input (hereinafter referred to as unsolicited communications) will only be taken into consideration at its next meeting if received before the documents submission deadline (2 weeks prior to the meeting).
  - ☞ Any unsolicited communication received after this deadline would be considered, as appropriate, at a subsequent meeting.
- ♦ Unsolicited communications should generally be addressed to the Chair of the EB and send to the UNFCCC secretariat via email (secretariat@unfccc.int) or fax (number +49. 228.815.1999).
- ♦ The secretariat shall acknowledge receipt of the unsolicited communications addressed to the EB and forward them to the EB.
  - ☞ 1 member and/or 1 alternate members shall be identified to be responsible for addressing the submissions received.
  - ☞ They shall decide if the communication shall be responded before the next EB meeting or if it shall be considered by the EB at its next informal consultations.
  - ☞ In the case they decide a need to respond before the next EB meeting, they shall, with the assistance of the secretariat, prepare a draft response and share the draft with the EB via listserve.
  - ☞ If no objection is received on their proposal within a period of 5 working days, the answer shall be sent by the secretariat on behalf of the Chair of the EB.
    - ⇒ In the case that unsolicited communications are related to the work of one of the panels or WGs, the Chair of the respective panel or WG shall decide if the submission shall be shared, via listserve, with the panel or group and inform the identified member and/or alternate member about it.

- ♦ If a member or alternate member receives, in his/her capacity, individually an unsolicited communication, he/she shall forward it to the secretariat for sharing with the rest of the EB copying the sender of the unsolicited communication. This request will be dealt in accordance with above.
  - ☞ The same action shall be taken if panel or working group members receive, in their capacity, individually an unsolicited communication.

**Modalities of communication of PPs with the EB**
[PDD guidelines ver4, p9]

- ♦ The modalities of communication between PPs and the EB are indicated at the time of registration by submitting a statement signed by all PPs.
- ♦ All official communication from and to PPs, after a request for registration (p30) is submitted by a DOE, shall be handled in accordance with these modalities of communication.

**BOX: Confidential/proprietary information**
[PDD guidelines ver4, p7]

- ☞ Information obtained from PPs marked as proprietary or confidential shall not be disclosed without the written consent of the provider of the information, except as required by national law.
  - ⇒ Information used to determine additionality, to describe the baseline methodology and its application, and to support an environmental impact assessment shall not be considered as proprietary or confidential.
- ☞ PPs shall submit documentation that contains confidential and proprietary information in one marked up version where all confidential/proprietary parts shall be made illegible by the PPs, and a second version containing all information which shall be treated as strictly confidential by all handling this documentation.

# 5. Conditions for CDM projects

♦ When planning a CDM project activity, it is necessary to keep in mind following points:
- ☞ The CDM shall assist non-Annex I Parties in achieving sustainable development; [CP/2001/13/Ad2, p20]
  - ⇒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 (p18); [CDM M&P, p36 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) (p42); [CP/2001/13/Ad2, p22 para7(a)]
- ☞ 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 guidelines ver4, p17]

♦ It is necessary to prepare a project design document (PDD) in order to be registered as a CDM project activity.
- ☞ The contents of PDD is described in Attachment 1 (p70).

**Registration fee of the CDM project activity** [EB6 Rep Anx5]

☞ PPs shall pay registration fee at registration stage.(p30)
- ⇒Fee level depends on the estimated or approved average annual emissions reductions (tonnes of $CO_2$ equivalent) to be realized over the crediting period.

| Reductions per year | US$ |
|---|---|
| <= 15,000 | 5,000 |
| > 15,000 and <= 50,000 | 10,000 |
| > 50,000 and <= 100,000 | 15,000 |
| > 100,000 and <= 200,000 | 20,000 |
| > 200,000 | 30,000 |

*These registration fee is subject to be confirmed by the UNFCCC secretariat.*

- ⇒The DOE shall include a statement of the likelihood of the project activity to achieve the anticipated emission reductions stated in the PDD. This statement will constitute the basis for the calculation of the registration fee. [EB11 Rep Anx6]

☞ The registration fee paid will be deducted from the share of proceeds for administration (p35) due at issuance of CERs.

**BOX: CDM project activities under a programme of activities** *[CMP/2005/24/AdUe, p5 para20]*

☞ Local/regional/national policy or standard cannot be considered as a CDM project activity

☞ But that project activities under a programme of activities 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

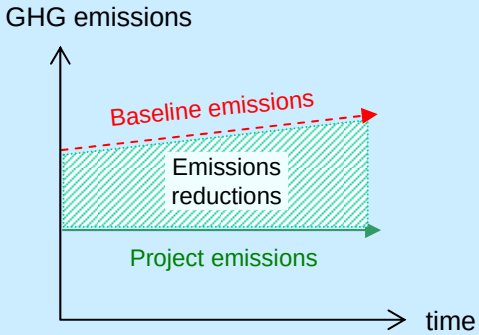
**BOX: Carbon dioxide capture and storage (CCS)**

☞ The COP/MOP decides to consider, at COP/MOP2, how to consider carbon dioxide capture and storage as CDM project activities, taking into account issues relating to project boundary, leakage and permanence. *[CMP/2005/24/AdUe, p3 para8]*

# 6. Baseline

## 6-1. 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. [CDM M&P, p36 para44]




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

♦ A baseline (scenario and emissions) shall be established:
(a)By PPs in accordance with provisions for the use of approved and new methodologies (p20);
(b)In a transparent and conservative manner regarding the choice of approaches, assumptions, methodologies, parameters, data sources, key factors and additionality, and taking into account uncertainty;
(c)On a project-specific basis;
(d)In the case of small-scale CDM project activities (p36), in accordance with simplified procedures developed for such activities;(p38)
(e)Taking into account relevant national and/or sectoral policies (p19) and circumstances, such as sectoral reform initiatives, local fuel availability, power sector expansion plans, and the economic situation in the project sector. [CDM M&P, p36 para45]

♦ Before calculating baseline emissions, it is necessary to identify baseline scenarios (p19).

♦ A baseline (emissions) shall cover emissions from all gases, sectors and source categories within the project boundary (p25). [CDM M&P, p36 para44]

♦A CDM project activity is **additional** if GHG emissions are reduced below those that would have occurred in the absence of the registered CDM project activity. [CDM M&P, p36 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. [CDM M&P, p34 para37(d)]

♦PPs have to write explanation of how and why this project activity is **additional** and therefore not the baseline scenario in a PDD, including;
⇒a description of the baseline scenario determined by applying the methodology,
⇒a description of the project activity scenario, and
⇒an analysis showing why the emissions in the baseline scenario would likely exceed emissions in the project activity scenario. [PDD guidelines ver4, p17]

♦"The tool for the demonstration and assessment of additionality"(p74) provides a general framework for demonstrating and assessing additionality. PPs may also propose other tools for the demonstration of additionality. [EB22 Anx8 para1]

**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]

# 6-2. Baseline scenario

- The baseline scenario for a CDM project activity is the scenario that reasonably represents GHG emissions that would occur in the absence of the proposed project activity. [PDD guidelines ver4, p7]
- Different scenarios may be elaborated as potential evolutions of the situation existing before the proposed CDM project activity.
  - ☞ 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. [CDM M&P, p37 para46]

**Clarifications on the treatment of national and/or sectoral policies and regulations in determining a baseline scenario** (p18)

- 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: [EB22 Anx3]

**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).

# 6-3. Baseline methodology

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

♦ No methodology is excluded a priori so that PPs have the opportunity to propose any methodology. [PDD guidelines ver4, p6]

**A baseline methodology approved by the EB** is publicly available along with relevant guidance on the UNFCCC CDM website (http://unfccc.int/cdm). [PDD guidelines ver4, p7]

☞If DOEs wish to submit queries regarding the applicability of **approved methodologies**, the procedures for the submission and consideration of queries from DOEs to the Methodologies Panel (MP) regarding the application of approved methodologies is written in EB20 Anx6.

If a DOE determines that a proposed project activity intends to use a **new baseline methodology**, it shall, prior to the submission for registration of this project activity, forward the proposed methodology to the EB for review, i.e. consideration and approval (p22), if appropriate. [EB20 Anx2, p2 para2]

♦ It is needed to ensure consistency between baseline scenario derived by baseline methodology and the procedure and formulae used to calculate baseline emissions. [PDD guidelines ver4, p31]

**Baseline approach (para 48 of CDM M&P)** [CDM M&P, p37 para48]

♦ In choosing a baseline methodology for a project activity, PPs shall select from among the following baseline approaches (para 48 of CDM M&P) the one deemed most appropriate for the project activity, and justify the appropriateness of their choice:

(a)Existing actual or historical emissions, as applicable; or

(b)Emissions from a technology that represents an economically attractive course of action, taking into account barriers to investment; or

(c)The average emissions of similar project activities undertaken in the previous 5 years, in similar social, economic, environmental and technological circumstances, and whose performance is among the top 20 per cent of their category. <See [EB08 Anx1 para4-5] for guidance>

☞Proponents of methodologies have indicated some apparent overlap between approaches (a), (b),and (c) of para 48 of the CDM M&P.

☞Since para 48 stipulates that only one approach should be chosen, developers are advised to select the one that most closely reflects the process used for calculating baseline emissions or baseline emission rates. [EB10 Anx1 para4]

## Examples of guidance and clarification regarding methodological issues

### Proposed project activities applying more than one methodology
[EB08 Anx1, p2 para6]

☞ If a proposed CDM project activity comprises different "sub-activities" requiring different methodologies, PPs may forward the proposal using one CDM-PDD but shall complete the methodologies sections (sections A.4.2, A.4.3, A.4.4. and B to E of the CDM-PDD (p70)) for each "sub-activity".

### Clarifications on ex post calculation of baselines
[EB10 Anx1, p2 para6]

☞ The ex post calculation of baseline emission rates may only be used if proper justification is provided. Notwithstanding, the baseline emission rates shall also be calculated ex-ante and reported in the draft CDM-PDD (p70).

### Temporarily result in "negative emission reductions"
[EB21 Rep, p5 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.

### Use of and/or reference to lifecycle analysis (LCA) in proposed NMs
[EB22 Anx2, para1]

☞ When referring to and/or making use of LCAs and/or LCA tools, PPs shall in a transparent manner provide all equations, parameterizations and assumptions used in the LCA and/or LCA tools to calculate baseline and monitoring methodologies.

☞ For example, this could be accomplished by highlighting the relevant sections in an attached copy of the referenced LCA and/or tool.

### Consideration of uncertainties when using sampling
[EB22 Anx2, p2 para10]

☞ Methodologies employing sampling to derive parameters in estimating emissions reductions shall quantify these parameter uncertainties at the 95% confidence level.

☞ The choice of the upper or lower bounds to be used in estimating emission reductions shall be conducted in a manner that ensures conservativeness.

### Inclusion/exclusion of emission sources in baseline and monitoring methodologies
[EB22 Anx2, p2 para11]

☞ When defining which emission sources should be considered in the project boundary, in the baseline scenario and in the calculation of leakage emissions (p25), PPs should make conservative assumptions,

☞ For example the magnitude of emission sources omitted in the calculation of project emissions and leakage effects (if positive) should be equal to or less than the magnitude of emission sources omitted in the calculation of baseline emissions.

### Treatment of the lifetime of plants and equipment in proposed new baseline methodologies [EB22 Anx2, p2 para4-9]

☞ Where a project activity involves the replacement or retrofit of existing equipment or facilities, it is reasonable to assume that emission reductions shall only be accounted from the date of replacement until the point in time when the existing equipment would have been replaced in the absence of the project activity or the end of crediting period, whatever is earlier.

☞ In order to estimate the point in time when the existing equipment would need to be replaced in the absence of the CDM, a new methodology may consider the following approaches:

⇒ A sector and/or activity specific method or criteria to determine when the equipment would be replaced or retrofitted in the absence of the CDM;

⇒ The typical average technical lifetime of the type equipment may be determined and documented, taking into account common practices in the sector and country, e.g. based on industry surveys, statistics, technical literature, etc.;

⇒ The practices of the responsible entity/PPs regarding replacement schedules may be evaluated and documented, e.g. based on historical replacement records for similar equipment.

# 6-4. Procedures for the submission of a proposed new methodology

<http://cdm.unfccc.int/Reference/Procedures/Pnm_proced_ver09.pdf>

(1) PPs intend to propose a new baseline or monitoring methodology (NM) for approval by the EB, prepare the methodologies forms for baseline and monitoring methodologies (CDM-NMB and CDM-NMM) and a draft PDD and as a minimum, complete sections A to E, including relevant annexes, following its respective current guidelines.

(2) A DOE/AE may voluntarily undertake a pre-assessment of a proposed NM before submitting it. If a voluntary pre-assessment has been undertaken, no pre-assessment by the Meth Panel, as referred in (5), is needed.

The submitted methodology may be in such case be considered as received after (3) and (4) is completed.

(3) A fee of USD 1,000 shall be charged to PPs when submitting a proposed NM for regular project activities.
- ☞ If a methodology is approved and the project activity for which it was developed is registered, the registration fee shall be lowered by that amount.
- ☞ The amount of this fee will be reviewed and, if necessary, revised in the 3rd quarter 2006.
- ☞ Not applicable to methodologies for small-scale and afforestation and reforestation project activities.

(4)The secretariat checks that the "CDM: Proposed new methodology form" (F-CDM-NM) has been duly filled by the DOE, documentation provided by the DOE is complete and the proof of payment of the stipulated submission fee has been received.

(5)The secretariat forwards the documentation to 1 member of the MP. This member is to assess the quality of the submission and grade it as being 1 and 2 in accordance with the criteria for pre-assessment as contained in the "CDM: Proposed new methodology assessment form" (F-CDM-NMas).
- ☞ If the grade is 2, the documentation is to be sent back to the PPs.
- ☞ If the grade is 1, the documentation is considered as received by the EB, and be forwarded by the secretariat for consideration of the EB and the MP.

The member shall receive a half-day fee as remuneration.

The date of receipt of the proposed NM

(6)At the same time, the secretariat makes the proposed NM publicly available on the UNFCCC CDM web site and invite public inputs for a period of **15 working days**.

Public inputs shall be made using the "public comment form"(F-CDM-NMpu)

(7)Comments are forwarded to the MP at the moment of receipt and made available to the public at the end of the 15 working day period.

(8)Upon receipt of a proposed NM, 2 members of the MP are selected on a rotational basis in alphabetical order. The 2 members prepare draft recommendations by the MP to the EB.

The 2 panel members shall be paid a fee for 1 working day for the preparation of the draft recommendations.

(9)The Chair and the Vice-Chair of the MP, with the assistance of the 2 designated panel members and the secretariat, shall, **no later than 7 working days** after the receipt of the proposed NM, select 2 experts from a roster of experts who are to undertake a desk review to appraise the validity of the proposed NM, being one the lead reviewer.

The lead is to be paid 3 days fee and the second reviewer a 2 days fee.

(10)Each desk reviewer forwards his/her recommendation to the MP independently, wherever possible, within **10 working days** after having received a proposed NM using lead expert desk review form (F-CDM-NMex_3d) and second expert desk review form (F-CDM-NMex_2d).

(11)The MP may request, through the secretariat, and via the DOE, the PPs additional technical information within a deadline stipulated by the Chair of MP.

Any additional technical information provided by PPs to the MP shall be made available to the EB and to the public.

(12)The MP prepares its preliminary recommendation regarding the approval of the proposed NM to the EB using the forms "CDM: Proposed NM - Panel recommendation to the EB" (F-CDM-NMmp) and "CDM: Proposed NM - Panel recommendation summary to the EB" (F-CDM-NMSUMmp).

(13)The MP, through the secretariat, and via the DOE, forwards its preliminary recommendation to PPs.

**Next Page**

## 6-4. Procedures for the submission of a proposed new methodology

(14)Within **10 working days** after the receipt of the preliminary recommendation of the MP, the PPs may submit, via the DOE, clarifications to the MP, through the secretariat, on technical issues. Technical clarifications provided by the PPs shall include revisions in the CDM-NMB and CDM-NMM in highlighted form.

(15 a) If PPs do not provide any clarification within the 10-day period, or if the preliminary recommendation by the MP is in favour of approving (so called A case) or not approving (so called C case) the proposed NM, it is considered as a final recommendation

(15 b) If PPs provide clarifications related to the preliminary recommendation by the MP, the MP considers these clarifications **at its next meeting** and prepare its final recommendation to the EB.

- ☞ The MP makes a recommendation to the EB, if possible **at its next meeting**.
- ☞ A proposed NM shall be available to the MP at least **10 weeks prior to its next meeting**.
- ☞ In case more than 10 proposed NMs are submitted by the deadline, the Chair of the MP ascertains how many proposals are analyzed at the next MP meeting and decide to postpone the analysis of some submissions.
- ☞ Submissions are treated on a “First come first served” basis.
- ☞ The EB may decide to change a deadline for submissions of proposed NMs taking into account the workload of the MP.

(16) The final recommendation is forwarded to the EB and made publicly available.

(17)The EB considers a proposed NM **at the next meeting** following the receipt of the final recommendation regarding the approval of the proposed NM by the MP.

- ☞ The EB shall expeditiously, if possible **at its next meeting** but **not later than 4 months** after the date of receipt of the proposed NM, review the proposed NM in accordance with the CDM M&P.

Once approved by the EB, it shall make the approved methodology (AM) publicly available and the DOE may proceed with the validation of the project activity and submit the PDD for registration.

If the EB considers the case to be re-submitted (so called “B” case), PPs have the opportunity to re-submit the proposal taking into consideration:

- ☞ Required changes being made by the PPs, taking into account issues raised by the EB, recommendations made by the MP, and re-submission of a duly revised proposal. The secretariat shall make the revised proposal publicly available upon receipt;
- ☞ Reconsideration of the revised proposal directly by the MP, without further review by desk reviewers; and
- ☞ A recommendation by the MP being made to the EB.

- ☞ A proposed methodology may be resubmitted to the EB with required changes (i.e. rated as “B” by the EB) **only once**.
- ☞ If a proposal that may be resubmitted with required changes (i.e. rated as “B”) is not resubmitted within the timeframe of **5 months** will be considered as withdrawn.

# 6-5. Procedures for the revision of an approved methodology [EB21 Anx6]

(1)If PPs intend to propose a revision to an approved baseline or monitoring methodology (AM) for consideration and approval by the EB, they shall submit to a DOE the form for submission of requests for revisions of AMs to the MP (F-CDMAM-Rev) along with a draft revised version of the AM highlighting proposed changes together with a draft PDD with complete sections A to E, including relevant annexes.

(2)In the event that the COP/MOP requests the revision of an AM, no CDM project activity may use this methodology. The PPs shall revise the methodology, as appropriate, taking into consideration any guidance received from the EB in accordance with these procedures unless otherwise decided by the COP/MOP.

(3)Having checked that the above requirements are met and documentation is complete, the DOE transmits the documentation to the secretariat.

(4)The secretariat forwards the documentation to the EB and the MP after having checked that (a) the "CDM: Proposed revision of AM form" has been duly filled by the DOE, and (b) the documentation provided by the DOE is complete.
Information on a request for revision of an AM shall be made available in the UNFCCC CDM web site.

The date of receipt of a proposed revision to an AM by the EB

(5)Bearing in mind the timelines and deadlines for the consideration of documents by the MP and priorities set by the EB and the Chair of the MP, the MP considers the proposed revision at **its next meeting**, if feasible, and recommend to the EB whether the proposed revision should be accepted for consideration.

(6)If the EB decides that a revision of a baseline and monitoring methodology shall be considered, it requests the MP to further analyze the case and prepare a recommendation to the EB to be received no later than for consideration **at the 2nd meeting** following the request by the EB.

(7)Depending on the proposed revision of a methodology, the EB may decide to request the secretariat to invite public inputs on the proposed revision for a period of **15 working days**.

(8)Up to 2 member(s) of the MP, under the guidance of the Chair and Vice-Chair of the MP, be selected for preparing draft recommendations for the MP.

The selected Panel member(s) shall each be paid a fee of a maximum of 2 working days.

(9)The MP recommends, based on substantiated justification, a revision to an AM or the continued validity of the already AM, possibly with minor revisions and/or minor corrections.
The MP may also recommend a review of an AM based on the experience gained through the examination of submissions of NMs in order to ensure a consistent approval process.

(10)The EB shall consider the recommendation by the MP **at the next meeting**.

(11)If the EB approves the revision of an AM, this methodology shall replace the previous AM.

**BOX: Revision of an AM**

- ☞Any revision to an AM only be applicable to project activities registered subsequent to the date when the revision took effect.
- ☞The date of revision shall be the date/time (Bonn, GMT) at which the EB has agreed on the case (not adoption of report).
- ☞The revision shall not affect (a) registered CDM project activities during their crediting period; and (b) project activities that use the previously AM for which requests for registration are submitted before or within 4 weeks after the methodology was revised.

- ☞If the EB considers that the possible revision of the methodology could have significant implications for the use of the methodology, the EB may agree to suspend the use of the methodology, by putting it "on hold", with immediate effect.
- ☞Project activities which use this methodology but have not been submitted for registration **within 4 weeks** after the methodology "on hold", will not be able to use the methodology until the EB has decided on any revision of the methodology.
- ☞If the EB puts a methodology "on hold", a revised methodology should be approved not later than **at the 3rd meeting** of the EB after it has agreed to put the methodology "on hold".

# 7. Items in the project design document (PDD)

## 7-1. Project boundary and leakage

**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. [CDM M&P, p37 para52]
  - ☞ The Meth Panel (MP) shall develop specific proposals for consideration by the EB on how to operationalize the terms “under the control of”, “significant” and “reasonably attributable.” [PDD guidelines ver4, p11]
  - ☞ Pending decisions by the EB on these terms, PPs are invited to explain their interpretation of such terms when completing and submitting the CDM-NMB (p72) and CDM-NMM (p73).

**Leakage**

- ☞ Leakage is defined as the net change of GHG emissions which occurs outside the project boundary, and which is measurable and attributable to the CDM project activity. [CDM M&P, p37 para51]
  - ⇒ In an operational context, the terms measurable and attributable should be read as “which can be measured” and “directly attributable”, respectively. [PDD guidelines ver4, p9]
- ☞ Reductions in GHG emissions shall be adjusted for leakage in accordance with the monitoring and verification provisions. [CDM M&P, p37 para50]

## 7-2. Monitoring

- ♦ Monitoring refers to the collection and archiving of all relevant data necessary for determining the baseline, measuring GHG emissions within the project boundary of a CDM project activity and leakage, as applicable. [PDD guidelines ver4, p10]
- ♦ A monitoring plan for a proposed project activity shall be based on a previously approved monitoring methodology or a new methodology. [CDM M&P, p38 para54]
  - ☞ A monitoring methodology refers to the method used by PPs for the collection and archiving of all relevant data necessary for the implementation of the monitoring plan. [PDD guidelines ver4, p10]

- ☞ A monitoring methodology approved by the EB and made publicly available along with relevant guidance. [PDD guidelines ver4, p10]
- ☞ PPs may propose a new monitoring methodology. In developing a monitoring methodology, the 1st step is to identify the most appropriate methodology bearing in mind good monitoring practice in relevant sectors.
- ☞ PPs shall submit a proposal for a new methodology to a DOE by forwarding a completed “Proposed New Methodology:Baseline (CDM-NMB)” along with a completed “Proposed New Methodology: Monitoring (CDM-NMM)” and the CDM-PDD with sections A to E completed in order to demonstrate the application of the proposed new methodology to a proposed project activity.
  - ⇒ Procedures for the submission of a proposed new monitoring methodology is same as that of new baseline methodology (p22).

# 7-3. Crediting period

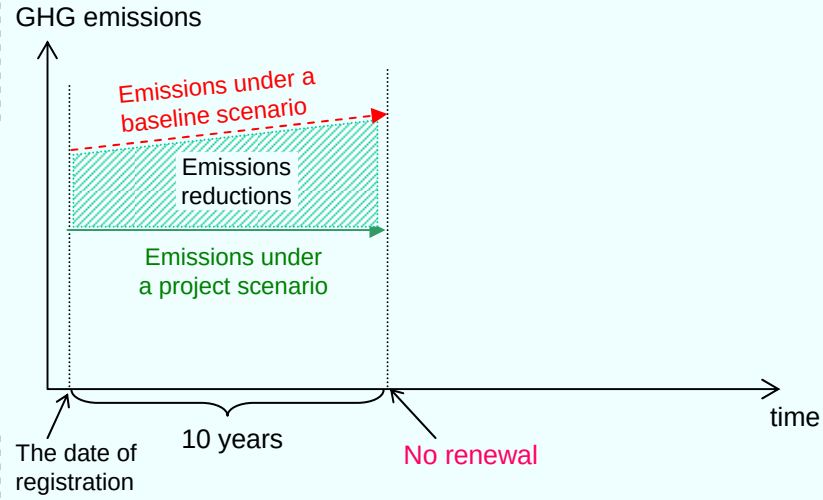
- ♦ CERs shall only be issued for a crediting period starting after the date of registration of a CDM project activity. [CP/2001/13/Ad2, p23 para12]
- ♦ PPs select a crediting period for a proposed project activity from one of the following alternative approaches [CDM M&P, p37 para49] :
  - ☞ A maximum 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. [EB12 Anx3, para1(b)]

**Retroactivity of a crediting period**

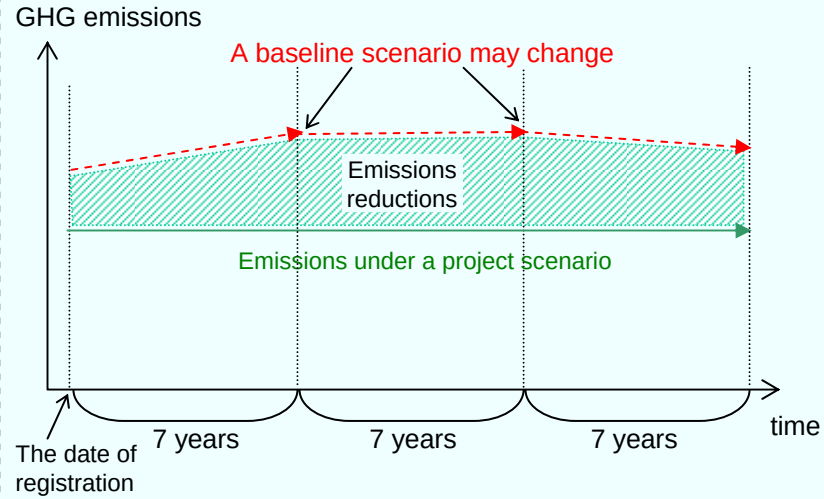
- ☞ Project activities that started in the period between 1 January 2000 and 18 November 2004 and have not yet requested registration but have either submitted a new methodology or have requested validation by a DOE by 31 December 2005 can request retroactive credits if they are registered by the EB by 31 December 2006 at the latest. *[CMP/2005/24/AdUe, p2 para4]*
- ☞ The starting date of a CDM project activity is the date at which the implementation or construction or real action of a project activity begins. [PDD guidelines ver4, p11]

- ☞ The starting date of a CDM project activity does not need to correspond to the starting date of the crediting period for this project activity. Therefore that project activities starting as of 1 January 2000 may be validated and registered as a CDM project activity after 31 December 2005. [EB21 Rep, p10 para63]

**A maximum of 10 years with no option of renewal**




**A maximum of 7 years which may be renewed at most 2 times**



**Procedures and documentation which need to be used for the renewal of a crediting period** [EB20 Anx7]

♦ The EB agreed that at the start of the 2nd and 3rd crediting period for a project activity, 2 issues need to be addressed:

**Assessing the continued validity of the baseline**

☞ The DOE shall verify whether the baseline scenario chosen is still the most likely scenario, using the approved methodology for the project activity.

☞ The DOE shall verify whether the project activity still generates lower emissions than the revised baseline emissions.

⇒ If the revised baseline emissions are lower than the project activity emissions, the project is automatically non-additional and will not generate any emission reductions.

☞ A change in the relevant national and/or sectoral regulations between 2 crediting periods has to be examined at the start of the new crediting period.

⇒ If at the start of the project activity, the project activity was not mandated by regulations, but at the start of the 2nd or 3rd crediting period regulations are in place that enforce the practice or norms or technologies that are used by the project activity, the new regulation (formulated after the registration of the project activity) has to be examined to determine if it applies to existing plants or not.

⇒ If the new regulation applies to existing CDM project activities, the baseline has to be reviewed and, if the regulation is binding, the baseline for the project activity should take this into account.

⇒ This assessment will be undertaken by the verifying DOE.

**Updating the baseline**

☞ For updating the baseline at the start of the 2nd and 3rd crediting period, there shall be no change in the methodology for determining the baseline emissions.

☞ However, new data available will be used to revise the baseline emissions.

⇒ For example, if the “average of 3 most recent years data” was used to determine the baseline emissions for the 1st crediting period, the baseline shall be updated using the average for the 3 most recent years prior to the start of the subsequent crediting period.

☞ In the case of baselines where emission factors are determined ex ante (and not updated during a crediting period), the baseline emissions factor shall be updated for the subsequent crediting period.

⇒ This shall not be necessary for baselines which are constantly updated.

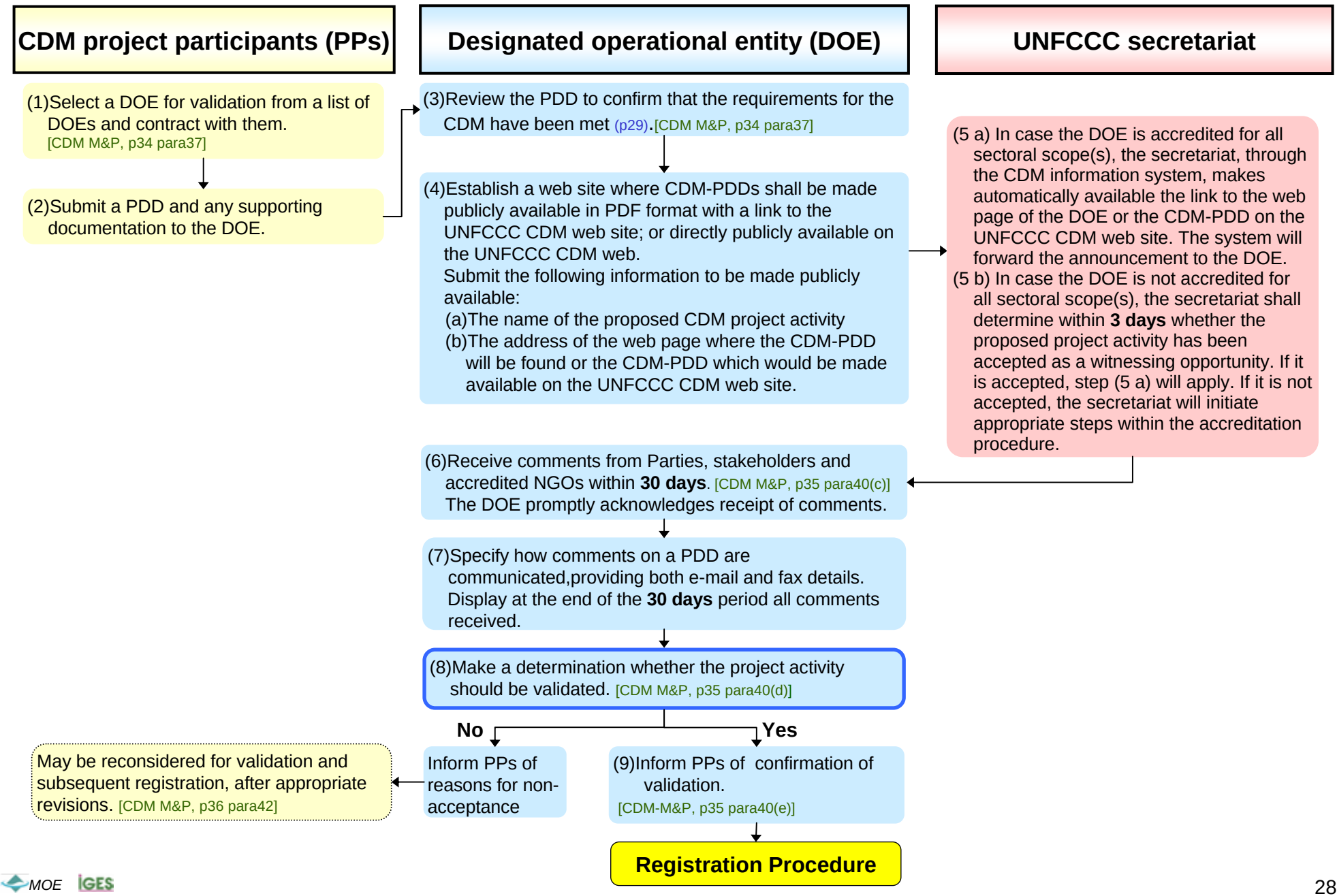
⇒ In both cases, the CDM project activities are not included in the revised estimation of the baseline emissions.

☞ PPs shall assess and incorporate the impact of new regulations on baseline emissions. The DOE shall verify this.

# 8. Validation of a CDM project activity

<http://cdm.unfccc.int/Reference/Procedures>[Version 4 / June 2005]

## 8-1. Overview of validation procedures



## 8-2. Validation requirements

♦ The DOE selected by PPs to validate a project activity, being under a contractual arrangement with them, shall review the PDD and any supporting documentation to confirm that the following requirements have been met. [CDM M&P, p34 para37]

- ☞The participation requirements, as follows, are satisfied;
  ⇒Participation in a CDM project activity is voluntary. Parties participating in the CDM shall designate a national authority (DNA) for the CDM. A non-Annex I Party may participate in a CDM project activity if it is a Party to the Kyoto Protocol.
- ☞Comments by local stakeholders have been invited, a summary of the comments received has been provided, and a report to the DOE on how due account was taken of any comments has been received;
- ☞PPs have submitted to the DOE documentation on the analysis of the environmental impacts of the project activity or an environmental impact assessment in accordance with procedures as required by the host Party;
- ☞The project activity is expected to result in GHG reductions that are additional to any that would occur in the absence of the proposed project activity;
- ☞The baseline and monitoring methodologies comply with requirements pertaining to methodologies previously approved by the EB, or modalities and procedures for establishing a new methodology;
- ☞Provisions for monitoring, verification and reporting are in accordance with CDM M&P and relevant decisions of the COP/MOP;
- ☞The project activity conforms to all other requirements for CDM project activities in CDM M&P and relevant decisions by the COP/MOP and the EB.

**Validation Report** [CDM M&P, p35 para40]

♦ The DOE shall:

- ☞ Prior to the submission of the validation report to the EB, have received from the PPs written approval of voluntary participation from the DNA of each Party involved, including confirmation by the host Party that the project activity assists it in achieving sustainable development;
- ☞ In accordance with provisions on confidentiality (p16) above, make publicly available the PDD;
- ☞ Submit to the EB, if it determines the proposed project activity to be valid, a request for registration in the form of a validation report including the PDD, the written approval of the host Party, and an explanation of how it has taken due account of comments received;
- ☞ Make this validation report publicly available upon transmission to the EB.

# 9. Registration of a CDM project activity

## 9-1. Overview of registration procedures

[EB14 Anx7] [CP/2003/6/Ad2 Anx2, p9]

### Designated operational entity (DOE)

(1)Prepare validation report using the "CDM project activity registration and validation report form" (F-CDM-REG) including the PDD, the written approval of the host Party and an explanation of how it has taken account of comments received on the PDD.

(2)Submit all required documents for a request for registration, except for the proof of payment of the registration fee, using the electronic, internet-based, submission tool provided by the secretariat to each DOE.

(3)Upon submission of the required information, a DOE receives automatically a unique reference number which is used to identify the bank transfer of the registration fee (p17).
A DOE submits, using the submission tool, the proof of payment which indicates the unique reference number.

### UNFCCC secretariat

(4)Determine whether the submission by the DOE is complete.

(5)After the registration fee has been received and the secretariat has determined that the submission by a DOE is complete, the "request for registration" shall be considered received and make publicly available, at the latest on the day, through the UNFCCC CDM web site for a period of **8 weeks**.
The secretariat conveys the announcement of this publication, including the name of the proposed CDM project activity, the first and last day of the 8-week period and the location on the UNFCCC CDM web site.

(6)The secretariat identifies for each request for registration, the member of EB-RT (p12) and 1 expert from the Meth roster, to prepare appraisals of requests for registration.
⇒ The member and the expert assigned will be informed and have a maximum of **5 days** to indicate whether they have or not a conflict of interest. If a conflict of interest exists, another person shall be assigned.
The appraisal indicates whether validation requirements have been met and/or appropriately dealt with by the DOE.
The expert shall prepare an appraisal using the form "Appraisal of registration requests (F-CDM-REGappr)" and submit it to the member within **15 (10 for SSC) calendar days**. The member shall review and finalize, in consultation with the expert, the appraisal and submit it within **15 (10 for SSC) calendar days** to the secretariat.
The secretariat shall forward the appraisal to the EB within **1 working day**. [EB22 Anx19, p3 para17-23]

### CDM executive board (EB)

(7)Whether a Party involved in the project activity or at least 3 members of the EB request a review of the proposed CDM project activity (p31) within **8 (4 for SSC) weeks** after the date of receipt of the request for registration.
[CDM M&P, p36 para41]

**No**

(8)Registration as CDM project activity.

**Yes**

The review by the EB shall be finalized no later than **at the 2nd meeting** following the request for review. The decision and the reasons for it are communicated to the PPs and the public.

Can be registered

Not registered

May be reconsidered for validation and subsequent registration, after appropriate revisions. [CDM M&P, p36 para42]

(9)Marked in the UNFCC CDM web site as "registration completed". The registered CDM project activity and related documents are displayed as registered and made publicly available in accordance with provisions on confidentiality (p16).

# 9-2. Procedures for review of registration [EB22 Anx18]

The EB shall recommend to the COP/MOP, for adoption at its next session, procedures for conducting the reviews of registration of the proposed CDM project activity and issuance of CER. Until their adoption by the COP/MOP, the procedures shall be applied provisionally. [CDM M&P, p28 para5(o)]

## (1) Request for review (p30)

**By a Party involved in a proposed CDM project activity**
A request for review shall be sent by the relevant DNA to the EB, through the secretariat, using official means of communication (such as recognized official letterhead and signature or an official dedicated e-mail account).

**By a member of the EB**
A request for review shall be made by notifying the EB.

↓

The secretariat acknowledges the receipt of a request for review and promptly forward the request to the EB via the list-serve.

↓

As soon as a Party involved or 3 EB members request a review of a proposed project activity, the following action are taken:

(a) The consideration of a review of the proposed project activity shall be included in the proposed agenda of the next EB meeting;
(b) The EB notifies the PPs and the DOE that a review has been requested, and inform about the date and venue of the next and subsequent EB meetings at which the request for review will be considered. Stakeholders interested in the review process also be given opportunity to attend the EB meeting;
⇒ PPs and the DOE, when being notified of the request for review, shall be invited to submit comments to the EB on issues raised **not later than 1 week before the meeting**. These inputs shall be made publicly available.
(c) The PPs and the DOE shall each provide a contact person for the review process;
(d) The proposed project activity will be marked as being "under review" on the UNFCCC CDM web site and a notification be sent through UNFCCC CDM News facility.

A review shall be related to issues associated with the validation requirements. A request for review shall be specific in this regard.

A request for review shall include the form "CDM Project Activity Registration Review" (F-CDM-RR) and provide reasons, including any supporting documentation.

A request for review is considered to be received by the EB as of the date it has been received by the secretariat, and not be considered if it is received after **17:00 GMT** of the last day of the **8 week** period after the receipt of the request for registration.

## (2) Scope and modalities of review

☞ The EB considers and decides, at its next meeting, either to undertake a review or register as a CDM project activity.
☞ If the EB agrees to undertake a review, it decides on the scope of the review and the composition of a review team, at the same meeting. The review team consists of 2 EB members and outside experts, as appropriate.
☞ The review team requests further information to the DOE and PPs and analyze information received.

↓

## (3) Review process

☞ The decision by the EB on the scope of the review is made publicly available as part of the report of its meeting.
☞ A request for further information is sent to the DOE and the PPs. Answers shall be submitted to the review team, through the secretariat, within **5 working days** after the receipt of the request for clarification.
☞ The 2 EB members prepare the recommendation to be forwarded to the EB via list serve at least **2 weeks** before the next EB meeting.

↓

## (4) Review decision

☞ The review by the EB shall be finalized no later than **at the 2nd meeting** following a request for review.
☞ The EB decides on whether: to register the proposed project activity: to request the DOE and PPs to make corrections before proceeding with registration; or to reject it.
☞ The EB shall communicate the decision to the public.
☞ If the review indicates any issues relating to performance of the DOE, the EB considers whether or not to trigger a spot-checking of the DOE.

**BOX: Coverage of costs of the request for review**
The EB bears the costs for reviewing. If the EB rejects the registration and if a DOE is found in the situation of malfeasance or incompetence, the DOE shall reimburse the EB for the expenses. This provision is subject to review as experience accrues.

# 10. Verification, certification and issuance of CERs

## 10-1. Overview of procedures for verification, certification and issuance of CERs

### CDM project participants (PPs)

(1)Select a DOE for verification and certification from a list of DOEs and contract with them [CDM M&P, p39 para62]

(2)Submit a monitoring report to the DOE.

Upon request, the EB may allow a single DOE to perform validation or verification and certification within a single CDM project activity. [CDM M&P, p32 para27(e)]

Timing and frequency of submission is not specified in the official documents.

### Designated operational entity (DOE)

(3)Make the monitoring report publicly available. [CDM M&P, p39 para62)]

(4)Implement verification. [CDM M&P, p39 para62(a)-(g)]
- ☞ Determine whether the project documentation provided is in accordance with the requirements of the registered PDD
- ☞ Conduct on-site inspections, as appropriate.
- ☞ Review monitoring results and verify the monitoring methodologies have been applied correctly.
- ☞ Recommend to the PPs appropriate changes to the monitoring methodology for any future crediting period, if necessary.
- ☞ Determine the GHG emission reductions by the CDM project activity
- ☞ Identify and inform the PPs of any concerns. (PPs shall address the concerns and supply relevant additional information)

(5)Provide a verification report to the PPs, the countries involved and the EB. Make the verification report publicly available. [CDM M&P, p39 para62(h)]

(6)Based on its verification report, certify in writing the verified amount of GHG emission reductions. [CDM M&P, p40 para63]

(7)Inform the PPs, countries involved and the EB of its certification decision in writing. The certification report shall constitute a request for issuance to the EB of CERs equal to the verified amount of GHG emission reductions. Make the certification report publicly available. [CDM M&P, p40 para63-64]

### CDM executive board (EB)

(8) Whether a Party involved in the project activity or at least 3 members of the EB request a review (p33) of the proposed issuance of CERs within **15 days** after the date of receipt of the request for issuance. (Such a review shall be limited to issues of fraud, malfeasance or incompetence of the DOE) [CDM M&P, p40 para65]

**Yes** / **No**

Decide on its course of action at **its next meeting**.

**No**

**Yes**

Complete its review within **30 days**.

Inform the PPs of the outcome of the review, and make public its decision regarding the approval of the proposed issuance of CERs and the reasons for it.

Can be issued

(9)Issuance of CERs.

Procedures for making the monitoring report available to the public (ver.01) and procedures relating to verification report and certification report/request for issuance of CERs (ver.01) can be downloaded from <http://cdm.unfccc.int/Reference/Procedures>.

# 10-2. Procedures for review of issuance [EB15 Anx12]

The EB shall recommend to the COP/MOP, for adoption at its next session, procedures for conducting the reviews of registration of the proposed CDM project activity and issuance of CER. Until their adoption by the COP/MOP, the procedures shall be applied provisionally. [CDM M&P, p28 para5(o)]

## (1) Request for review (p32)

**By a Party involved in a proposed CDM project activity**
A request for review shall be sent by the relevant DNA to the EB, through the secretariat, using official means of communication (such as recognized official letterhead and signature or an official dedicated e-mail account).

**By a member of the EB**
A request for review shall be sent to the EB.

↓

The secretariat acknowledges the receipt of a request for review and promptly forward the request to the EB via the list-serve.

↓

As soon as a Party involved or 3 EB members request a review of a proposed issuance of CERs, the following action are taken:

(a) The consideration of a review of the proposed issuance of CERs shall be included in the proposed agenda of the next EB meeting;
(b) The EB notifies the PPs and the DOE that a review has been requested, informed about the date and venue of the EB meeting at which the request for review will be considered. Stakeholders interested in the review process also be given an opportunity to attend the EB meeting;
(c) The PPs and the DOE shall each provide a contact person for the review process;
(d) The proposed issuance of CERs shall be marked as being "under review" on the UNFCCC CDM web site and a notification shall be sent through the UNFCCC CDM News facility.

A review shall be limited to issues of fraud, malfeasance or incompetence of the DOEs.

A request for review shall be considered received by the EB on the date it has been received by the secretariat, and not be considered if it is received after **17:00 GMT** of the last day of the **15 days** period after the receipt of the request for issuance of CERs.

**BOX: Coverage of costs of the request for review**
The EB bears the costs for reviewing. If the EB decides not to approve a proposed issuance of CERs and if a DOE is found to be in the situation of malfeasance or incompetence, the DOE shall reimburse the EB for the expenses. This provision is subject to review as experience accrues.

## (2) Scope and modalities of review

- ☞ The EB considers and decides, at its next meeting, either to perform a review of the proposed issuance of CERs or to approve the issuance.
- ☞ If the EB agrees to perform a review, it decides on the scope of the review and the composition of a review team, at the same meeting. The review team consists of 2 EB members and outside experts, as appropriate.
- ☞ The review team requests further information to the DOE and PPs and analyze information received.

↓

## (3) Review process

- ☞ The decision by the EB is made publicly available as part of the report of its meeting.
- ☞ Requests for clarification and further information may be sent to the DOE and the PPs. Answers shall be submitted to the review team, through the secretariat, within **5 working days** after the receipt of the request for clarification.
- ☞ The 2 EB members shall be responsible for compiling inputs and comments and preparing the recommendation to be forwarded to the EB via listserv.

↓

## (4) Review decision

- ☞ The EB shall complete its review within **30 days** following its decision to perform the review.
- ☞ The EB decides on whether: to approve the proposed issuance of CERs; to request the DOE to make corrections based on the findings from the review before approving the issuance of CERs; or to not approve the proposed issuance of CERs.
- ☞ The EB shall inform the PPs of the outcome of the review, and make public its decision regarding the approval of the proposed issuance of CERs and the reasons for it.
- ☞ If the review indicates any issues relating to performance of the DOE, the EB shall consider whether or not to trigger a spot-check of the DOE.

# 11. Procedures for request for deviation

[EB22 Anx20]

A DOE shall, prior to requesting registration of a project activity or issuance of CERs, notify the EB of deviations from approved methodologies (AMs) and/or provisions of registered project documentation and explain how it intends to address such deviations. The DOE shall only proceed with further actions after receipt of guidance from the EB. The Chairs of the panels shall provide an input as to whether the issue should be considered or not by the panels.

## (1) Submission of a request for deviation

**(a) Registration:**
**Request for deviation from an approved methodology**
If a DOE determines at validation that PPs deviated from an AM when applying it to a proposed project activity,
- ☞ it may reject the project activity,
- ☞ or seek guidance on the acceptability of the deviation from the EB prior to requesting registration of the proposed project activity.

**(b) Issuance:**
**Request for deviation from provisions for a registered project activity**
If a DOE determines at verification that PPs deviated from the provisions contained in the documentation related to the registered CDM project activity,
- ☞ it may conclude not to certify the emission reductions for the verified period, and inform the EB accordingly,
- ☞ or to seek guidance from the EB on the acceptability of the deviation prior to concluding on its verification/certification decision.

If guidance is sought, the DOE shall submit the form for submission of a request for deviation "CDM: Request for deviation form" (F-CDM-DEV) through the dedicated internet interface.

Upon submission of the form, the secretariat shall forward the documentation to the EB (in case of (a), and to the MP), via list serv after having checked that (a) the F-CDM-DEV has been completed by the DOE, and (b) the documentation provided by the DOE is complete. The date of transmission by the secretariat to the EB is to be considered as the date of receipt of a request for deviation. Information on a request for deviation from an AM shall be made publicly available unless specified differently in the form by the DOE.

## (2) Consideration of a request for deviation

The Chair of the EB, in consultation with the relevant chair of panel(s) and/or WG(s) shall decide **within 5 working days** if:
- ☞ The submission shall be considered by the relevant panel(s) and/or working group(s) in order to provide technical input.
- ☞ More information is required. If so, the secretariat will inform the DOE which shall provide such information as soon as possible. Upon receipt the information is forwarded to the members of the EB, panels, WGs, as applicable.

In the case that no technical clarification is needed by any panel and/or WG, or once technical clarifications have been provided by a panel and/or WG, the EB shall decide, whenever possible, by electronic decision making based on a decision prepared by the Chair of the EB,
- ☞ if the request for deviation shall be accepted or not;
- ☞ if further guidance is to be provided to the DOE; and
- ☞ if the general clarifications shall be shared with all DOEs and PPs, as appropriate.

The proposed decision shall include the original request, reasons for acceptance or rejection of the request and the language of the proposed decision.

Once a decision has been made by the EB, the secretariat shall inform the DOE about the decision and guidance provided by the EB. If general clarifications shall be shared with all DOEs and PPs, the secretariat shall make the guidance publicly available.

## (3) Consideration of a request for deviation by panel/WG

If a panel and/or WG is to consider a request for deviation, the Chair of the panel/WG shall decide,
- ☞ if it shall be treated at the next meeting of the panel/WG;
- ☞ or whether the request can be treated electronically by the panel/WG.

In the case the request shall be considered at a meeting the panel/working group shall consider the proposed deviation at **its next meeting, if feasible**, and recommend to the EB whether the proposed request should be accepted and/or provide clarifications requested.
Up to 2 member(s) of the panel/WG shall, under the guidance of the Chair and Vice-Chair of the panel/WG, be selected for preparing draft recommendations for the panel/WG. The selected panel/WG member(s) shall each be paid a fee of a maximum of 1 working days for the preparation of the draft recommendation.

# 12. Distribution of CERs

(1) CERs will be issued in the CDM registry

- ♦Upon being instructed by the EB to issue CERs for a CDM project activity, the CDM registry administrator (p65) promptly issues the specified quantity of CERs. [CDM M&P, p40 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. [CP/2001/13/Ad2, p23 para16]*[CMP/2005/24/AdUe, p6 para37]*
  - ☞The SOP to cover administrative expenses of the CDM shall be:
    - ⇒USD 0.10 per CER issued for the 1st 15,000 tonnes of $CO_2$ 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 tonnes of $CO_2$ equivalent for which issuance is requested in a given calendar year.

    *[CMP/2005/24/AdUe, p6 para37]*
  - ☞The registration fee shall be deducted from the SOP-Admin (p17).
- ♦CERs are issued into the pending account of the EB in the CDM registry (p65).

(2) 2% of CERs are deducted

- ♦ 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). [CDM M&P, 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]

(3) CERs are forwarded to the registry accounts of PPs, in accordance with their request. [CDM M&P, p41 para66(b)]

- ♦ The decision on the distribution of CERs from a CDM project activity shall exclusively be taken by PPs. [PDD guidelines ver4, p11]
  - ☞PPs shall communicate with the EB, through the secretariat, in writing in accordance with the “modalities of communication” as indicated at the time of registration or as subsequently altered.
  - ☞If a PP does not wish to be involved in taking decisions on the distribution of CERs, this shall be communicated to the EB through the secretariat at the latest when the request regarding the distribution is made.
  - ☞The request regarding the distribution of CERs can only be changed if all signatories have agreed to the change and signed the appropriate document.
- ♦ Requests for the partial distribution of CERs issued in a single transaction shall be allowed. [EB21 Rep, p11 para70 ]

# 13. Small-scale CDM (SSC)

## 13-1. Definition of a small-scale CDM project activity

Simplified modalities and procedures are applicable for the following small-scale CDM project activities. [SSC guidelines, ver1 p16-19]

**Type (i) : Renewable energy project activities with a maximum output capacity equivalent to up to 15 MW(or an appropriate equivalent)**

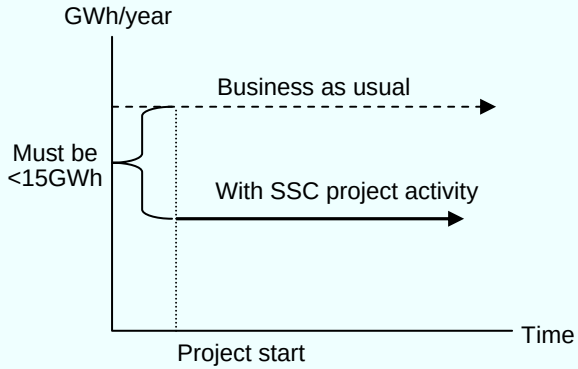
- ☞Maximum "output" is defined as installed/rated capacity, as indicated by the manufacturer of the equipment or plant, disregarding the actual load factor of the plant;
- ☞"Appropriate equivalent" of 15 MW is defined as 15 MW (electric).
  - ⇒Projects referring to MW (peak) or MW (thermal) will have to use a conversion factor to 15 MW (electric)
- ☞Project activities referring to the burning of peat and non-biogenic waste should not be included.

**BOX: Equipment performance**

[SSC guidelines, ver1 p12]

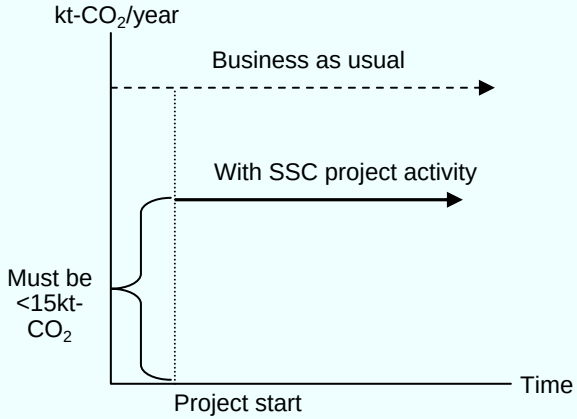
- ♦To determine equipment performance, PPs shall use:
  - ☞(a) The appropriate value specified in Appendix B (=CP/2002/7/Ad3 ApxB);
  - ☞(b) If the value specified in (a) is not available, the national standard for the performance of the equipment type;
  - ☞(c) If the value specified in (b) is not available, an international standard for the performance of the equipment type, such as ISO and IEC standards;
  - ☞(d) If a value specified in (c) is not available, the manufacturer's specifications provided that they are tested and certified by national or international certifiers.
- ♦PPs have the option of using performance data from test results conducted by an independent entity for equipment installed under the project activity.

**Type (ii) : Energy efficiency improvement project activities which reduce energy consumption, on the supply and/or demand side, by up to the equivalent of 15GWh/year**




- ☞Energy efficiency is the improvement in the service provided per unit power, that is, project activities which increase unit output of traction, work, electricity, heat, light (or fuel) per MW input are energy efficiency project activities;
- ☞Energy consumption is the consumption reduced and measured in watt-hours with reference to an approved baseline. Lower consumption as a result of lower activity shall not be taken into consideration;
- ☞Demand side, as well as supply side, projects shall be taken into consideration, provided that a project activity results in a reduction of maximum 15 GWh.
  - ⇒A total saving of 15 GWh is equivalent to 1000 hours of operation of a 15 MW plant or 15*3.6 TJ = 54 TJ, where TJ stands for terajoules.

**Type (iii) : Other project activities that both reduce anthropogenic emissions by sources and directly emit less than 15,000 t-$CO_2$ equivalent annually**




- ☞Type (iii) projects shall not exceed total direct emissions of 15,000 t-$CO_2$ equivalent annually, and must reduce GHG emissions.
- ☞Type (iii) CDM project activities could include agricultural projects, fuel switching, industrial processes and waste management.
  - ⇒Possible examples in the agricultural sector include improved manure management, reduction of enteric fermentation, improved fertilizer usage or improved water management in rice cultivation.
  - ⇒Other project activities that could qualify include $CO_2$ recycling, carbon electrodes, adipic acid production and the use of HFCs, PFCs and $SF_6$ making reference to the emission reductions generated by such projects expressed in $CO_2$ equivalent.

**Project activity with more than one component**

♦The 3 types of project activities are mutually exclusive.

☞In a project activity with more than one component that will benefit from simplified CDM modalities and procedures (p38), each component shall meet the threshold criterion of each applicable type,

☞e.g. for a project with both a renewable energy and an energy efficiency component, the renewable energy component shall meet the criterion for "renewable energy" and the energy efficiency component that for "energy efficiency".

**In case a SSC project activity goes beyond the limit**

♦SSC project activities shall remain under the limits for SSC project activities types, every year during each year of the crediting period.

☞If a project activity goes beyond the limit of its type in any year of the crediting period, the emission reductions that can be claimed by the project during this particular year will be capped at the maximum emission reduction level estimated in the CDM-SSC-PDD by the PPs for that year during the crediting period.

**Proof of eligibility for a SSC project activity**

♦PPs shall demonstrate in the CDM-SSC-PDD that the project activity characteristics are defined in a way that precludes project activities to go beyond the limits:

☞For type I: PPs shall provide proof that the installed capacity of the proposed project activity will not increase beyond 15 MW;

☞For type II: PPs shall provide proof that the efficiency improvements are below the equivalent of 15 GWh/year every year throughout the crediting period;

☞For type III: PPs shall provide an estimation of emissions of the project activity over the crediting period and proof that the emissions every year will not go beyond the limits of 15,000 t-$CO_2$e/y over the entire crediting period.

**Renewal of a crediting period of a SSC project activity**

♦Project activities using a renewable crediting period shall reassess their compliance with the limits at the time when they request renewal of the crediting period.

[SSC guidelines, ver1 p17]

# 13-2. 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: [CP/2002/7/Ad3, p20 para9]
  - ☞Project activities may be bundled or portfolio bundled at the following stages in the project cycle: the PDD, validation, registration, monitoring, verification and certification (p41);
  - ☞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 operational entity may undertake validation, and verification and certification.
- The other differences from large-scale CDM project activities are as follows:
  - ☞For the appraisal by EB-RT, the expert prepares an appraisal and submit it to the member within 10 (15 for large) calendar days. The member reviews and finalize the appraisal and submit it within 10 (15 for large) calendar days to the secretariat (p30). [EB22 Anx19, p3 para17-23]
  - ☞The registration by the EB shall be deemed final 4 (8 for large) weeks after the date of receipt of the request for registration, unless there is a request for review of the proposed CDM project activity (p30). [CP/2002/7/Ad3, p23 para24]

- Baseline and monitoring methodologies approved by the EB is included in an indicative list of simplified baseline and monitoring methodologies for selected SSC project activity categories (contained in the Appendix B (=CP/2002/7/Ad3 ApxB)) and is publicly available along with relevant guidance on the UNFCCC CDM website <http://cdm.unfccc.int/methodologies/SSCmethodologies/approved>. [SSC guidelines, ver1 p7]
- A simplified baseline and monitoring methodology listed in Appendix B (=CP/2002/7/Ad3 ApxB) may be used for a SSC project activity if the PPs are able to demonstrate to a DOE that the project activity would otherwise not be implemented due to the existence of one or more of the barriers (p39) listed in the attachment A to Appendix B (=CP/2002/7/Ad3 ApxB AttA). [SSC guidelines, ver1 p6]

**Overall monitoring plan** [SSC guidelines, ver1 p14]

- If project activities are bundled (p41), a separate monitoring plan shall apply for each of the constituent project activities, or an overall monitoring plan shall apply for the bundled projects, as determined by the DOE at validation to reflect good monitoring practice appropriate to the bundled project activities and to provide for collection and archiving of the data needed to calculate the emission reductions achieved by the bundled project activities

**BOX: Revisions to the CDM-SSC-PDD** [SSC guidelines, ver1 p3]

☞Revisions to the CDM-SSC-PDD do not affect projects already validated, or already made publicly available by an OE for receiving comments prior to the adoption of the revised CDM-SSC-PDD. The EB will not accept documentation using previous versions of the CDM-SSC-PDD, **6 months after** the adoption of the new version.

**Additionality for SSC project activities** [SSC guidelines, ver1 p6]

- The attachment A to Appendix B (=CP/2002/7/Ad3 ApxB AttA) corresponds to list of barriers PPs shall use in order to demonstrate that a small-scale project activity would not have occurred otherwise (i.e. is additional).
- 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;

**Barrier due to prevailing practice**:
☞prevailing practice or existing regulatory or policy requirements would have led to implementation of a technology with 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;

**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.

# 13-3. Simplified baseline and monitoring methodologies

♦ Indicative simplified baseline and monitoring methodologies for selected SSC project activity categories, including recommendations for determining the project boundary, leakage, baseline and monitoring, have been developed for the following categories except for III.A. [CP/2002/7/Ad3 ApxB] [Version 05: 25 February 2005]

| |
|---|
| **TYPE I - RENEWABLE ENERGY PROJECTS** |
| I.A. Electricity generation by the user |
| I.B. Mechanical energy for the user |
| I.C. Thermal energy for the user |
| I.D. Renewable electricity generation for a grid |
| **TYPE II - ENERGY EFFICIENCY IMPROVEMENT PROJECTS** |
| II.A. Supply side energy efficiency improvements - transmission and distribution |
| II.B. Supply side energy efficiency improvements - generation |
| II.C. Demand-side energy efficiency programmes for specific technologies |
| II.D. Energy efficiency and fuel switching measures for industrial facilities |
| II.E. Energy efficiency and fuel switching measures for buildings |
| II.F. Energy efficiency and fuel switching measures for agricultural facilities and activities |
| **TYPE III - OTHER PROJECT ACTIVITIES** |
| III.A. Agriculture |
| III.B. Switching fossil fuels |
| III.C. Emission reductions by low-greenhouse gas emitting vehicles |
| III.D. Methane recovery |
| III.E. Avoidance of methane production from biomass decay through controlled combustion |

**New types of SSC project activities**

[SSC guidelines, ver1 p17]

- ☞ PPs may propose changes to the simplified baseline and monitoring methodologies or propose additional project categories for consideration by the EB.
- ☞ PPs willing to submit a new small-scale project activity category or revisions to a methodology shall make a request in writing to the EB providing information about the technology/activity and proposals on how a simplified baseline and monitoring methodology would be applied to this category.
- ☞ The EB may draw on expertise, as appropriate, in considering new project categories and/or revisions of and amendments to simplified methodologies.
- ☞ The EB shall expeditiously, if possible at its next meeting, review the proposed methodology.
- ☞ Once approved, the EB shall amend the indicative list of simplified baseline and monitoring methodologies contained in Appendix B (=CP/2002/7/Ad3 ApxB).

# 13-4. Bundling of SSC projects activities

**Bundling** [EB21 Anx21, para3-4]

- ♦ Bundle is defined as, bringing together of SSC project activities, to form a single CDM project activity or portfolio without the loss of distinctive characteristics of each project activity.
- ♦ Project activities within a bundle can be arranged in one or more sub-bundles, with each project activities retaining it distinctive characteristics. Such characteristics include its: technology/measure; location; application of simplified baseline methodology.
  - ☞ Sub-bundle is defined as: "An aggregation of project activities within a bundle having the characteristics that all project activities within a sub-bundle belong to the same type (p40)."
- ♦ The sum of the output capacity of project activities within a sub-bundle shall not exceed the maximum output capacity limit for its type.

**General principles for bundling** [EB21 Anx21, para5]

- ☞ Project activities wishing to be bundled shall indicate this when making the request for registration;
- ☞ Once a project activity becomes part of a bundle for a project cycle stage, it shall not be de-bundled for this stage. The EB may consider debundling in exceptional situations;
- ☞ The composition of bundles shall not change over time;
- ☞ All project activities in the bundle shall have the same crediting period;
- ☞ A form with information related to the bundle must be included in the submission;
- ☞ The form should cover issues such as title of the bundle, general description, PPs, locations, types and categories, estimated amount of emission reduction, crediting period and monitoring plans;
- ☞ It should be demonstrated that the bundle will remain under the limit for the type every year during the crediting period. The total emission reduction estimated for the crediting period must be included in the draft CDM-PDD and further monitored.

**BOX: Bundling of small-scale project activities of (a) the same type, same category and different technology/measure; (b) same type, different categories and technologies/measures and; and (c) different types** [EB21 Anx21, p2 para7]

- ☞ One DOE can validate this bundle;
- ☞ Different monitoring plans will be required for the bundle and separate monitoring reports must be prepared;
- ☞ One verification report (p32) will be adequate, one issuance will be made at the same time for the same period, and a single serial number (p64) will be issued for all the project;
- ☞ The sum of the size (capacity for type I, energy saving for type II and direct emissions of project activity for type III) of the technology or measure utilized in the bundle should not exceed the limits for SSC project activities.

**Debundling** [SSC guidelines, ver1 p10]

- ♦ Debundling is defined as the fragmentation of a large project activity into smaller parts.
  - ☞ A small-scale project activity that is part of a large project activity is not eligible to use the simplified modalities and procedures for SSC project activities.
  - ☞ The full project activity or any component of the full project activity shall follow the regular CDM modalities and procedures.
- ♦ A proposed small-scale project activity shall be deemed to be a debundled component of a large project activity if there is a registered SSC project activity or a request for registration by another small-scale project activity:
  - ⇒ By the same PPs;
  - ⇒ In the same project category and technology/measure; and
  - ⇒ Registered within the previous 2 years; and
  - ⇒ Whose project boundary is within 1 km of the project boundary of the proposed small-scale activity at the closest point.
- ♦ If a proposed small-scale project activity is deemed to be a debundled component, but the total size of such an activity combined with the previous registered SSC project activity does not exceed the limits for SSC project activities, the project activity can qualify to use simplified modalities and procedures for SSC project activities.

# 14. Afforestation and Reforestation CDM (A/R CDM) project activity

## 14-1. Overview of A/R CDM project activity

Rules and procedures regarding A/R CDM project activities are similar to those of GHG emission reduction CDM project activity including project cycle, PDD contents, and validation and verification procedure. The most significant difference between the emission reduction CDM and A/R CDM is non-permanence. Once GHG emission reductions are achieved, they are permanent reduction whereas in A/R CDM, $CO_2$ once sequestered in trees could be release back into the atmosphere in an occasion of such as forest fire or die back from pests. The issue of non-permanence is addressed by creating different type of CERs, namely temporary CERs (**tCERs**) and long-term CERs (**lCERs**) (p43).

**Types of A/R CDM project activities**

- ♦ Land use, Land-use change and Forestry project activities under the CDM is limited to afforestation and reforestation [CP/2001/13/Ad2, p22 para7(a)]
  - ☞ "Afforestation" is the direct human-induced conversion of land that has not been forested for a period of at least 50 years to forested land through planting, seeding and/or the human-induced promotion of natural seed sources.
  - ☞ "Reforestation" is the conversion of non-forested land to forested land, on land that was forested but that has been converted to non-forested land. For the 1st commitment period, reforestation activities will be limited to reforestation occurring on those lands that did not contain forest on 31 December 1989.

[/CP/2001/13/Add.1 Anx, p58 para1(b)-(c)]

PPs shall provide evidence that the land within the planned project boundary is eligible as an A/R CDM project activity. In order to demonstrate, PPs shall provide one of the following verifiable information: [EB22 Anx16]

- ☞ Aerial photographs or satellite imagery complemented by ground reference data; or
- ☞ Ground based surveys (land use permits, land use plans or information from local registers such as cadastre, owners register, land use or land management register); or
- ☞ If options above are not available/applicable, PPs shall submit a written testimony which was produced by following a participatory rural appraisal methodology.

**Participation requirements** [CDM A/R M&P, p17 para7-8]

- ♦ All provisions of participation requirements of the CDM M&P apply mutatis mutandis to A/R CDM.
- ♦ An non-Annex I Party may host an A/R CDM project, if it has selected and reported to the EB through its DNA:
  - (a) A single minimum tree crown cover value between 10 and 30%; and
  - (b) A single minimum land area value between 0.05 and 1 hectare; and
  - (c) A single minimum tree height value between 2 and 5 metres.

**Crediting period of the A/R CDM project activity** [CDM A/R M&P, p21 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 of this project activity.
- ☞ 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, p10 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. [CDM A/R M&P, p22 para32]

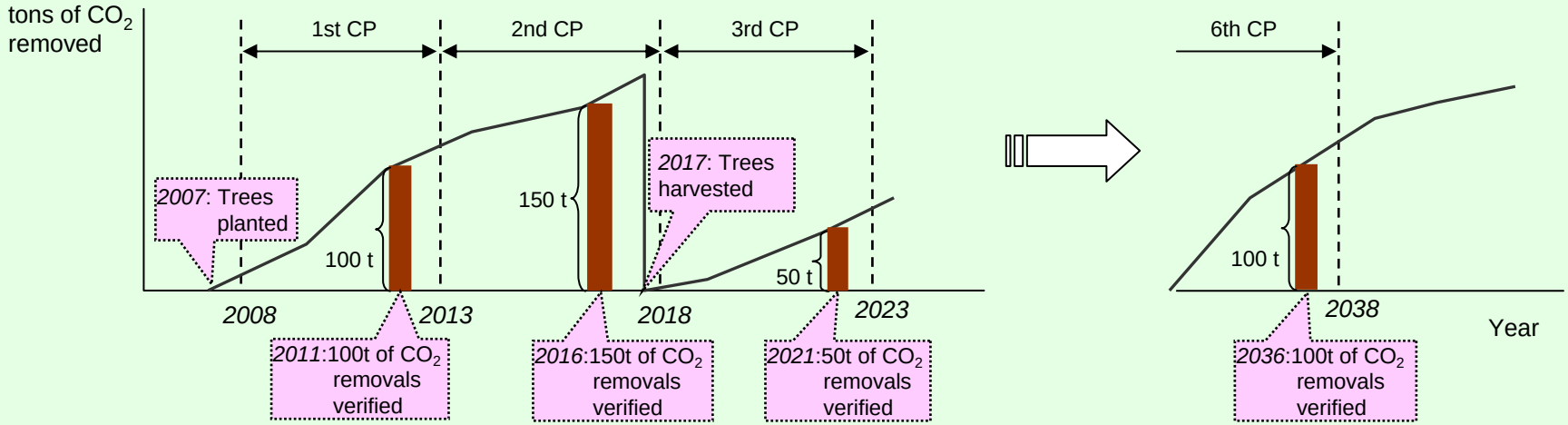
# 14-2. Non-permanence of A/R CDM project activities (tCER and lCER)

♦ 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 [CDM A/R M&P, p24 para38]:
  - (a) Issuance of **tCERs** for the net GHG removals by sinks achieved by the project activity since the project start 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.

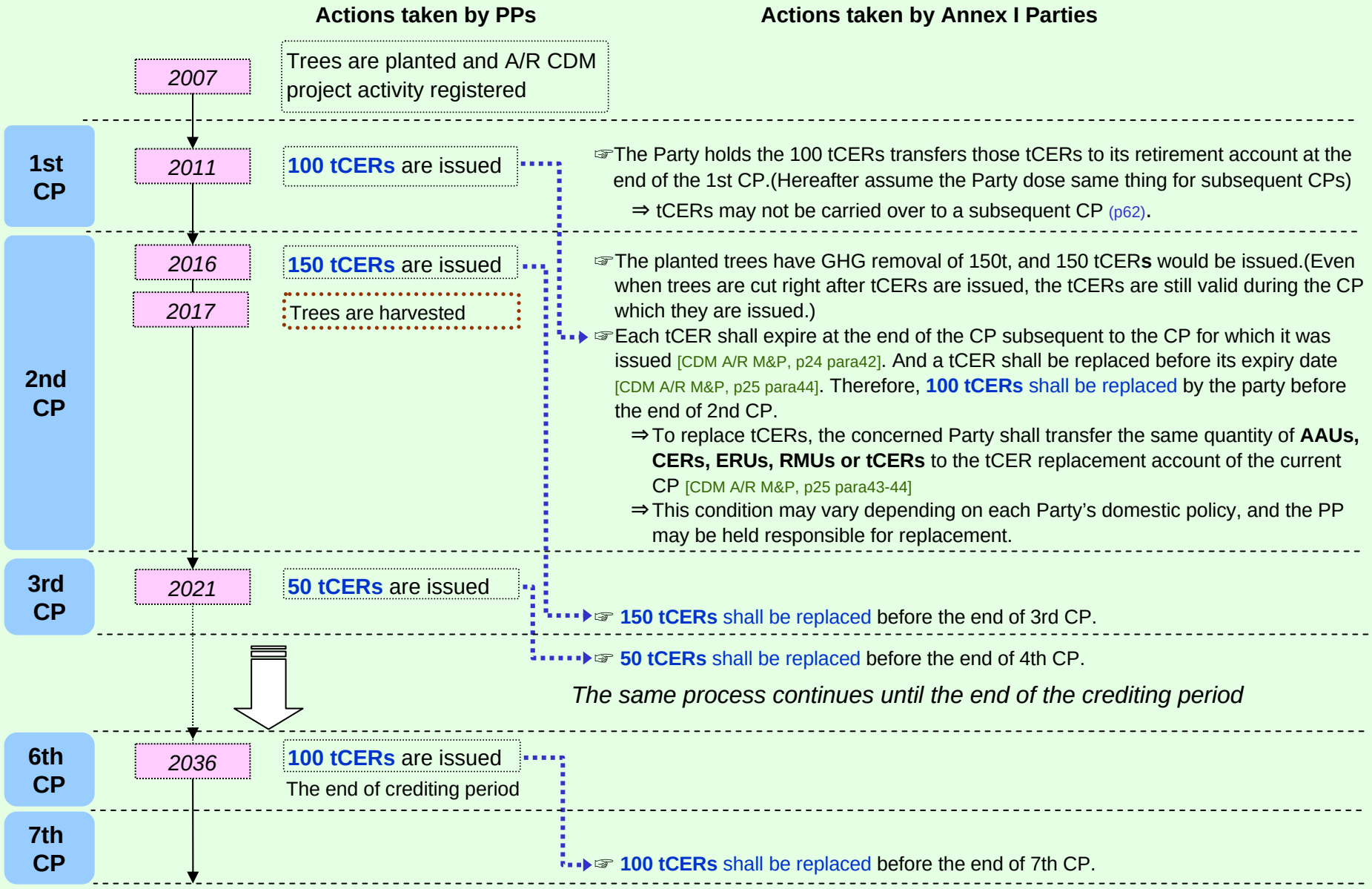
**Expiry of tCERs and lCERs**
- ☞Each **tCER** shall expire at the end of the commitment period subsequent to the commitment period for which it was issued. [CDM A/R M&P, p24 para42]
- ☞Each **lCER** shall expire at the end of the crediting period or, where a renewable crediting period is chosen, at the end of the last crediting period of the project activity. [CDM A/R M&P, p25 para46]

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

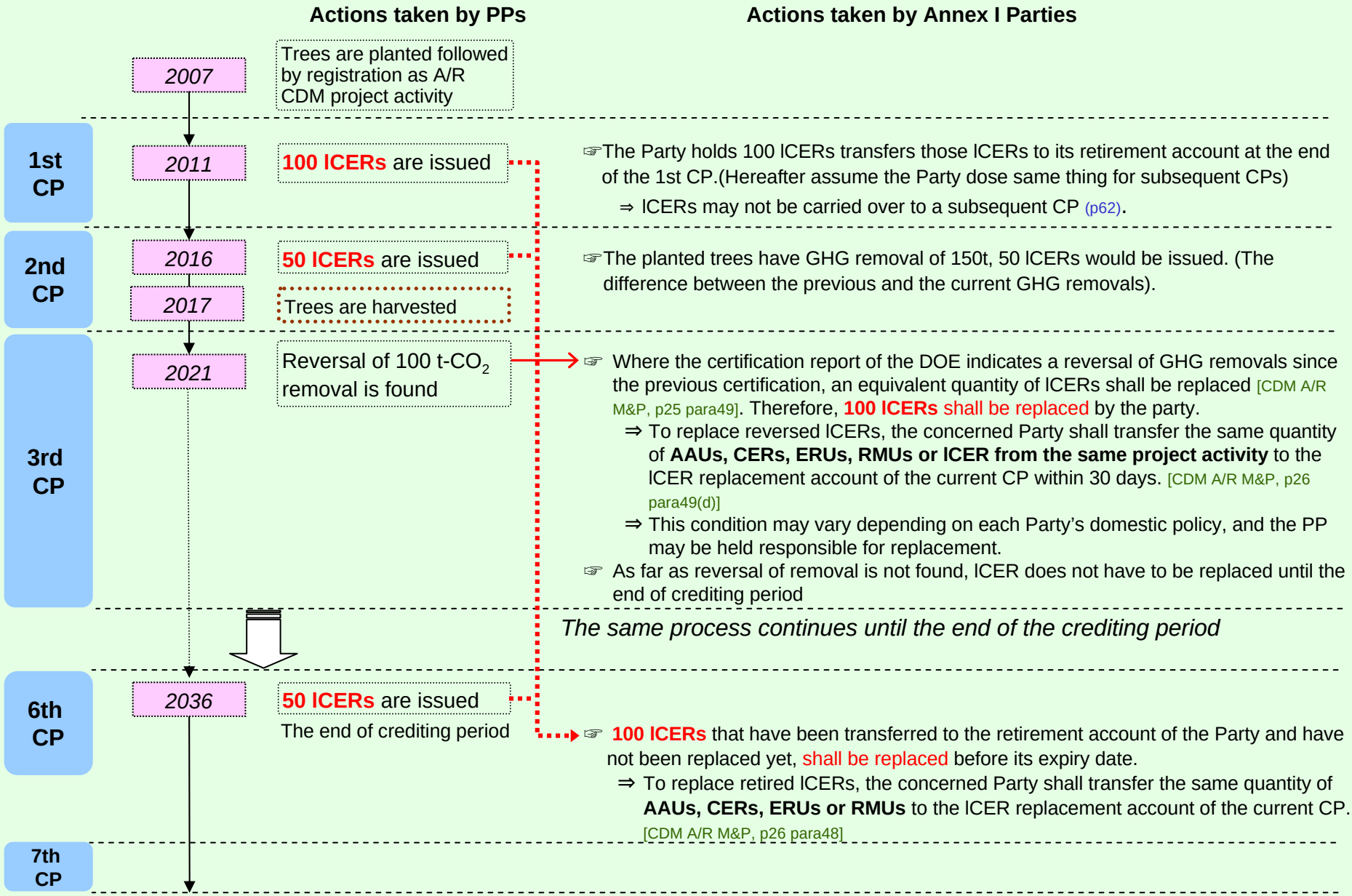
♦ The chart below shows changes in GHG removals by an A/R project activity. In the next two pages, an explanation of issuance and expiration of **tCERs** and **lCERs** will be given based on the assumptions shown in the chart below.
- ☞Trees are planted in *2007*.
- ☞1st issuance of **tCERs** or **lCERs** 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.



## Example: From issuance to replacement of tCERs



## Example: From issuance to replacement of lCERs



# 14-3. Calculation of GHG removals

## Equations for the calculation of tCER and lCER [EB22 Anx15 para4-9]

### Equations to calculate tCERs

(carbon stock in the project – carbon stock in the baseline)
in the carbon pools, at the time of verification

*less*

cumulative GHG emissions from the project

*less*

cumulative GHG emissions, outside the project boundary due to A/R

*less*

(carbon stock in the baseline – carbon stock in the project)
in the carbon pools outside the project boundary affected by A/R,
at the time of verification

### Equations to calculate lCERs

(increment of the carbon stock in the project –
increment of the carbon stock in the baseline)
in the carbon pools, at the time of 2 verification period respectively

*less*

GHG emissions from the project, between 2 verification period

*less*

cumulative GHG emissions, outside the project boundary due to A/R,
between 2 verification period

*less*

(increment of the carbon stock in the baseline –
increment of the carbon stock in the project)
in the carbon pools outside the project boundary affected by A/R,
at the time of 2 verification period respectively

**Carbon pools** [AR CDM guidelines, ver2 p9]

- ☞ Carbon pools are: above-ground biomass, belowground biomass, litter, dead wood and soil organic carbon.
- ☞ PPs may choose not to account for one or more carbon pools if they provide transparent and verifiable information that indicates that the choice will not increase the expected net GHG removals by sinks.

**Project boundary**

[AR CDM guidelines, ver2 p13]

- ☞ The "project boundary" geographically delineates the A/R CDM project activity under the control of the PPs.
- ☞ An A/R CDM project activity may contain more than one discrete areas of land.

**Pre-project emissions**

[EB22 Anx15, para1-2]

- ☞ Pre-project GHG emissions as a consequence of the implementation of the project activity has to be taken into account in the calculation of net GHG removals by sinks.

**BOX: Revisions to the CDM-AR-PDD** [AR CDM guidelines, ver2 p4]

Revisions to the CDM-AR-PDD do not affect A/R project activities:

- ☞ Already validated, or already submitted to the OE for validation prior to the adoption of the revised CDM-AR-PDD;
- ☞ Submitted to the OEs within a month of the adoption of the revised CDM-AR-PDD;
- ☞ The EB will not accept documentation using previous versions of the CDM-AR-PDD **6 months after** the adoption of the new version.

**BOX: Revisions to the CDM-AR-NMB/NMM** [AR CDM guidelines, ver2 p4]

Revisions to the CDM-AR-NMB and CDM-AR-NMM do not affect new baseline and monitoring methodologies:

- ☞ Submitted to the OEs prior to the adoption of the revised CDM-AR-NMB and CDM-ARNMM;
- ☞ Submitted to the OEs within a month of the adoption of the revised CDM-AR-NMB and CDM-AR-NMM;
- ☞ The EB will not accept documentation using previous versions of the CDM-AR-NMB and CDM-AR-NMM **3 months after** the adoption of the new versions.

# 14-4. Small-scale A/R CDM project activity

**Definition of small-scale A/R CDM project activity**

- ☞Those that are expected to result in net GHG removals by sinks of less than 8,000 t-$CO_2$/year; [CDM A/R M&P, p16 para1(i)]
  - ⇒The average projected net GHG removals by sinks for each verification period shall not exceed 8,000 t-$CO_2$/year. [CP/2004/10/Ad2, p26 para1(b)]
- ☞Developed or implemented by low-income communities and individuals as determined by the host Party. [CDM A/R M&P, p16 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. [CP/2004/10/Ad2, p32 para15(b)]

☞If a small-scale A/R CDM project activity results in net GHG removals by sinks greater than 8,000t of $CO_2$ per year, the excess removals will not be eligible for the issuance of **tCERs** or **lCERs**. [CDM A/R M&P, p16 para1(i)]

**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: [CP/2004/10/Ad2, p29 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. [CP/2004/10/Ad2, p30 para13]

- ♦ The EB shall develop simplified baseline methodologies, for the following types of small-scale A/R CDM project activities: [CP/2004/10/Ad2, p38 para4]
  - ☞ Grassland to forested land
  - ☞ Cropland to forested land
  - ☞ Wetland to forested land
  - ☞ Settlements to forested land
- ♦ No monitoring of the baseline is requested.
- ♦ If PPs demonstrate that the small-scale A/R CDM project activity does not result in the displacement of activities or people, or does not trigger activities outside the project boundary, that would have been attributable to the small-scale A/R CDM project activity, such that an increase in GHG emissions by sources occurs, a leakage estimation is not required.
  - ☞ In all other cases leakage estimation is required.
  - ☞ The EB shall develop guidelines to estimate leakage. [CP/2004/10/Ad2, p39 para9]

# 15. Joint Implementation (JI)

## 15-1. JI project cycle

"Joint Implementation (JI)" is a common name for "Article 6 project activity" defined in the Kyoto Protocol. However, this guide employs the term JI since it is widely used and popularly recognized.

**Track 1 and track 2**

♦ The procedures for issuing emission reduction unit (ERU) based on a project activity which reduces or removes GHG emissions in a host Party (Annex I Party), are different depending on whether a host Party meets the eligibility requirements shown on the right.

**Track 1** : Where it is considered a host Party meets the eligibility requirements, the host Party may issue the appropriate quantity of ERUs. [CP/2001/13/Ad2, p13 para23]

☞ Because JI involves credit transfers between Parties both of which have emission caps and the total amount of emission cap of Annex I Parties will not change, a host Party can decide the amount of ERUs to be issued and transferred.

☞ A host Party which meets the eligibility requirements may at any time elect to use the verification procedure under the JISC (which means track 2). [CP/2001/13/Ad2, p13 para25]

**Track 2** : Where it is considered a host Party does not meet the eligibility requirements, the verification of GHG emission reductions or removals by sinks from a JI project shall occur through the verification procedure as set out, which is similar to modalities and procedures for CDM. [CP/2001/13/Ad2, p13 para24]

☞ The host Party may however only issue and transfer ERUs upon meeting the requirements below:

⇒It is a Party to the Kyoto Protocol;

⇒Its assigned amount (p1) has been calculated and recorded;

⇒It has in place a national registry (p63).

**Eligibility requirements** [CP/2001/13/Ad2, p12 para21]

☞An Annex I Party is eligible to transfer and/or acquire ERUs issued in accordance with the relevant provisions, if it is in compliance with the following eligibility requirements:

⇒It is a Party to the Kyoto Protocol;

⇒Its assigned amount (p1) has been calculated and recorded;

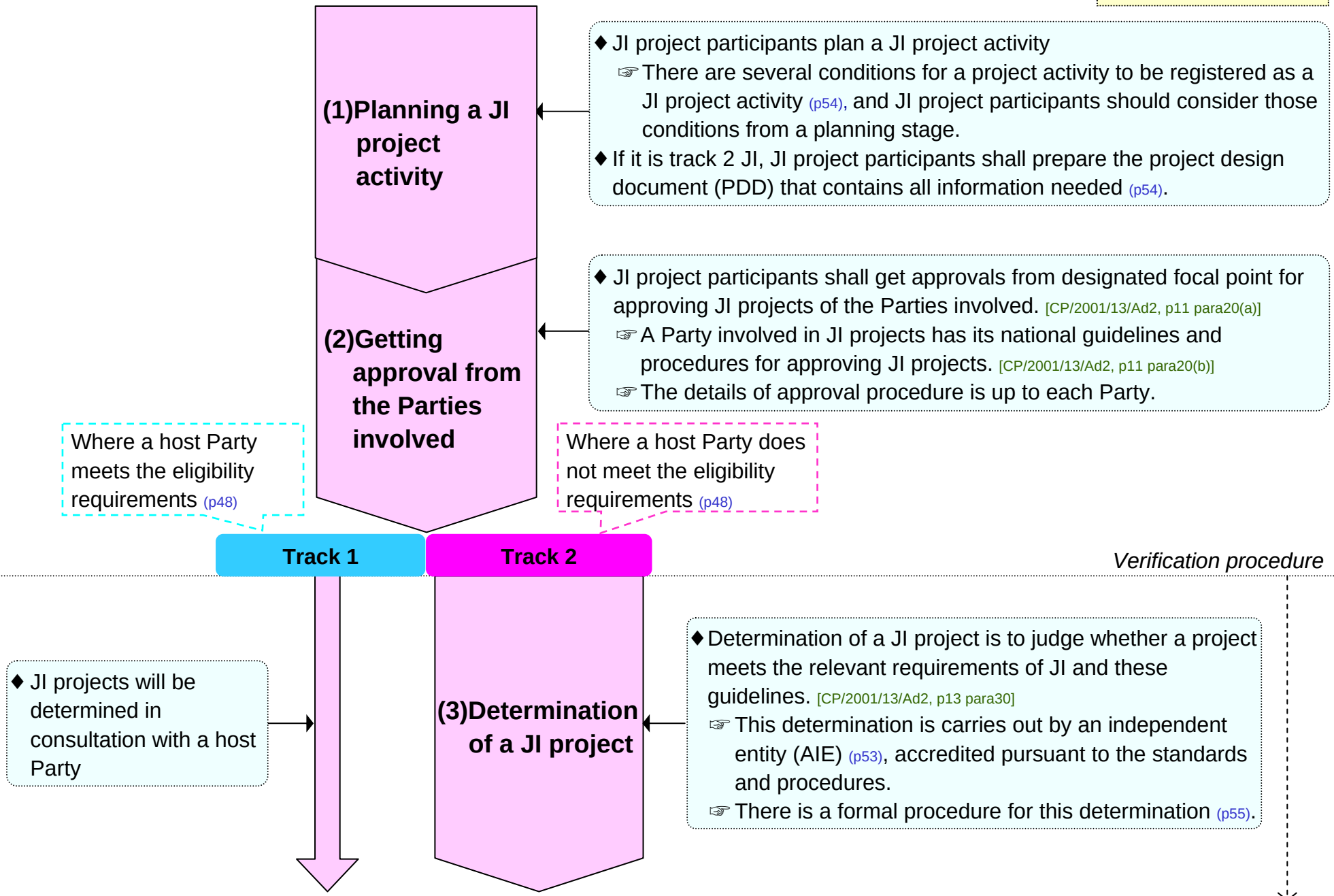
⇒It has in place a national registry;

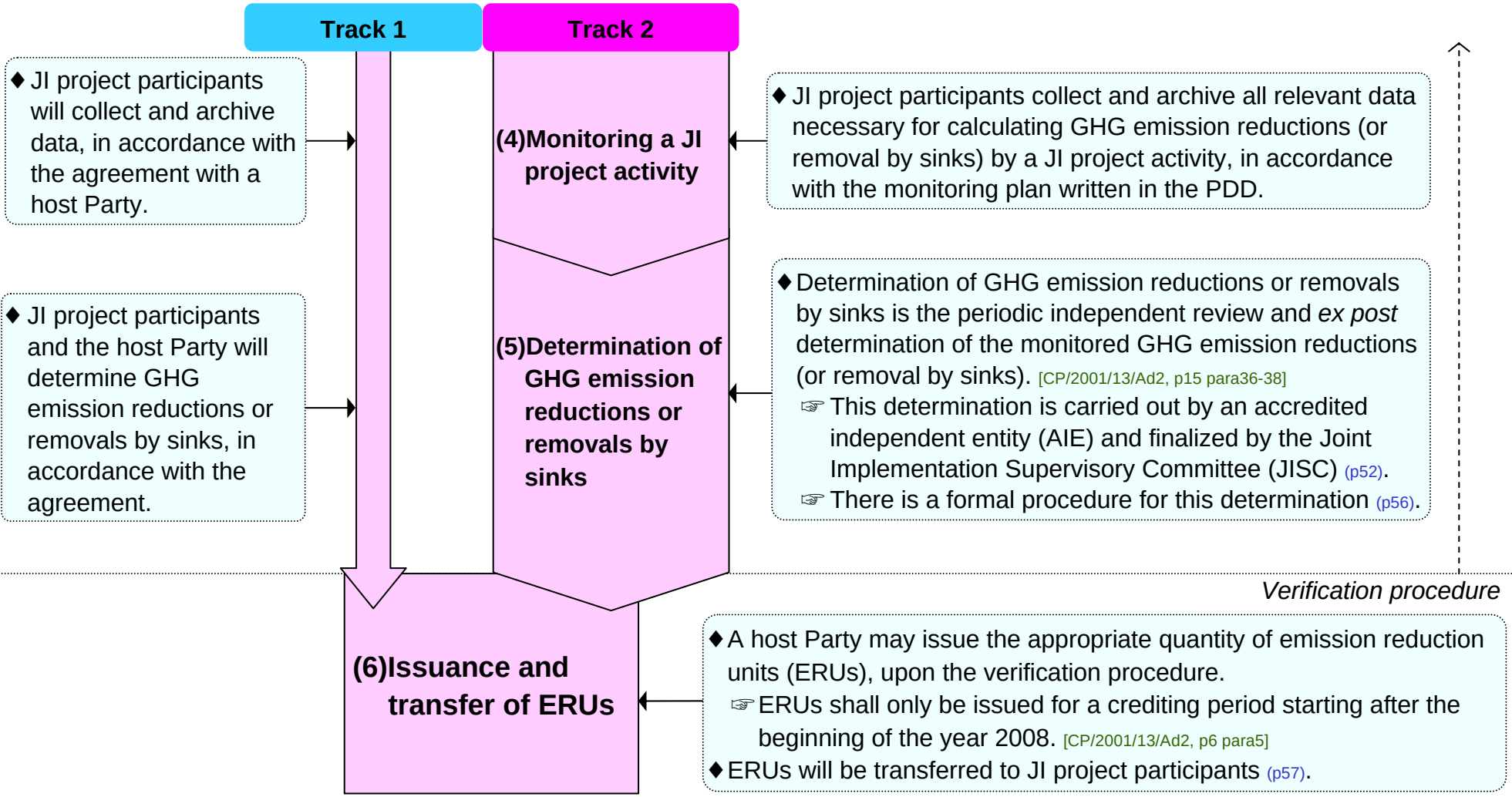
⇒It has in place a national system for the estimation of GHG emissions and removals by sinks of GHGs;

⇒It has submitted annually the most recent required inventory, including the national inventory report and the common reporting format;

⇒For the 1st commitment period, the quality assessment needed for the purpose of determining eligibility to use the mechanisms shall be limited to the parts of the inventory pertaining to GHG emissions from sources/sector categories from Annex A to the KP and the submission of the annual inventory on sinks;

⇒It submits the supplementary information on assigned amount and makes any additions to, and subtractions from, assigned amount, including for the activities under Art.3, para3 and 4 of the KP (land-use, land-use change and forestry).


(1)Planning a JI project activity
♦ JI project participants plan a JI project activity
☞ There are several conditions for a project activity to be registered as a JI project activity (p54), and JI project participants should consider those conditions from a planning stage.
♦ If it is track 2 JI, JI project participants shall prepare the project design document (PDD) that contains all information needed (p54).
(2)Getting approval from the Parties involved
♦ JI project participants shall get approvals from designated focal point for approving JI projects of the Parties involved. [CP/2001/13/Ad2, p11 para20(a)]
☞ A Party involved in JI projects has its national guidelines and procedures for approving JI projects. [CP/2001/13/Ad2, p11 para20(b)]
☞ The details of approval procedure is up to each Party.
Where a host Party meets the eligibility requirements (p48)
Where a host Party does not meet the eligibility requirements (p48)
Track 1
Track 2
Verification procedure
♦ JI projects will be determined in consultation with a host Party
(3)Determination of a JI project
♦ Determination of a JI project is to judge whether a project meets the relevant requirements of JI and these guidelines. [CP/2001/13/Ad2, p13 para30]
☞ This determination is carries out by an independent entity (AIE) (p53), accredited pursuant to the standards and procedures.
☞ There is a formal procedure for this determination (p55).


Track 1
Track 2
♦ JI project participants will collect and archive data, in accordance with the agreement with a host Party.
(4)Monitoring a JI project activity
♦ JI project participants collect and archive all relevant data necessary for calculating GHG emission reductions (or removal by sinks) by a JI project activity, in accordance with the monitoring plan written in the PDD.
♦ JI project participants and the host Party will determine GHG emission reductions or removals by sinks, in accordance with the agreement.
(5)Determination of GHG emission reductions or removals by sinks
♦ Determination of GHG emission reductions or removals by sinks is the periodic independent review and ex post determination of the monitored GHG emission reductions (or removal by sinks). [CP/2001/13/Ad2, p15 para36-38]
☞ This determination is carried out by an accredited independent entity (AIE) and finalized by the Joint Implementation Supervisory Committee (JISC) (p52).
☞ There is a formal procedure for this determination (p56).
Verification procedure
(6)Issuance and transfer of ERUs
♦ A host Party may issue the appropriate quantity of emission reduction units (ERUs), upon the verification procedure.
☞ ERUs shall only be issued for a crediting period starting after the beginning of the year 2008. [CP/2001/13/Ad2, p6 para5]
♦ ERUs will be transferred to JI project participants (p57).

# 15-2. JI-related entities

**For Track 1** **For Track 2**

**The Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (COP/MOP)**

- ♦ The COP/MOP shall provide guidance regarding the implementation of JI and exercise authority over the Joint Implementation Supervisory Committee (JISC) (p52). [CP/2001/13/Ad2, p8 para2]

**BOX: Future revision of the guidelines for the implementation of JI**
[CP/2001/13/Ad2, p6 para8]

☞ Future revision of the guidelines is decided in accordance with the rules of procedure of the COP/MOP, as applied.
⇒The 1st review is carried out no later than 1 year after the end of the 1st commitment period, and further reviews are carried out periodically thereafter.
⇒The 1st review is carried out based on recommendations by the JISC and by the SBI drawing on technical advice of the SBSTA, as needed.
⇒Any revision of the decision shall not affect ongoing JI projects.

**For Track 1** **For Track 2**

**Designated focal point** [CP/2001/13/Ad2, p11 para20]

♦ A Party involved in an JI project shall inform the secretariat of:
☞ Its designated focal point for approving JI projects;
☞ Its national guidelines and procedures for approving JI projects, including the consideration of stakeholders' comments, as well as monitoring and verification.

**For Track 2**

## Joint Implementation Supervisory Committee (JISC)

**<Formerly, the Article 6 supervisory committee>**

◆The COP/MOP decides to establish the Joint Implementation Supervisory Committee (JISC), and requests the JISC to:

- ☞Develop, as soon as possible, rules of procedure taking into consideration, as appropriate, the rules of procedure of the CDM-EB (p11), and to recommend them for adoption by the COP/MOP2, and to apply them provisionally until they are so adopted;
- ☞Elaborate, as a priority, standards and procedures for the accreditation of independent entities (IEs)(p53), taking into consideration, as appropriate, the procedures for accrediting OEs (p13) developed by the CDM-EB;
- ☞Accredit independent entities in accordance with the standards and procedures for the accreditation of independent entities;
- ☞Elaborate and agree on a JI project design document, with the understanding that it shall be applied provisionally until the COP/MOP has adopted;
- ☞Develop, as soon as possible, guidelines for users, inter alia, of the JI PDD, drawing on guidelines developed by the EB, where appropriate;
- ☞Develop, as soon as possible, guidance including provisions for small-scale projects as SSC (p36), as appropriate;
- ☞Develop provisions for the charging of fees to cover administrative costs relating to the activities of the JISC;
- ☞Etc.

*[CMP/2005/25/AdUe, para1-2]*

◆JISC shall supervise, inter alia, the verification of ERUs (p49-50) generated by JI project activities. [CP/2001/13/Ad2, p9 para3]

### Members of the JISC [CP/2001/13/Ad2, p9 para4-8]

☞The JISC comprises 10 members from Parties to the KP.
⇒3 members from EIT countries (Annex I Parties), 3 members from Annex I Parties not referred to in above, 3 members from non-Annex I Parties and 1 member from the small island developing States.
⇒As a result, 6 are from Annex I Parties and 4 are from non-Annex I Parties.
⇒There is an alternate for each member of the JISC.

☞Members, including alternate members, of the JISC are nominated by the relevant constituencies referred above and be elected by the COP/MOP.
⇒The nomination by a constituency of a candidate member shall be accompanied by a nomination of a candidate alternate member from the same constituency.

☞Members may 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 for a term of 2 years and 5 members and 5 alternate members for a term of 3 years. Thereafter, the COP/MOP elects, every year, 5 new members and 5 alternate members for a term of 2 years.
⇒The members and alternate members shall remain in office until their successors are elected.

☞The JISC elects annually a chair and vice-chair from among its members, with one being from an Annex I Party and the other being from a non-Annex I Party.
⇒The positions of chairperson and vice-chairperson alternate annually between a member from an Annex I Party and the other being from a non-Annex I Party.

### Meeting and decision of the JISC

☞The JISC meets at least 2 times each year, whenever possible in conjunction with the meetings of the subsidiary bodies, unless decided otherwise. [CP/2001/13/Ad2, p10 para9]

☞At least 2/3 of the members of the JISC, 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. [CP/2001/13/Ad2, p11 para14]

☞Decisions by the JISC is taken by consensus, whenever possible. If that is not possible, decisions shall as a last resort be adopted by a 3/4 majority vote of the members present and voting at the meeting. Members abstaining from voting shall be considered as not voting. [CP/2001/13/Ad2, p11 para15]

## For Track 2 Accredited Independent Entity (AIE)

- The AIE is an independent verifier for track 2 JI, which corresponds a DOE for the CDM (p13), and it shall:
  - Determine whether a project which reduces GHG emissions (or removes by sinks) meets the relevant requirements of JI and these guidelines; [CP/2001/13/Ad2, p13 para30]
  - Make a determination of the GHG emission reductions (or removal by sinks) reported by project participants in accordance with criteria for baseline setting and monitoring. [CP/2001/13/Ad2, p15 para37]
- DOEs under the CDM may act provisionally as AIEs until the JISC has approved its procedures for accreditation.
  - Those DOEs that apply for accreditation under the approved procedures for accreditation may continue to act provisionally as AIEs until a final accreditation decision is taken.
  - The determinations and relevant activities undertaken under these provisions shall be valid only after the accreditation of the IE is finalized. *[CMP/2005/25/AdUe, p2 para3]*

### Standards and procedures for the accreditation of IEs

- The AIEs are accredited by the JISC. [CP/2001/13/Ad2, p9 para3(b)]
- There are standards and procedures for the accreditation of IEs [CP/2001/13/Ad2 ApxA, p16]. For example, an IE shall:
  - Be a legal entity (either a domestic legal entity or an international organization);
  - Employ a sufficient number of persons, and have the financial stability and a management structure to have the necessary competence to perform its functions;
  - Have the necessary expertise to carry out the functions specified in the standards and procedures and relevant decisions by the COP/MOP;
  - Work in a credible, independent, non-discriminatory and transparent manner;
  - Etc.

### Suspension or withdrawal of a AIE

[CP/2001/13/Ad2, p15 para42]

- The JISC shall suspend or withdraw the accreditation of an IE if it has carried out a review and found that the entity no longer meets the accreditation standards.
  - The JISC may suspend or withdraw accreditation only after the AIE has had the opportunity of a hearing and depending on the outcome of the hearing.
  - The suspension or withdrawal is with immediate effect.
  - The affected entity shall be notified, immediately and in writing, once the JISC has decided upon its suspension or withdrawal. The decision by the JISC on such a case shall be made public.

### Affect to verified JI project by the suspension or withdrawal of accreditation of an AIE [CP/2001/13/Ad2, p16 para43-45]

- Verified projects shall not be affected by the suspension or withdrawal of the accreditation of an AIE unless significant deficiencies are identified in the determination for which the entity was responsible.
- In case that significant deficiencies are identified, the JISC shall decide whether a different AIE shall be appointed to assess and, where appropriate, correct such deficiencies.
  - ⇒ Any costs related to the assessment shall be borne by the AIE whose accreditation has been withdrawn or suspended.
- If such an assessment reveals that excess ERUs have been transferred as a result of the deficiencies identified in the determination, the IE whose accreditation has been withdrawn or suspended shall acquire an equivalent amount of AAUs and ERUs and place them in the holding account of the Party hosting the project within 30 days from the assessment mentioned above.
- Any suspension or withdrawal of an AIE that adversely affects verified projects shall be decided on by the JISC only after the affected project participants have had the opportunity of a hearing.

# 15-3. Conditions for JI projects

**For Track 1** **For Track 2**

♦ When planning a JI project activity, it is necessary to keep in mind following points:
- ☞ Annex I Parties are to refrain from using ERUs generated from nuclear facilities to meet their commitments of the KP; [CP/2001/13/Ad2, p5]
- ☞ JI projects aimed at enhancing removals by sinks shall conform to definitions, accounting rules, modalities and guidelines under Art.3, para 3 and 4, of the KP. [CP/2001/13/Ad2, p6 para4]
  - ⇒For the 1st commitment period, ERUs resulting from forest management project activities shall not exceed the value inscribed in the [CP/2001/13/Ad1 Apx, p63], times five, for each Party.

♦ Projects starting as of the year 2000 may be eligible as JI projects. [CP/2001/13/Ad2, p6 para5]
- ☞ ERUs shall only be issued for a crediting period starting after the beginning of the year 2008.

**For Track 2**

**Project design document (PDD)**

♦ JI project participants shall submit to an AIE a PDD that contains all information needed for the determination of whether the project: [CP/2001/13/Ad2, p14 para31]
- ☞ Has been approved by the Parties involved;
- ☞ Would result in GHG emission reductions or removals by sinks that is additional to any that would otherwise occur;
- ☞ Has an appropriate baseline and monitoring plan in accordance with the criteria set out.

♦ Methodologies for baselines and monitoring, including methodologies for small-scale project activities, approved by the CDM-EB, may be applied by PPs under JI, as appropriate.

♦ The relevant parts of the CDM-PDD, and of CDM-SSC-PDD, may be applied by PPs under JI, as appropriate.

*[CMP/2005/25/AdUe, p2 para4]*

# 15-4. Determination of JI projects

For Track 2

| JI project participants | Accredited independent entity (AIE) | Joint Implementation Supervisory Committee (JISC) |
|---|---|---|

(1)Select a AIE for determination and contract with them.

(2)Submit a PDD that contains all information needed for the determination to the selected AIE.
[CP/2001/13/Ad2, p14 para31]

(3)Make the PDD publicly available through the UNFCCC secretariat, subject to confidentiality provisions. Receive comments from Parties, stakeholders and UNFCCC accredited observers for **30 days** from the date the PDD is made publicly available.
[CP/2001/13/Ad2, p14 para32]

(4)Determine whether the project meets the relevant requirements of JI and these guidelines.
[CP/2001/13/Ad2, p14 para33]

**No**

**Yes**

(5)Make its determination publicly available through the UNFCCC secretariat, together with an explanation of its reasons, including a summary of comments received and a report of how due account was taken of these.
[CP/2001/13/Ad2, p14 para34]

(6)Whether there is a Party involved in the project or 3 of the members of the JISC request a review by JISC within **45 days** after the date on which the determination is made public.
[CP/2001/13/Ad2, p14 para35]

**Yes**

**No**

The JISC shall finalize the review no later than **6 months** or **at the 2nd meeting** following the request for review, and shall communicate its decision on the determination and the reasons for it to the project participants and the public.
[CP/2001/13/Ad2, p14 para35]

(7)Determination of JI project.

Can be determined

Not determined

May be reconsidered for determination after appropriate revisions.

# 15-5. Determination of the reductions or removals by JI projects

**For Track 2**

| JI project participants | Accredited independent entity (AIE) | Joint Implementation Supervisory Committee (JISC) |
|---|---|---|

(1)Submit to an AIE a report in accordance with the monitoring plan on GHG emission reductions or removals by sinks that have already occurred.
☞The report shall be made publicly available.
[CP/2001/13/Ad2, p15 para36]

Timing and frequency of submission is not specified in the official documents.

(2)Make a determination of the GHG emission reductions or removals by sinks reported by project participants,provided that they were monitored and calculated in accordance with the monitoring plan.
[CP/2001/13/Ad2, p15 para37]

(3)Make its determination publicly available through the UNFCCC secretariat, together with an explanation of its reasons. [CP/2001/13/Ad2, p15 para38]

(4)Whether there is a Party involved in the project or 3 of the members of the JISC request a review by JISC within **15 days** after the date on which it is made public.
[CP/2001/13/Ad2, p15 para39]

**Yes**

Decide on its course of action at its next meeting or no later than **30 days** after the formal request for the review.

**No review**

(5)Determination of of the reductions or removals.

**Review**

Complete its review within **30 days** following its decision to perform the review.

Inform the project participants of the outcome of the review, and make public its decision and the reasons for it.

**No**

Can be determined

# 15-6. Issuance and transfer of ERUs

(1) A host Party will issue ERUs into its national registry by converting AAUs or RMUs previously issued by that Party and held in its national registry.
[CP/2001/13/Ad2, p63 para29]

- ◆ Each Annex I Party shall establish and maintain a national registry (p63) 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. [CP/2001/13/Ad2, p61 para17]

(2)JI project participants will acquire ERUs (a host Party will transfer ERUs)

- ◆ If JI project participant is a Party, it is necessary that the Party meets eligibility requirements in order to acquire ERUs (p60).
- ◆ If JI project participant is an entity, it is necessary that the authorizing Party is eligible to do so at that time in order to acquire ERUs. [CP/2001/13/Ad2, p13 para29]

# 16. International Emissions Trading

## 16-1. Overview of International Emissions Trading

The Kyoto Protocol (KP) and the Marrakech Accords do not clearly specify practical steps for International Emissions Trading (IET). However, it can be assumed that the following steps would apply when a Party or legal entity transfers and acquires KP units (ERUs, CERs, tCERs, lCERs, AAUs and RMUs) through IET.

**(1)Agreement of trading**

- ♦ A buyer and seller (in another country) make an agreement regarding transfer and acquisition of KP units.
  - ☞ Terms to be agreed would be the amount of KP units to be traded, serial number (p64), price, timing of trading, and payment methods.

**(2)Verification by the transaction log**

- ♦ The seller directs its national registry (p63) to transfer specified KP units to the buyers account within another registry.
- ♦ The initiating registry sends a record of the proposed transaction to the transaction log (p66).
- ♦ The transaction log conducts an automated check to verify that there is no discrepancy with regard to the rules of IET.
  - ☞ Transaction log is a computerized automatic verification system maintained by the UNFCCC secretariat
  - ☞ An example of the rules of IET is the requirement to maintain a commitment period reserve (CPR) (p59).
  - ☞ Refer to p.61 for other limitations.
  - ☞ If a discrepancy is notified by the transaction log, the initiating registry shall terminate the transaction.

**(3)Transfer and acquisition of KP units**

- ♦ The buyer acquires KP units (transferred from the seller).
  - ☞ The transfer and acquisition of KP units is formally complete when the transaction has been reflected in both the initiating registry and acquiring registry.
- ♦ Transfer and acquisition of KP units can formally take place after the Parties that authorize the buyer and seller have met the eligibility requirements to participate in the Kyoto Mechanisms. (it is envisaged that will take place approximately around the year 2008) (p68)
  - ☞ It is conceivable, however, that “(1) agreement of transfer/acquisition” would take place before 2007.

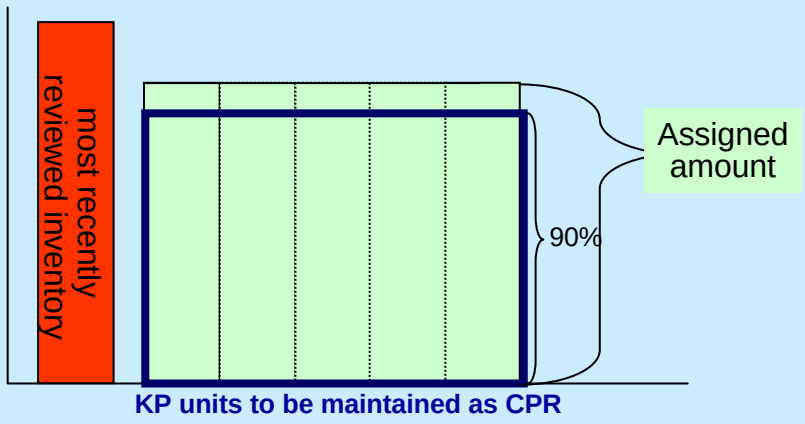
**Reference: Future revision of the modalities, rules and guidelines for International Emissions Trading** [CP/2001/13/Ad2, p50 para2]

☞ The future revision is to be decided in accordance with the rules of procedures of the COP/MOP.
- ⇒The 1st review shall be carried out no later than 1 year after the end of the 1st commitment period.
- ⇒The review will be based on recommendations by the SBI drawing on technical advice of the SBSTA, as needed. Further reviews shall be carried out periodically thereafter.

# 16-2. Commitment period reserve (CPR)

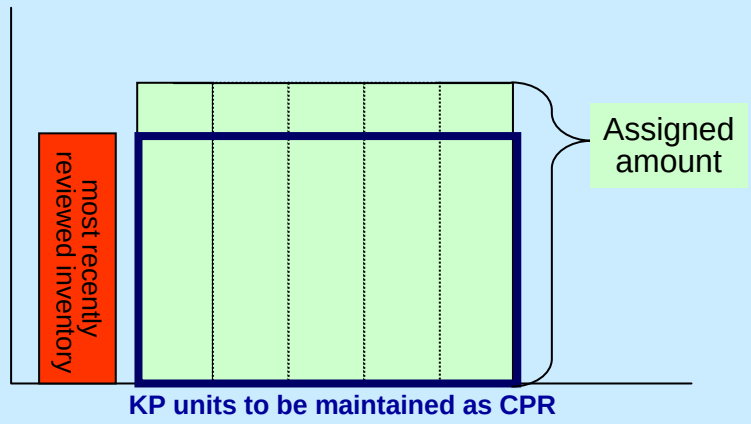
- Commitment period reserve (CPR) aims at preventing Annex I Parties to oversell KP units through IET, and as a result for their GHG emissions to exceed its holdings of KP units at the end of the 1st commitment period.
- Each Annex I Party maintains holdings of KP units (AAUs, ERUs, CERs, tCERs, lCERs and/or RMUs), in its national registry, the lower of (1) or (2) below as a CPR,. [CP/2001/13/Ad2, p54 para6-7]

(1) 90% of the Party's assigned amount calculated pursuant to Art.3, para7 and 8, of the Kyoto Protocol




(2)100% of 5 times its most recently reviewed inventory.

☞In case (2) above applies, the amount of KP units to be maintained as a CPR would vary every year depending on the inventory.




- A Party cannot make a transfer which would result in the holdings of KP units being below the required level of the CPR. [CP/2001/13/Ad2, p54 para8]
- In case of (2) above, if the amount of KP units to be maintained as a CPR fluctuates, and as a result, the required level of the CPR surpasses the Party's holdings of KP units valid for the relevant commitment period, which have not been cancelled, the Party would be notified by the secretariat. [CP/2001/13/Ad2, p54 para9]
  ☞ The Party must bring its holdings to the required level within 30 days of the notification.
- Any provisions relating to the CPR shall not apply to transfers by a Party of ERUs issued into its national registry which were verified in accordance with the verification procedure under the JISC (i.e. JI track 2). [CP/2001/13/Ad2, p15 para41] [CP/2001/13/Ad2, p54 para10]

# 17. Terms for the Kyoto Mechanisms

## 17-1. Eligibility requirements to participate the Kyoto Mechanisms

### Eligibility requirements for a Party

- For an Annex I Party to participate the KM, it has to be in compliance with the following eligibility requirements.
  [CP/2001/13/Ad2, p12 para21] [CDM M&P, p32 para31] [CP/2001/13/Ad2, p52 para2]
  - ☞ It is a Party to the Kyoto Protocol;
  - ☞ Its assigned amount (p1) has been calculated and recorded, and it submits the supplementary information (p67);
  - ☞ It has in place a national registry (p63);
  - ☞ It has in place a national system for the estimation of GHG emissions and removals by sinks of GHGs;
  - ☞ It has submitted annually the most recent required inventory.
    ⇒For the 1st commitment period, to have passes the quality assessment (p67).

### Eligibility requirements for an entity

- Entities of an Annex I Party may develop CDM/JI projects, and CERs can be issued into the CDM registry and be forwarded to accounts in the CDM registry, even if the Party does not meet the eligibility requirements.
- The following must be satisfied for entities to acquire and transfer KP units by the KM:
  - ☞ The Party authorizing the entities to participate in the KM meets the eligibility requirements to participate in the KM.
    [CP/2001/13/Ad2, p13 para29] [CDM M&P, p33 para33] [CP/2001/13/Ad2, p53 para5]
  - ☞ A holding account for each entity authorized by the Party has been set up within the national registry
  - ☞ It is possible to prepare CDM and JI projects before the Party fulfills eligibility requirements.

Here, "participate" means:
- ☞ to transfer/acquire KP units through International Emissions Trading;
- ☞ to use CERs to meet emissions reduction target of an Annex I Party. Eligibility requirement for issuance and acquisition of CERs is, the Party designate a national authority for the CDM (which is called DNA);
- ☞ to acquire ERUs through JI, and to issue and transfer ERUs through track 1 procedures. Eligibility requirements to issue and transfer ERUs through track 2 procedures are; to be a Party to the KP; its assigned amount has been calculated; and it has in place a national registry.

### BOX: Obtaining eligibility to participate the KM

- ☞ An Annex I Party shall be considered to meet the eligibility requirements to participate the KM, after 16 months have elapsed since the submission of its report regarding the eligibility to the UNFCCC, unless "the enforcement branch of the compliance committee" finds that the Party does not meet these requirements.
  ⇒A Party may acquire eligibility before 16 months have elapsed after the submission of the report if the enforcement branch so permits.
  ⇒A Party is considered to continue to meet the eligibility requirements unless and until the enforcement branch of the compliance committee decides that the Party does not meet the eligibility requirements.
  [CP/2001/13/Ad2, p12 para22] [CDM M&P, p33 para32] [CP/2001/13/Ad2, p53 para3]

### BOX: Suspension and reinstatement of a Party's eligibility

- ☞ Where the enforcement branch has determined that a Party does not meet the eligibility requirements, it shall suspend the eligibility of that Party (as well as entities authorized by that Party) to participate the KM.
  [CP/2001/13/Ad3, p76 para4]
- ☞ Where the eligibility of a Party has been suspended, the Party concerned may submit a request to reinstate its eligibility to the enforcement branch after having taken necessary measures for reinstatement.
  [CP/2001/13/Ad3, p73 para4]
- ☞ The enforcement branch shall reinstate that Party's eligibility, unless it considers that there continues to be a question of implementation. (the same applies to entities authorized by that Party).
- ☞ The secretariat maintains publicly accessible lists of Annex I Parties that do not meet the requirements or have been suspended.
  [CP/2001/13/Ad2, p13 para27] [CDM M&P, p33 para34] [CP/2001/13/Ad2, p53 para4]

# 17-2. Limitations of the acquisition and issuance of KP units

## Supplementarity of the Kyoto Mechanisms

♦ The use of the KM must be supplemental to domestic action and that domestic action shall thus constitute a significant element of the effort made by each Annex I Party to meet its quantified emission limitation and reduction commitments under Art.3, para1 of the KP. [CP/2001/13/Ad2, p2]

☞ This does not set any quantitative limits to the utilization (acquisition of KP units) of the KM.

## Limitation for net acquisitions of tCERs and lCERs

♦ For the 1st commitment period, the total of credits from eligible A/R CDM project activities (p43) additions to a Party's assigned amount, shall not exceed 1 % of base year emissions of that Party, times five. [CP/2001/13/Ad2, p22 para7(b)]

☞ This means net additions (acquisitions – transfers) and it will be checked at retirement.

## Limitation for ERUs issuance from forest management

♦ For the 1st commitment period only, there is a limitation to amount of ERUs issuance from forest management JI project activities for each Party. [CP/2001/13/Ad1, p60 para10-11]

☞ A limit is set to the total amount of RMUs resulting from domestic forest management activities and ERUs resulting from forest management JI project activities, for each Party.

♦ There is no limitation for ERUs resulting from afforestation and reforestation JI project activities.

☞These limitations apply to Parties that participate the Kyoto Mechanisms. However, entities can be affected by such limitations indirectly.

## 17-3. Restrictions to carry over KP units

Each Party may carry over KP units held in its registry, that have not been cancelled or retired for the 1st commitment period, to the subsequent commitment period [CP/2001/13/Ad2, p64 para36]. But there are some restrictions as follows.

☞These restrictions apply to Parties that participate the Kyoto Mechanisms. However, entities can also be indirectly affected by such limitations.

### Restrictions on carrying over of ERUs

- A maximum amount of ERUs acquired through JI project activities that can be carried over is limited to 2.5 % of the assigned amount of each Party.
- ERUs that have been converted from RMUs cannot be carried over [CP/2001/13/Ad2, p61 para15]

### Restrictions on carrying over of CERs

- A maximum amount of CERs acquired through CDM project activities that can be carried over is limited to 2.5 % of the assigned amount of each Party. [CP/2001/13/Ad2, p61 para15(b)]

### Restrictions on carrying over of tCERs and lCERs

- tCERs and lCERs may not be carried over. [CP/2003/6/Ad2, p24 para41] [CP/2003/6/Ad2, p25 para45]

### Restrictions on carrying over of RMUs

- RMUs may not be carried over. [CP/2001/13/Ad2, p61 para16]

- There is no restrictions on carrying over of AAUs [CP/2001/13/Ad2, p61 para15(c)]

## 17-4. Restrictions in case a Party is not in compliance for its commitments

- At the end of the additional period for fulfilling commitments (p67), if “the enforcement branch of the compliance committee” has determined that the emissions of a Party have exceeded its emission cap, suspension of the eligibility to make transfers under International Emissions Trading will be applied until the Party is reinstated. [CP/2001/13/Ad3, p76 para5]
  ☞Suspension of the eligibility will apply to a legal entity in the Party as well.
- If it is declared that a Party is not in compliance with its commitments, a number of tonnes equal to 1.3 times the amount in tonnes of excess emissions will be deducted from the Party’s assigned amount for the 2nd commitment period [CP/2001/13/Ad3, p76 para5(a)]

# 18. Modalities for dealing with KP units

Mainly related to Art.7, para4 of the KP

## 18-1. 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. [CP/2001/13/Ad2, p61 para17]

☞ Each Party designates an organization as its registry administrator to maintain the national registry of that Party. [CP/2001/13/Ad2, p61 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 (p65) and the transaction log (p66) should be ensured. [CP/2001/13/Ad2, p61 para19]

♦ Each national registry has the following accounts in order to account for KP units (AAUs, ERUs, CERs, tCERs, lCERs and RMUs): [CP/2001/13/Ad2, p61 para21] [CDM A/R M&P, p25 para43] [CDM A/R M&P, p25 para47]

**(1) Holding account for the Party**

**(2) Holding account for each legal entity authorized by the Party,** to hold KP units under its responsibility.

**(3) Cancellation account for LULUCF activities,** to cancel the KP units in case such activities result in a net source of GHG emissions.

**(4) Cancellation account for non compliance,** to cancel the KP units equal to 1.3 times the amount of excess emissions in case the Party was not in compliance in the 1st commitment period

**(5) Cancellation account for other cancellations by the Party**, to cancel KP units for purposes of cancellations other than (3) and (4) above.

**(6) tCER replacement account,** to cancel AAUs, CERs, ERUs, RMUs and/or tCERs for the purposes of replacing tCERs prior to expiry.

**(7) lCER replacement account,** to cancel AAUs, CERs, lCERs, ERUs and/or RMUs for the purposes of replacing lCERs.

**(8) Retirement account,** used to retire KP units valid for that commitment period for use towards meeting the Party's commitments. [CP/2001/13/Ad2, p60 para14]

☞ For accounts described in (1) (2)(3)(5), multiple accounts may be established.

☞ Accounts described in (3) (4) (5) (6) (7) (8) should be established for each commitment period.

☞ Each account must have a unique account number comprising a Party identifier and a unique number. [CP/2001/13/Ad2, p62 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. [CP/2001/13/Ad2, p64 para35]

♦ KP units transferred to the retirement account may not be further transferred or carried over to the subsequent commitment period. [CP/2001/13/Ad2, p64 para35]

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

- Every t-$CO_2$ 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.
  [CP/2001/13/Ad2, p61 para20]

**Serial Number Identifiers**

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

| | Identifier | Range or Codes |
|---|---|---|
| ***1*** | Originating Registry | Two-letter country codes in ISO3166, as of 01 January 2005 |
| ***2*** | Unit Type | 1 = AAU, 2 = RMU, 3 = ERU converted from AAU, 4 = ERU converted from RMU, 5 = CER, 6 = tCER, 7 = lCER |
| ***3*** | Supplementary Unit Type | Blank for Kyoto-only Units, or as defined by STL |
| ***4*** | Unit Serial Block Start | Unique numeric values assigned by registry from 1 - 999,999,999,999,999 |
| ***5*** | Unit Serial Block End | Unique numeric values assigned by registry from 1 - 999,999,999,999,999 |
| ***6*** | Original Commitment Period | 1 - 99 |
| ***7*** | Applicable Commitment Period | 1 - 99 |
| ***8*** | LULUCF Activity | 1 = Afforestation and reforestation, 2 = Deforestation, 3 = Forest management, 4 = Cropland management, 5 = Grazing land management, 6 = Revegetation |
| ***9*** | Project Identifier | Unique numeric value assigned by registry for Project |
| ***10*** | Track | 1 or 2 |
| ***11*** | Expiry Date | Expiry Date for tCERs or lCERs |

[Data exchange standards for registry system under the Kyoto Protocol, draft technical specifications Annexes Non-paper, November 3, 2004, p F-2]

## Publicly accessible information through national registry

Each national registry shall make non-confidential information publicly available through the Internet.
[CP/2001/13/Ad2, p67 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.

# 18-2. CDM registry

♦ The EB (p11) 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. [CP/2001/13/Ad2, p47 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. [CP/2001/13/Ad2, p47 para3] [CP/2003/2/Ad1, p7 para26(b)] [CP/2003/6/Ad2, p31 para3]

**(1) A pending account for the EB**, into which CERs are issued before being transferred to other accounts.

**(2) Holding accounts for non-Annex I Party** of hosting a CDM project activity or requesting an account.

**(3) Temporary accounts for Annex I Parties, and PPs from such Parties,** until national registries for such Parties and entities are operational, for the purposes of receiving CERs.

**(4) Cancellation account for excess CERs**, to cancel KP units equal to excess CERs issued, as determined by the EB (p14).

**(5) Cancellation account for tCERs and lCERs**, that have expired in a holding account of the CDM registry, and lCERs that have become ineligible (p43).

**(6) Account for the share of proceeds**, to hold and transfer CERs corresponding to the SOP-Adaptation (p35).

♦ Accounts described in (2)(3)(4)(6) 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. [CP/2001/13/Ad2, p47 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 (p64) and be held in only one account in one registry at a given time. [CP/2001/13/Ad2, p47 para4]

## Publicly accessible information through the CDM registry

The CDM registry shall make non-confidential information publicly available through the Internet. [CP/2001/13/Ad2, p48 para9-12]

♦ Information on accounts

☞ The holder of the account, representative name and contact information of the account holder.

♦ Information on the total quantity of CERs

☞ The total quantities of CERs issued and transferred, and the identity of the acquiring accounts and registries

☞ The total quantity of KP units cancelled for excess CERs issued.

♦ Information on CER holdings in each account

☞ The total quantity of CERs in each account currently and at the beginning of the year.

♦ CDM project activity information

☞ Project name, location, years of CER issuance, the OEs involved, and downloadable electronic versions of documentation to be made publicly available.

# 18-3. International transaction log (ITL)

♦ The UNFCCC secretariat establishes and maintain an international transaction log (ITL) to verify the validity of transactions, including issuance, transfer and acquisition between registries, cancellation, expiration and replacement (in case of tCER and lCER), retirement and the carry-over of KP units. [CP/2001/13/Ad2, p65 para38] [CDM A/R M&P, p26 para55-56]

☞ The ITL is in the form of a standardized electronic database. The accurate, transparent and efficient exchange of data between national registries (p63), the CDM registry (p65) and the ITL should be ensured

♦ The ITL conducts the following automated check. [CP/2001/13/Ad2, p65 para42]

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

☞ units previously retired or cancelled; units existing in more than one registry; units for which a previously identified discrepancy has not been resolved;

☞ units improperly carried over; units improperly issued;

☞ the authorization of legal entities involved to participate in the transaction (p15).

**(2) Transfers between registries**

☞ the eligibility of Parties involved in the transaction to participate in the KM (p60);

☞ infringement upon the commitment period reserve of the transferring Party (p59).

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

☞ infringement of the limits (limitation for net acquisitions of tCERs and lCERs) (p61)

**(4) Retirement of CERs**

☞ the eligibility of the Party involved to use CERs to contribute to its compliance

♦ Prior to the completion of any transactions, the initiating registry sends a record of the proposed transaction to the ITL and, in the case of transfers to another registry, to the acquiring national registry. [CP/2001/13/Ad2, p65 para41]

♦ The ITL shall records, and makes publicly available, all transaction records and the date and time of completion of each transaction. [CP/2001/13/Ad2, p66 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. [CDM A/R M&P, p26 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. [CDM A/R M&P, p26 para56]

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

☞ The initiating registry shall terminate the transaction, notify the ITL and, in the case of transfers to another registry, the acquiring registry of the termination. The ITL shall forward a record of the discrepancy to the secretariat for consideration as part of the review process for the relevant Party or Parties under Article 8. [CP/2001/13/Ad2, p66 para43(a)]

☞ In the event of a failure by the initiating registry to terminate the transaction, KP units involved in the transaction shall not be valid for use towards compliance with commitments, until the problem has been corrected and questions have been resolved.

⇒ The Party shall perform any necessary corrective action within 30 days. [CP/2001/13/Ad2, p66 para43(b)]

# 18-4. From issuance to retirement of KP units

## 1. Issuance of AAUs

### (1) Submission of reports to calculate a Party's assigned amount

♦ To demonstrate its capacity to account for its emissions and assigned amount, each Party should submit a report, in 2 parts, to the secretariat. [CP/2001/13/Ad2, p58 para6]

☞ The report is to be submitted prior to 1 January 2007 or 1 year after the entry into force of the Kyoto Protocol for that Party, whichever is later. [CP/2001/13/Ad2, p56 para2]

**Contents of part 1 of the report**: [CP/2001/13/Ad2, p58 para7]

☞ Complete inventories of GHG emissions and removals for all years from 1990, or another approved base year or period to the most recent year available.

☞ Selected base year for HFCs, PFCs, and $SF_6$

☞ The agreement under Art.4, where the Party has reached such an agreement to fulfill its commitments jointly with other Parties

☞ Calculation of its assigned amount on the basis of its inventory of GHG emissions and removals.

**Contents of part 2 of the report**: [CP/2001/13/Ad2, p58 para8]

☞ Calculation of its commitment period reserve (p59);

☞ Identification of its selection of minimum values for use in accounting for its LULUCF activities;

☞ Identification of its election of activities under Art.3, para4 of the KP;

☞ Identification of whether, for each activity under Art.3, para3 and 4, it intends to account annually or for the entire commitment period;

☞ A description of its national system for the estimation of GHG emissions and removals ;

☞ A description of its national registry.

### (2) Review of information by the expert review team (ERT)

♦ After initial review by the ERT and resolution of any questions, the assigned amount of each Party shall be recorded in the database for the compilation and accounting of emissions and assigned amounts

One of the eligibility requirements to participate in the Kyoto Mechanisms (p60) is that a Party's has submitted annually the most recent required inventory, and to have passes the quality assessment.

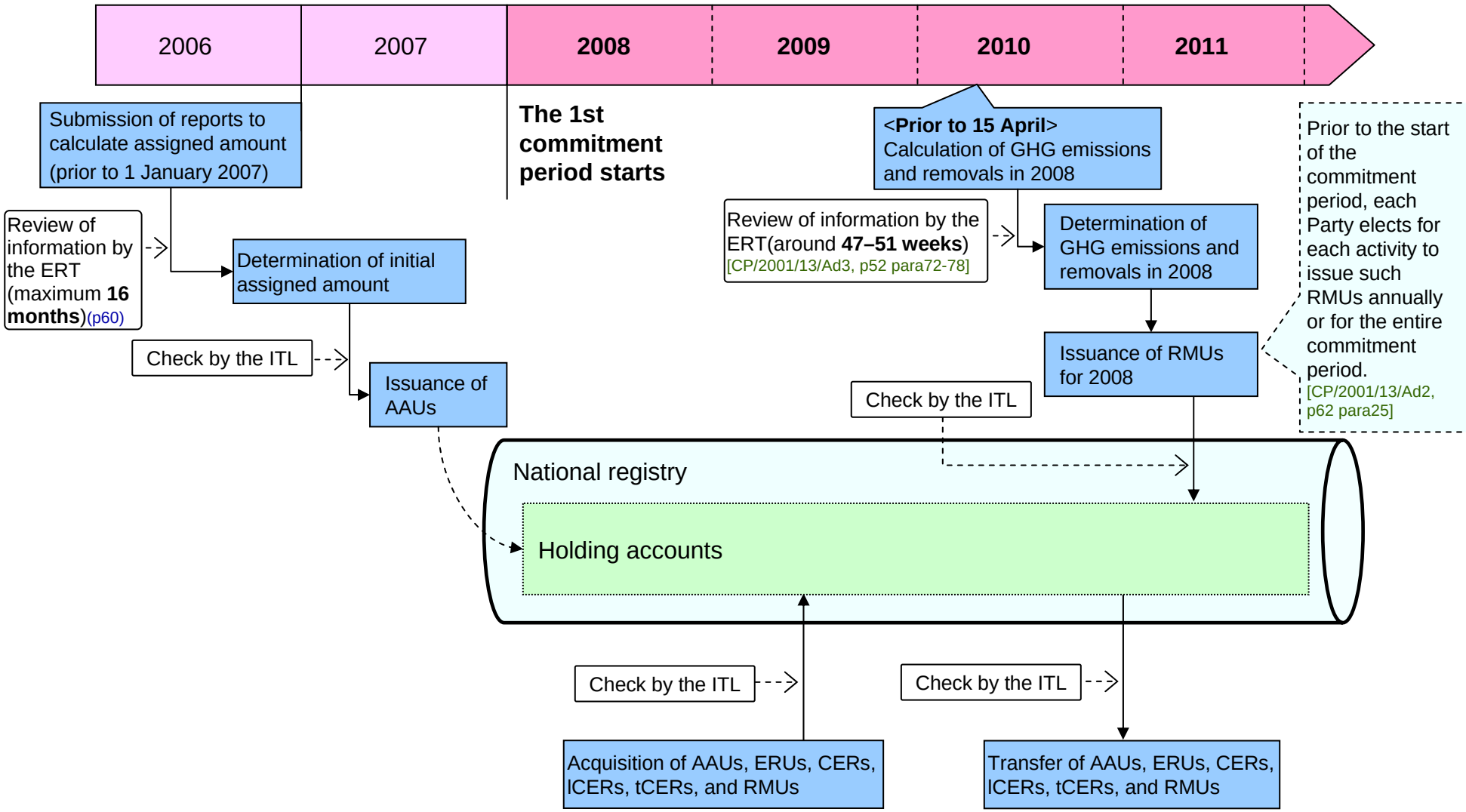
☞ For the 1st commitment period, the quality assessment needed for the purpose of determining eligibility shall be limited to the parts of the inventory pertaining to GHG emissions.

### (3) Issuance of AAUs

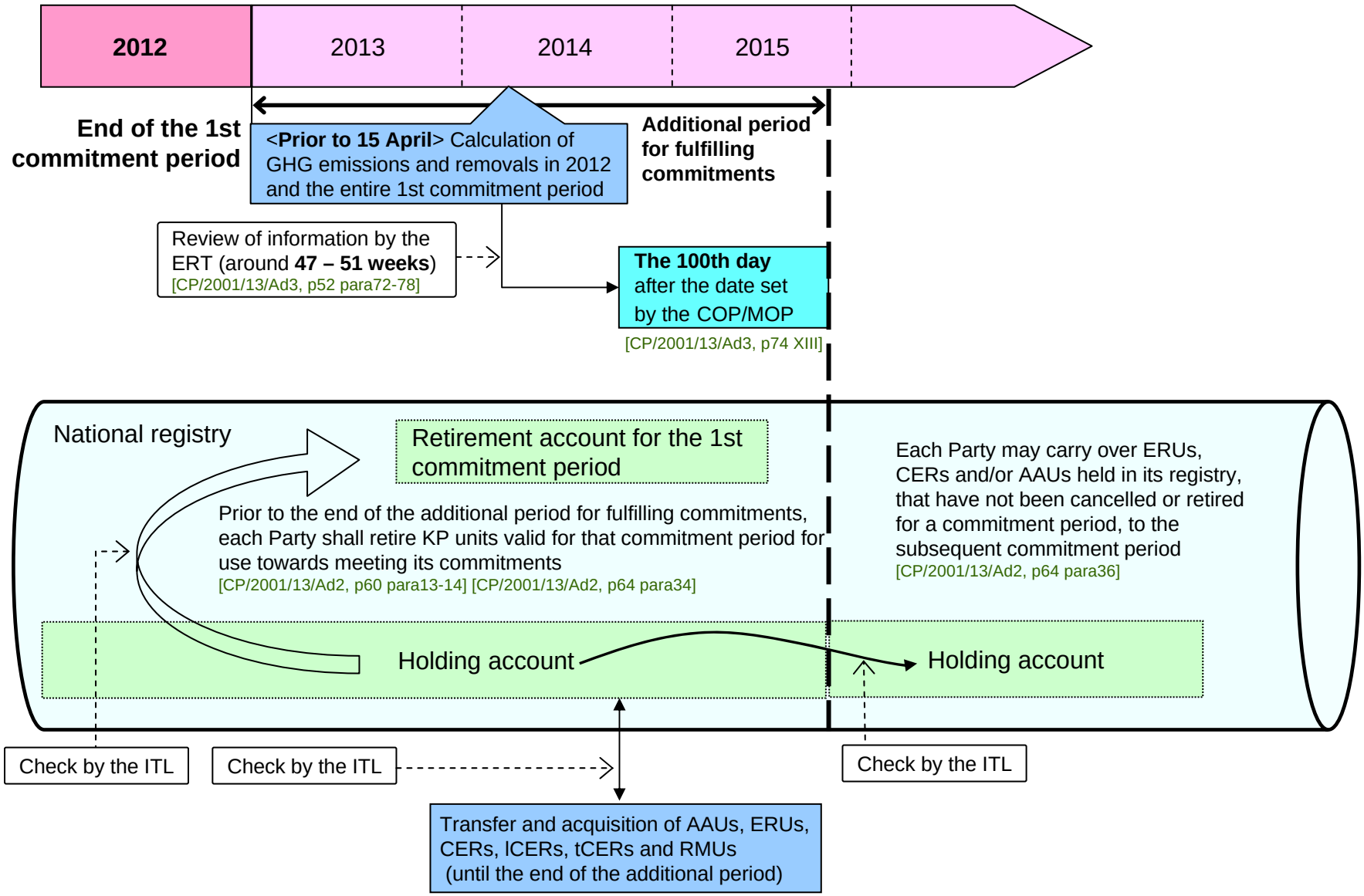
♦ Each Party will issue a quantity of AAUs equivalent to its assigned amount in its national registry

☞ AAUs should be issued prior to any transactions taking place for that commitment period

## 2. Issuance, transfer and acquisition of KP units



## 3. Retirement and carry-over of KP units



# Attachment 1. Contents of the CDM-PDD, CDM-NMB and CDM-NMM

## 1-1. Contents of the Project Design Document (CDM-PDD)

(Version 02 - in effect as of 1 July 2004) <http://cdm.unfccc.int/Reference/Documents/cdmpdd/English/CDM_PDD_ver02.doc>

### SECTION A. General description of project activity

- A.1. Title of the project activity
- A.2. Description of the project activity
- A.3. Project participants
- A.4. Technical description of the project activity
  - A.4.1. Location of the project activity
    - A.4.1.1.Host Party(ies)
    - A.4.1.2.Region/State/Province etc
    - A.4.1.3.City/Town/Community etc
    - A.4.1.4.Detail of physical location, including information allowing the unique identification of this project activity:
  - A.4.2. Category(ies) of project activity
  - A.4.3. Technology to be employed by the project activity
  - A.4.4. Brief explanation of how the anthropogenic emissions of anthropogenic GHGs by sources are to be reduced by the proposed CDM project activity, including why the emission reductions would not occur in the absence of the proposed project activity, taking into account national and/or sectoral policies and circumstances
    - A.4.4.1. Estimated amount of emission reductions over the chosen crediting period
  - A.4.5. Public funding of the project activity

### SECTION B. Application of a baseline methodology

- B.1. Title and reference of the approved baseline methodology applied to the project activity
  - B.1.1. Justification of the choice of the methodology and why it is applicable to the project activity
- B.2. Description of how the methodology is applied in the context of the project activity
- B.3. Description of how the anthropogenic emissions of GHG by sources are reduced below those that would have occurred in the absence of the registered CDM project activity
- B.4. Description of how the definition of the project boundary related to the baseline methodology selected is applied to the project activity
- B.5. Details of baseline information, including the date of completion of the baseline study and the name of person (s)/entity (ies) determining the baseline

### SECTION C. Duration of the project activity / Crediting period

- C.1. Duration of the project activity
  - C.1.1. Starting date of the project activity
  - C.1.2. Expected operational lifetime of the project activity
- C.2. Choice of crediting period and related information
  - C.2.1. Renewable crediting period
    - C.2.1.1. Starting date of the 1st crediting period
    - C.2.1.2. Length of the 1st crediting period
  - C.2.2. Fixed crediting period
    - C.2.2.1. Starting date
    - C.2.2.2. Length

## 1-1. Contents of the Project Design Document (CDM-PDD)

(Version 02 - in effect as of 1 July 2004)

### SECTION D. Application of a monitoring methodology and plan

- D.1. Name and reference of approved monitoring methodology applied to the project activity
- D.2. Justification of the choice of the methodology and why it is applicable to the project activity
  - D.2.1. Option 1: Monitoring of the emissions in the project scenario and the baseline scenario
    - D.2.1.1. Data to be collected in order to monitor emissions from the project activity, and how this data will be archived
    - D.2.1.2. Description of formulae used to estimate project emissions (for each gas, source, formulae/algorithm, emissions units of $CO_2$ equ.)
    - D.2.1.3. Relevant data necessary for determining the baseline of anthropogenic emissions by sources of GHGs within the project boundary and how such data will be collected and archived
    - D.2.1.4. Description of formulae used to estimate baseline emissions (for each gas, source, formulae/algorithm, emissions units of $CO_2$ equ.)
  - D. 2.2. Option 2: Direct monitoring of emission reductions from the project activity (values should be consistent with those in section E).
    - D.2.2.1. Data to be collected in order to monitor emissions from the project activity, and how this data will be archived
    - D.2.2.2. Description of formulae used to calculate project emissions(for each gas, source, formulae/algorithm, emissions units of $CO_2$ equ.)
  - D.2.3. Treatment of leakage in the monitoring plan
    - D.2.3.1. If applicable, please describe the data and information that will be collected in order to monitor leakage effects of the project activity
    - D.2.3.2. Description of formulae used to estimate leakage (for each gas, source, formulae/algorithm, emissions units of $CO_2$ equ.)
  - D.2.4. Description of formulae used to estimate emission reductions for the project activity (for each gas, source, formulae/algorithm, emissions units of $CO_2$ equ.)
- D.3. Quality control (QC) and quality assurance (QA) procedures undertaken for data monitored
- D.4. Please describe the operational and management structure that the project operator will implement in order to monitor emission reductions and any leakage effects generated by the project activity
- D.5. Name of person/entity determining the monitoring methodology

### SECTION E. Estimation of GHG emissions by sources

- E.1. Estimate of GHG emissions by sources
- E.2. Estimated leakage
- E.3. The sum of E.1 and E.2 representing the project activity emissions
- E.4. Estimated anthropogenic emissions by sources of GHG of the baseline
- E.5. Difference between E.4 and E.3 representing the emission reductions of the project activity
- E.6. Table providing values obtained when applying formulae above

### SECTION F. Environmental impacts

- F.1. Documentation on the analysis of the environmental impacts, including transboundary impacts
- F.2. If environmental impacts are considered significant by the project participants or the host Party, please provide conclusions and all references to support documentation of an environmental impact assessment undertaken in accordance with the procedures as required by the host Party

### SECTION G. Stakeholders' comments

- G.1. Brief description of how comments by local stakeholders have been invited and compiled
- G.2. Summary of the comments received
- G.3. Report on how due account was taken of any comments received

### Annex 1. Contact information on participants in the project activity

### Annex 2. Information regarding public funding

### Annex 3. Baseline information

### Annex 4. Monitoring plan

# 1-2. Contents of the proposed new methodology: baseline (CDM-NMB)

(Version 02 - in effect as of 15 July 2005) <http://cdm.unfccc.int/Reference/Documents/cdm_nmb/English/CDM_NMB.doc>

## SECTION A. Methodology title and summary description

- Methodology title:
- Summary description:
- If this methodology is a based on a previous submission, please state the previous reference number (NMXXXX/AMXXXX) here:

## SECTION B. Applicability/ project activity

- Methodology procedure:
- Explanation/justification:

## SECTION C. Project Boundary

- Methodology procedure:
- Explanation/justification:

## SECTION D. Baseline Scenario

- Methodology procedure:
- Explanation/justification:

## SECTION E. Additionality

- Methodology procedure:
- Explanation/justification:

## SECTION F. Baseline emissions

- Methodology procedure:
- Explanation/justification:

## SECTION G. Project activity emissions

- Methodology procedure:
- Explanation/justification:

## SECTION H. Leakage

- Methodology procedure:
- Explanation/justification:

## SECTION I. Emission reductions

- Methodology procedure:
- Explanation/justification:

## SECTION J. Changes required for methodology implementation in 2nd and 3rd crediting periods (if relevant / optional)

- Methodology procedure:
- Explanation/justification:

## SECTION K. Selected baseline approach from paragraph 48 of the CDM modalities and procedures

- Choose One (delete others):
- Explanation/justification of choice:

## SECTION I. Other Information

- Explanation/justification:

# 1-3. Contents of the proposed new methodology: monitoring (CDM-NMM)

(Version 01 - in effect as of 1 July 2004) <http://cdm.unfccc.int/Reference/Documents/cdm_nmm/English/CDM_NMM.doc>

## SECTION A. Identification of methodology

- A.1. Title of the proposed methodology
- A.2. List of category(ies) of project activity to which the methodology may apply
- A.3. Conditions under which the methodology is applicable to CDM project activities
- A.4. What are the potential strengths and weaknesses of this proposed new methodology?

## SECTION B. Proposed new monitoring methodology

- B.1. Brief description of the new methodology
- B.2. Option 1: Monitoring of the emissions in the project scenario and the baseline scenario
  - B.2.1. Data to be collected or used in order to monitor emissions from the project activity, and how this data will be archived
  - B.2.2. Description of formulae used to estimate project emissions (for each gas, source, formulae/algorithm, emissions units of $CO_2$ equ.)
  - B.2.3. Relevant data necessary for determining the baseline of anthropogenic emissions by sources of GHG within the project boundary and how such data will be collected and archived
  - B.2.4. Description of formulae used to estimate baseline emissions (for each gas, source, formulae/algorithm, emissions units of $CO_2$ equ.)
- B.3. Option 2: Direct monitoring of emission reductions from the project activity
  - B.3.1. Data to be collected or used in order to monitor emissions from the project activity, and how this data will be archived
  - B.3.2. Description of formulae used to calculate project emissions (for each gas, source, formulae/algorithm, emissions units of $CO_2$ equ.)
- B.4. Treatment of leakage in the monitoring plan
  - B.4.1. If applicable, please describe the data and information that will be collected in order to monitor leakage effects of the project activity
  - B.4.2. Description of formulae used to estimate leakage (for each gas, source, formulae/algorithm, emissions units of $CO_2$ equ.)
- B.5. Description of formulae used to estimate emission reductions for the project activity (for each gas, source, formulae/algorithm, emissions units of $CO_2$ equ.)
- B.6. Assumptions used in elaborating the new methodology
- B.7. Please indicate whether quality control (QC) and quality assurance (QA) procedures are being undertaken for the items monitored
- B.8. Has the methodology been applied successfully elsewhere and, if so, in which circumstances?

# Attachment 2. Tool for the demonstration and assessment of additionality (Ver2) [EB22 Anx8]

The tool provides a general framework for demonstrating and assessing additionality. PPs proposing new baseline methodologies may incorporate this consolidated tool in their proposal. PPs may also propose other tools for the demonstration of additionality to the EB for its consideration.

## Step 0. Preliminary screening based on the starting date of the project activity

If PPs wish to have the crediting period starting prior to the registration of their project activity, they shall provide:

- ☞Evidence that the starting date of the CDM project activity falls within the definition of a crediting period (p26).
- ☞Evidence that the incentive from the CDM (including evidence of the objective to mitigate climate change) was seriously considered in the decision. 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.

**Pass**

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

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

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

***Sub-step 1b. Enforcement of applicable laws and regulations:***

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

**Pass**

Step 2 or Step 3

## Step 2. Investment analysis

Determine whether the proposed project activity is economically or financially less attractive than other alternatives without the revenue from the sale of CERs.

***Sub-step 2a. Determine appropriate analysis method :***

- ☞If the CDM project activity generates no financial or economic benefits other than CDM related income, then apply the simple cost analysis (Option I). Otherwise, use the investment comparison analysis (Option II) or the benchmark analysis (Option III).

***Sub-step 2b.***

***Option I. Apply simple cost analysis***

- ☞Document the costs associated with the CDM project activity and demonstrate that the activity produces no economic benefits other than CDM related income

***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 indicator. Identify the relevant benchmark value. Benchmarks can be derived from government bond rates, estimates of the cost of financing and required return on capital, and a company internal benchmark.

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

- ☞Present in the CDM-PDD a clear comparison of the financial indicator for the proposed CDM activity (excluding CER revenues) and:
  - ⇒The alternatives if Option II is used, or the financial benchmark if Option III 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.

**Pass**

**Step 3. Barrier analysis**

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.

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

☞Establish that there are 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 barriers due to prevailing practice.

☞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.

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

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

**Pass**

**Step 4. Common practice analysis**

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

***Sub-step 4a. Analyze other activities similar to the proposed project activity:***

☞Provide an analysis of any other activities implemented previously or currently underway that are similar to the proposed project activity. Other CDM project activities are not to be included in this analysis.

***Sub-step 4b. Discuss any similar options that are occurring:***

☞If similar activities are identified above, then it is necessary to demonstrate why the existence of these activities does not contradict the claim that the proposed project activity is financially unattractive or subject to barriers.

**Pass**

**Step 5. Impact of CDM registration**

Explain how the approval and registration of the project activity as a CDM activity, and the attendant benefits and incentives derived from the project activity, will alleviate the economic and financial hurdles (**Step 2**) or other identified barriers (**Step 3**) and thus enable the project activity to be undertaken.

**Pass**

**The proposed CDM project activity is additional**

# Attachment 3. Examples of approved consolidated baseline methodology

## 3-1. Consolidated baseline methodology for landfill gas project activities (ACM0001 Ver2) [EB21 Anx9]

**Applicability**

This methodology is applicable to landfill gas capture project activities, where the baseline scenario is the partial or total atmospheric release of the gas and the project activities such as the captured gas is flared or used to produce energy (e.g. electricity/thermal energy).

☞In case emission reductions are claimed for displacing or avoiding energy generation from other sources, a baseline methodology for electricity and/or thermal energy displaced shall be provided or an approved one used, including the ACM0002.

⇒If capacity of electricity generated is less than 15MW,and/or thermal energy displaced is less than 54 TJ (15GWh), small-scale methodologies can be used.

**Emission reductions** (p77)

**Additionality**

☞The additionality of the project activity shall be demonstrated and assessed using the latest version of the “Tool for the demonstration and assessment of additionality” agreed by the CDM EB (p74).

**Project boundary**

☞The project boundary is the site of the project activity where the gas is captured and destroyed/used.

☞Possible $CO_2$ emissions resulting from combustion of other fuels than the methane recovered should be accounted as project emissions.

☞In addition, electricity required for the operation of the project activity, including transport of heat, should be accounted and monitored.

☞Where the project activity involves electricity generation, only the net quantity of electricity fed into the grid should be used to account for emission reductions due to displacement of electricity in other power plants.

☞Where the project activity does not involve electricity generation, PPs should account for $CO_2$ emissions by multiplying the quantity of electricity required with the $CO_2$ emissions intensity of the electricity.

**Leakage**

☞No leakage effects need to be accounted under this methodology.

**Monitoring**

☞This baseline methodology shall be used in conjunction with the approved monitoring methodology ACM0001 (“Consolidated monitoring methodology for landfill gas project activities”). .

## 3-1. Consolidated baseline methodology for landfill gas project activities (ACM0001 Ver2)

### Emission reductions

**$ER_y$**
The GHG emission reduction achieved by the project activity during a given year "y"

=

The amount of methane destroyed/combusted during the year

+

$CO_2$ emission reduction by the electricity displaced during the year

+

$CO_2$ emission reduction by the thermal energy displaced during the year

**$(MD_{project, y} - MD_{reg, y}) * GWP_{CH4}$**

The methane destroyed by the project activity during a year

The amount of methane that would have been destroyed/combusted (as per a regulatory or contractual requirements) during the year in the absence of the project activity. In cases where regulatory or contractual requirements do not specify $MD_{reg,y}$,an "Adjustment Factor" (AF) shall be used and justified, taking into account the project context

**$MD_{reg, y} = MD_{project, y} * AF$**

Global Warming Potential value for methane for the 1st commitment period is 21 [t-$CO_2$equ/t-$CH_4$]

In cases where a specific system for collection and destruction of methane is mandated by regulatory or contractual requirements, the ratio of the destruction efficiency of that system to the destruction efficiency of the system used in the project activity shall be used for AF.

**$EG_y * CEF_{electricity, y}$**

$EG_y$:the net quantity of electricity displaced during the year measured in [MWh]

$CEF_{electricity, y}$:$CO_2$ emissions intensity of the electricity displaced determined by other the methodology in [t-$CO_2$equ/MWh]

**$ET_y * CEF_{thermal, y}$**

$ET_y$:the net quantity of thermal energy displaced during the year measured in [TJ]

$CEF_{thermal, y}$:$CO_2$ emissions intensity of the thermal energy displaced measured in [t-$CO_2$equ/TJ]

**$MD_{project, y} = MD_{flared, y} + (MD_{electricity, y} + MD_{thermal, y})$**

The quantity of methane destroyed by flaring

**$MD_{flared, y} = LFG_{flare, y} * W_{CH4, y} * D_{CH4, y} * FE$**

$LFG_{flare,y}$ :The quantity of landfill gas flared during the year measured in [$m^3$]

$W_{CH4,y}$ :The average methane fraction of the landfill gas as measured during the year and expressed as a fraction in [$m^3$-$CH_4$/$m^3$-LFG]

FE :The flare efficiency (the fraction of the methane destroyed)

$D_{CH4}$ : The methane density expressed in [t-$CH_4$/$m^3$-$CH_4$]

The quantity of methane destroyed by generation of electricity and/or thermal energy

**$MD_{electricity, y} = LFG_{electricity, y} * W_{CH4, y} * D_{CH4, y}$**

**$MD_{thermal, y} = LFG_{thermal, y} * W_{CH4, y} * D_{CH4, y}$**

$LFG_{electricity, y}$ :The quantity of landfill gas fed into electricity generator during the year measured in [$m^3$]

$LFG_{thermal, y}$ :The quantity of landfill gas fed into the boiler during the year measured in [$m^3$]

$W_{CH4,y}$ :The average methane fraction of the landfill gas as measured during the year and expressed as a fraction in [$m^3$-$CH_4$/$m^3$-LFG]

$D_{CH4}$ : The methane density expressed in [t-$CH_4$/$m^3$-$CH_4$]

This methodology might be revised in order to incorporate considerations by the EB on the impact of oxidation of biogas in the calculation of emission reductions of methane ($CH_4$) for landfill gas project activities. Any revisions shall not affect CDM project activities already registered using this current version of the methodology.

# 3-2. Consolidated baseline methodology for grid-connected electricity generation from renewable sources (ACM0002 Ver4)

[EB22 Anx6]

**Applicability**

This methodology is applicable to grid-connected renewable power generation project activities under the following conditions:

☞ Applies to electricity capacity additions from,
⇒Run-of-river hydro power plants; hydro power projects with existing reservoirs where the volume of the reservoir is not increased, wind sources, geothermal sources, solar sources, and wave and tidal sources.

☞ The geographic and system boundaries for the relevant electricity grid can be clearly identified and information on the characteristics of the grid is available.

**Baseline**

For project activities that do not modify or retrofit an existing electricity generation facility, the baseline scenario is:

☞ Electricity delivered to the grid by the project would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources, as reflected in the combined margin (CM) calculations (p79).

**Additionality**

☞ The additionality of the project activity shall be demonstrated and assessed using the latest version of the "Tool for the demonstration and assessment of additionality" agreed by the CDM EB (p74).

**Project boundary**

☞ For the baseline determination, PPs shall only account $CO_2$ emissions from electricity generation in fossil fuel fired power that is displaced due to the project activity.
⇒For geothermal project activities, PPs shall account fugitive emissions of methane and $CO_2$ from non-condensable gases and $CO_2$ emissions from combustion of fossil fuels required to operate the geothermal power plant.

☞ The spatial extent of the project boundary includes the project site and all power plants connected physically to the electricity system that the CDM project power plant is connected to.
⇒For the purpose of determining the build margin (BM) and operating margin (OM) emission factor (p79), a (regional) project electricity system is defined by the spatial extent of the power plants that can be dispatched without significant transmission constraints.

☞ Where the application of this methodology does not result in a clear grid boundary, given country specific variations in grid management policies:
⇒Use the delineation of grid boundaries as provided by the DNA of the host country if available; or
⇒Where DNA (p10) guidance is not available, in large countries with layered dispatch systems the regional grid definition should be used. In other countries, the national (or other largest) grid definition should be used by default.

☞ For the purpose of determining the emission factor of the baseline emissions, PPs shall take into account electricity imports and exports (p81). (for the detail, see [EB22 Anx6, p3])

**Leakage**

☞ PPs do not need to consider emissions arising due to activities such as power plant construction, fuel handling (extraction, processing, and transport), and land inundation as leakage in applying this methodology.

**Monitoring**

☞ This baseline methodology shall be used in conjunction with the approved monitoring methodology ACM0002 (Consolidated monitoring methodology for grid-connected electricity generation from renewable sources).

## 3-2. Consolidated baseline methodology for grid-connected electricity generation from renewable sources (ACM0002 Ver4)

### Emission reductions

**$ER_y$** The GHG emission reduction achieved by the project activity during a given year "y"

= **$BE_y$** Baseline emissions - **$PE_y$** Project emissions

$PE_y = 0$ except for geothermal project activities

**$BE_y = EF_y * EG_y$**

- The baseline emissions factor in [t-$CO_2$/MWh]
- The electricity supplied by the project activity to the grid in [MWh]

**$EF_y$ (Combined Margin EF) = $W_{OM}$* $EF_{OM,y}$ + $W_{BM}$* $EF_{BM,y}$**

The weights $W_{OM}$ and $W_{BM}$, by default, are 50% (i.e., $W_{OM}$ = $W_{BM}$ = 0.5). Alternative weights can be used, as long as $W_{OM}$ + $W_{BM}$ = 1, and appropriate evidence justifying the alternative weights is presented (p82). These justifying elements are to be assessed by the EB.

**$EF_{OM,y}$** (the Operating Margin emission factor)[t-$CO_2$/MWh]

**$EF_{OM,y}$** is calculated based on one of the *following 4 methods* (p80):

Are there enough data available to analyze dispatch data?

- Yes → *(1)Dispatch Data Analysis OM*
- No → Do low-cost/must run resources constitute less than 50% of total grid generation in: 1) average of the 5 most recent years, or 2) based on long-term normals for hydroelectricity production?
  - Yes → *(2)Simple OM*
  - No → Are there enough data available to apply Simple Adjusted OM?
    - Yes → *(3)Simple adjusted OM*
    - No → *(4)Average OM*

Low operating cost and must run resources typically include hydro, geothermal, wind, low-cost biomass, nuclear and solar generation. If coal is obviously used as must-run, it should also be included in this list, i.e. excluded from the set of plants.

(for details, see [EB22 Anx6,p5])

**$EF_{BM,y}$** (the Build Margin emission factor)[t-$CO_2$/MWh]

PPs should choose between the following 2 options a sample group that has the larger annual generation:

⇒ The 5 power plants that have been built most recently, or

⇒ The power plants capacity additions in the electricity system that comprise 20% of the system generation [in MWh] and that have been built most recently.

(Power plant capacity additions registered as CDM project activities should be excluded from the sample group.)

**$EF_{BM,y}$** is calculated by dividing $CO_2$ emissions [t-$CO_2$] of the chosen sample group by the electricity [MWh] delivered to the grid by that group.

PPs shall choose between one of the following 2 options:

*Option 1*. Calculate $EF_{BM,y}$ ex ante based on the most recent information available on plants already built at the time of PDD submission.

*Option 2*. For the 1st crediting period, $EF_{BM,y}$ must be updated annually ex post for the year in which actual project generation and associated emissions reductions occur. For subsequent crediting periods, $EF_{BM,y}$ should be calculated ex-ante, as described in option 1 above.

## 3-2. Consolidated baseline methodology for grid-connected electricity generation from renewable sources (ACM0002 Ver4)

**Calculation methods for $EF_{OM,y}$** (the Operating Margin emission factor)[t-$CO_2$/MWh]

**(1) Dispatch Data Analysis OM** [EB22 Anx6, p8]

(i) Obtain from a national dispatch center, the grid system dispatch order of operation for each power plant of the system, and the amount of power [MWh] that is dispatched from all plants in the system during each hour that the project activity is operating.

(ii) At each hour in a year, stack each plants generation using the merit order. The set of plants consists of those plants at the top of the stack (i.e., having the least merit), whose combined generation comprises 10% of total generation from all plants during that hour (including imports to the extent they are dispatched).

(iii) Calculate the hourly generation-weighted average emissions per electricity unit [t-$CO_2$/MWh] of the set of power plants in the top 10% of grid system dispatch order during each hour in a year.

(iv) Multiply the hourly emission factor above by the generation of the CDM project [MWh] in each hour, which gives amount of $CO_2$ emissions [t-$CO_2$].

(v) Divide the amount of $CO_2$ emissions above by the generation of the CDM project [MWh] in the year, which gives the Dispatch Data OM emission factor [t-$CO_2$/MWh].

**(2) Simple OM** [EB22 Anx6, p6]

(i) Identify the generating sources delivering electricity to the grid, not including low-operating cost and must-run power plants, and including imports to the grid.

(ii) The Simple OM emission factor [t-$CO_2$/MWh] is calculated as the generation-weighted average emissions per electricity unit of the generating sources above in a year.

**(3) Simple Adjusted OM** [EB22 Anx6, p7]

(i) Separate the power sources (including imports) delivering electricity to the grid in low-cost/must-run power sources and other power sources.

(ii) Calculate the generation-weighted average emissions per electricity unit [t-$CO_2$/MWh] of the set of power plants in a year for both low-cost/must-run power sources and other power sources.

(iii) Calculate $\lambda$ (p81).

(ii) The Simple Adjusted OM emission factor [t-$CO_2$/MWh] is calculated as "$\lambda$ x (emission factor of low-cost/must-run power sources)" + "(1- $\lambda$) x (other power sources)"

**(4) Average OM** [EB22 Anx6, p9]

The average OM emission factor [t-$CO_2$/MWh] is calculated as the generation-weighted average emissions per electricity unit of all generating sources serving the system.

☞Simple OM, Simple Adjusted OM and Average OM emission factors can be calculated using either of the two following data vintages for years:

⇒ A 3-year average, based on the most recent statistics available at the time of PDD submission, or

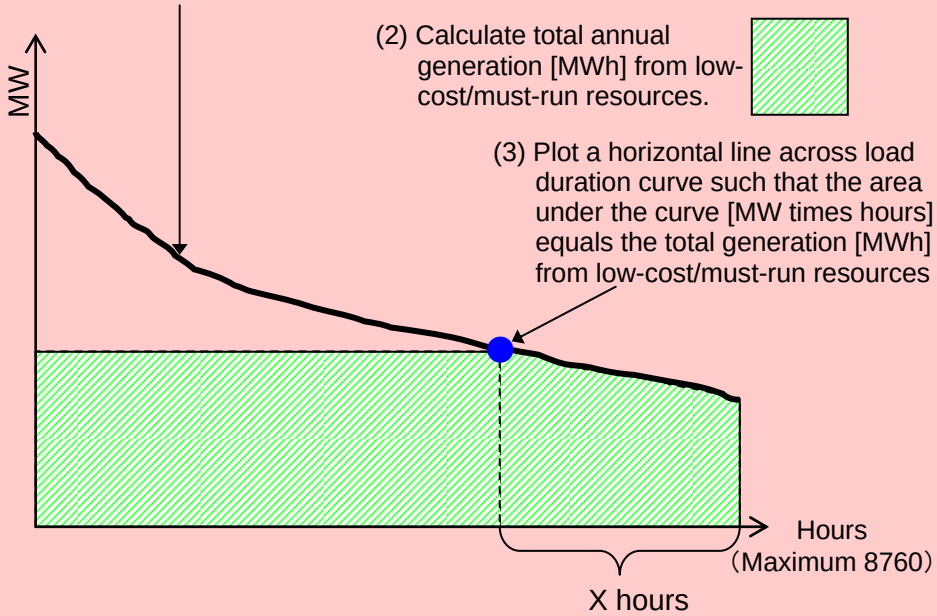
⇒ The year in which project generation occurs, if OM emission factor for a year is updated based on ex post monitoring.

## 3-2. Consolidated baseline methodology for grid-connected electricity generation from renewable sources (ACM0002 Ver4)

### How to calculate λ for the Simple Adjusted OM

(1) Collect chronological load data for each hour of a year, and sort load data from highest to lowest MW level. Plot MW against 8760 hours in the year, in descending order.

(2) Calculate total annual generation [MWh] from low-cost/must-run resources.




(4) Determine "the Number of hours per year for which low-cost/must-run sources are on the margin".

(5) λ = X/8760

*If the lines do not intersect at step (3), then λ is equal to zero.

### Electricity imports and exports

♦ Electricity transfers from connected electricity systems to the CDM project electricity system are defined as **electricity imports** and electricity transfers to connected electricity systems are defined as **electricity exports**.

**Electricity imports** [EB22 Anx6, p3]

♦Determining the OM emission factor

☞For imports from connected electricity system located in another country

⇒The emission factor is 0 [t-$CO_2$/MWh]

☞For imports from connected electricity system located within the same country

⇒0 [t-$CO_2$/MWh]

⇒The emission factor(s) of the specific power plant(s) from which electricity is imported, if and only if the specific plants are clearly known, or

⇒The average emission rate of the exporting grid, if and only if net imports do not exceed 20% of total generation in the project electricity system, or

⇒The emission factor of the exporting grid, determined as described in page 79, if net imports exceed 20% of the total generation in the project electricity system.

♦Determining the BM emission factor

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

⇒In such cases, the transmission capacity may be considered a build margin source, with the emission factor determined as for the OM imports above.

**Electricity exports** [EB22 Anx6, p4]

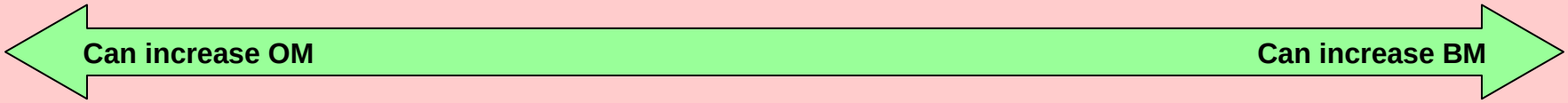
Electricity exports should not be subtracted from electricity generation data used for calculating and monitoring the baseline emission rate.

## 3-2. Consolidated baseline methodology for grid-connected electricity generation from renewable sources (ACM0002 Ver4)

**Guidance regarding OM/BM weighting in approved methodologies that use the combined margin approach** [EB22 Anx2, para2-3]

☞ The following guidance provides a number of project-specific and context-specific factors for developing alternative OM and BM weights to the default. It does not, however, provide specific algorithms to translate these factors into quantified weights, nor does it address all factors that might conceivably affect these weights. In this case, PPs are suggested to propose specific quantification methods with justifications that are consistent with the guidance provided below.

☞ Given that it is unlikely that a project will impact either the OM or BM exclusively during the first crediting period, it is suggested that neither weight exceed 75% during the 1st crediting period.




**Project size (absolute or relative to the grid size of the system or the size of other system capacity additions)**
⇒No change in weight on basis of absolute or relative size alone.

**Timing of project output**
⇒Project activities with output during mainly off-peak periods (e.g. solar PV projects in evening peak regions, seasonal biomass generation during off-peak seasons) can have a greater OM weight

**Timing of project output**
⇒Projects with disproportionately high output during on-peak periods (e.g. air conditioning efficiency projects in some grids) can have greater BM weight.

**Predictability of project output**
⇒Projects with output of an intermittent nature (e.g. wind or solar projects) which may have limited capacity value, depending on the nature of the (wind/solar) resource and the grid in question, and to the extent that a project's capacity value is lower than that of a typical grid resource can reduce the BM weight.

**Suppressed demand**
⇒Under conditions of suppressed demand that are expected to persist through over half of the 1st crediting period across a significant number of hours per year, available power plants are likely to be operated fully regardless of the CDM project, and thus the OM weight can be reduced.

# Attachment 4. Examples of simplified baseline and monitoring methodologies for SSC

## Example 1

**AMS-I.A. Renewable energy projects: Electricity generation by the user** [CP/2002/7/Ad3 ApxB] [Version 06: 30 September 2005]

**Technology/measure**

☞This category comprises renewable energy generation units that supply individual households or users. Upgrading of existing equipment is not allowed. These units include technologies such as solar power, hydropower, wind power, and other technologies that produce electricity all of which is used on-site by the user, such as solar home systems, and wind battery chargers.

⇒The renewable generating units may be new or replace existing fossil fuel fired generation. The capacity of these renewable energy generators shall not exceed 15 MW.

⇒Combined heat and power (co-generation) systems are eligible under categories I.C and I.D.

**Boundary**

☞The physical, geographical site of the renewable energy generating unit and the equipment that uses the electricity produced delineates the project boundary.

**Baseline**

Option 1: Baseline emissions = (Annual energy baseline [kWh/year]) x ($CO_2$ emission coefficient for the fuel displaced [kg-$CO_2$/kWh])

⇩

(The estimated annual output of the renewable energy technologies [kWh/year]) / (1- fraction (%))

Average technical distribution losses that would have been observed in diesel powered mini-grids in isolated areas. A reasonable default value for distribution losses on low voltage rural distribution grid could be **20%**.

IPCC default values for emission coefficients may be used. A default value **0.9 kg $CO_2$/kWh**, which is derived from diesel generation units, may be used. A higher emissions factor may be used, with adequate justification.

Option 3: A trend adjusted projection of historic fuel consumption is acceptable in situations where an existing technology is replaced.

Note: There are 3 options to calculate annual energy baseline. Option 2 is described in CP/2002/7/Ad3 ApxB [Version 06: 30 September 2005].

**Leakage**

☞If the energy generating equipment is transferred from another activity or if the existing equipment is transferred to another activity, leakage is to be considered.

**Monitoring**

☞(a) An annual check of all systems or a sample thereof to ensure that they are still operating(other evidence of continuing operation, such as on-going rental/lease payments could be a substitute).

or

☞(b) Metering the electricity generated by all systems of a sample thereof.

## Example 2

**AMS-I.D. Grid connected renewable electricity generation** [CP/2002/7/Ad3 ApxB] [Version 06: 30 September 2005]

**Technology/measure**

☞ This category comprises renewable energy generation units, such as photovoltaics, hydro, tidal/wave, wind, geothermal, and renewable biomass, that supply electricity to and/or displace electricity from an electricity distribution system that is or would have been supplied by at least one fossil fuel fired generating unit.

⇒ If the unit added has both renewable and non-renewable components (e.g. a wind/diesel unit), the eligibility limit of 15MW for a SSC project activity applies only to the renewable component. If the unit added co-fires nonrenewable biomass or fossil fuel, the capacity of the entire unit shall not exceed the limit of 15MW.

⇒ Biomass combined heat and power (co-generation) systems that supply electricity to and/or displace electricity from a grid are included in this category. To qualify under this category, the sum of all forms of energy output shall not exceed 45 $MW_{thermal}$.

**Boundary**

☞ The project boundary encompasses the physical, geographical site of the renewable generation source.

**Baseline**

Baseline emissions = (the kWh produced by the renewable generating unit [kWh]) x ($CO_2$ emission coefficient [kg-$CO_2$/kWh])

The average of the "approximate operating margin" and the "build margin"

- The weighted average emissions [kg-$CO_2$/kWh] of all generating sources serving the system, excluding hydro, geothermal, wind, low-cost biomass, nuclear and solar generation.
- The weighted average emissions [kg-$CO_2$/kWh] of recent capacity additions to the system, which capacity additions are defined as the greater [in MWh] of **most recent 20%** of existing plants or the **5 most recent** plants.

**or**

The weighted average emissions [kg-$CO_2$/kWh] of the current generation mix

Note: For a system where all generators use exclusively fuel oil and/or diesel fuel, the baseline is the annual kWh generated by the renewable unit times an emission coefficient for a modern diesel generating unit of the relevant capacity operating at optimal load as given in Table I.D.1. in CP/2002/7/Ad3 ApxB [Version 06: 30 September 2005].

**Leakage**

☞ If the energy generating equipment is transferred from another activity or if the existing equipment is transferred to another activity, leakage is to be considered.

**Monitoring**

☞ Monitoring shall consist of metering the electricity generated by the renewable technology. In the case of co-fired plants, the amount of biomass input and its energy content shall be monitored.

## Example 3

**Type II.C. Demand-side energy efficiency programmes for specific technologies** [CP/2002/7/Ad3 ApxB] [Version 06: 30 September 2005]

**Technology/measure**

☞This category comprises programmes that encourage the adoption of energy-efficient equipment, lamps, ballasts, refrigerators, motors, fans, air conditioners, appliances, etc. at many sites.

☞These technologies may replace existing equipment or be installed at new sites.

☞The aggregate energy savings by a single project may not exceed the equivalent of 15 GWh per year.

**Boundary**

☞The project boundary is the physical, geographical location of each measure (each piece of equipment) installed.

**Baseline**

Baseline emissions = (Annual energy baseline [kWh/year]) x ($CO_2$ emission coefficient [kg-$CO_2$/kWh])

⇩

( $\Sigma_i(n_i * p_i * o_i)$ [kWh/year]) / (1- fraction [%])

⇩

$n_i$ = the number of installed devices

$p_i$ = the power of the devices replaced

⇒In the case of a retrofit programme, "power" is the weighted average of the devices replaced.

⇒In the case of new installations, "power" is the weighted average of devices on the market.

$o_i$ = the average annual operating hours of the installed devices.

Fraction is average technical distribution losses for the grid serving the locations where the devices are installed.

An emission coefficient is calculated in accordance with provisions of category I.D projects.

Note: If the energy displaced is a fossil fuel, see CP/2002/7/Ad3 ApxB [Version 05: 25 February 2005].

**Leakage**

☞ If the energy efficiency technology is equipment transferred from another activity, leakage calculation is required.

**Monitoring**

Recording the "power" of the device installed using nameplate data or bench tests of a sample of the units installed and metering a sample of the units installed for their operating hours using run time meters.

**or**

Metering the "energy use" of an appropriate sample of the devices installed. For technologies that represent fixed loads while operating, such as lamps, the sample can be small while for technologies that involve variable loads, such as air conditioners, the sample may need to be relatively large.

☞ In either case, monitoring shall include annual checks of a sample of non-metered systems to ensure that they are still operating (other evidence of continuing operation, such as on-going rental/lease payments could be a substitute).

☞ If the devices installed replace existing devices, the number and "power" of the replaced devices shall be recorded and monitored.

## Example 4

**AMS-III. D. Methane recovery** [CP/2002/7/Ad3 ApxB] [Version 06: 30 September 2005]

**Technology/measure**

☞This project category comprises methane recovery from coalmines, agro-industries, landfills, wastewater treatment facilities and other sources. Measures shall both reduce anthropogenic emissions by sources and directly emit less than 15,000 t-$CO_2$ equivalent annually.

⇒$CO_2$ emissions from combustion of non-biogenic methane shall be accounted for in the project activity.

**Boundary**

☞The project boundary is the physical, geographical site of the methane recovery facility.

**Baseline**

Baseline emissions = [the amount of methane that would be emitted during the crediting period in the absence of the project activity]

The baseline shall cover only the capture and flaring that would not have happened in the absence of the project activity.

In the case of landfill gas, waste gas, waste water treatment and agro-industries projects: If the recovered methane is used for heat or electricity generation it can apply to the corresponding category of type I project activities. In these cases PPs may submit 1 single project design document for all of the components of the project activity.

**Leakage**

☞No leakage calculation is required.

**Monitoring**

☞The amount of methane recovered and used as fuel or combusted shall be monitored,using flow meters and analyzing the methane content of the combusted gases either online, or with samples taken at least quarterly, and more frequently if the results show significant deviations from previous values.

☞Regular maintenance should ensure optimal operation of flares. The flare efficiency, defined as the fraction of time in which the gas is combusted in the flare, multiplied by the efficiency of the flaring process, shall be monitored.

☞Flow meters, sampling devices and gas analyzers shall be subject to regular maintenance, testing and calibration to ensure accuracy.

# Attachment 5. Clarifications regarding biomass

**Definition of biomass** [EB20 Anx8 para2]

♦ When referring to biomass in relevant baseline and monitoring methodologies:

☞ Biomass means;

⇒Non-fossilized and biodegradable organic material originating from plants, animals and micro-organisms.

⇒Also products, by-products, residues and waste from agriculture, forestry and related industries as well as the non-fossilized and biodegradable organic fractions of industrial and municipal wastes.

⇒Also gases and liquids recovered from the decomposition of non-fossilized and biodegradable organic material.

☞ Biomass residues means biomass by-products, residues and waste streams from agriculture, forestry and related industries.

**Calculating emission reductions for small-scale project activities that propose the switch from non-renewable to renewable biomass** [EB22 Rep para59-60]

♦The EB, at its 21st meeting, agreed to delete the references to "non-renewable biomass" in the "Indicative simplified baseline and monitoring methodologies for selected SSC project activity categories".

♦The EB agreed that the SSC-WG shall undertake work on the development of methodologies for calculating emission reductions for small-scale project activities that propose the switch from non-renewable to renewable biomass on a priority basis.

☞In this regard, the EB requested the secretariat to launch a call for inputs related to alternative methods for calculating the emission reductions.

☞The call for public comments was open from 28 October 2005 to 05 December 2005.

**Consideration of changes in carbon pools** (p46) **due to a CDM project activity** [EB20 Anx8 para3-4]

**A project activity, which does not seek to obtain tCERs or lCERs from A/R project activities**

☞This project activity may directly or indirectly results in a net <u>decrease</u> of carbon pools compared to what would occur in the absence of the project activity.

⇒Such changes should be taken into account in the calculation of emission reductions subtracting the corresponding quantities from emission reductions.

☞This project activity may directly or indirectly results in a net <u>increase</u> of carbon pools compared to what would occur in the absence of the project activity.

⇒This increase should not be taken into account in the calculation of emission reductions.

**A project activity, which does seek to obtain tCERs or lCERs from A/R project activities**

☞This activity should be treated as a separate project activity and shall fulfill the modalities and procedures for A/R activities under the CDM.

# Attachment 6. List of approved methodologies

| Sectoral Scope | | Approved Methodologies | |
|---|---|---|---|
| 1 | Energy industries (renewable - / non-renewable sources) | ACM0002 ver3 | Consolidated methodology for grid-connected electricity generation from renewable sources |
| | | ACM0004 | Consolidated methodology for waste gas and/or heat for power generation |
| | | ACM0006 | Consolidated methodology for grid-connected electricity generation from biomass residues |
| | | ACM0007 | Methodology for conversion from single cycle to combined cycle power generation |
| | | AM0005 | Small grid-connected zero-emissions renewable electricity generation |
| | | AM0007 | Analysis of the least-cost fuel option for seasonally-operating biomass cogeneration plants |
| | | AM0010 | Landfill gas capture and electricity generation projects where landfill gas capture is not mandated by law |
| | | AM0014 | Natural gas-based package cogeneration |
| | | AM0019 | Renewable energy project activities replacing part of the electricity production of one single fossil-fuel-fired power plant that stands alone or supplies electricity to a grid, excluding biomass projects |
| | | AM0024 | Methodology for greenhouse gas reductions through waste heat recovery and utilization for power generation at cement plants |
| | | AM0026 | Methodology for zero-emissions grid-connected electricity generation from renewable sources in Chile or in countries with merit order based dispatch grid |
| 2 | Energy distribution | | |
| 3 | Energy demand | AM0017 ver2 | Steam system efficiency improvements by replacing steam traps and returning condensate |
| | | AM0018 | Steam optimization systems |
| | | AM0020 | Baseline methodology for water pumping efficiency improvements |
| 4 | Manufacturing industries | ACM0003 | Substitution of $CO_2$ from fossil or mineral origin by $CO_2$ from renewable sources in the production of inorganic compounds |
| | | ACM0005 ver2 | Consolidated Methodology for Increasing the Blend in Cement Production |
| | | AM0007 | Analysis of the least-cost fuel option for seasonally-operating biomass cogeneration plants |
| | | AM0008 | Industrial fuel switching from coal and petroleum fuels to natural gas without extension of capacity and lifetime of the facility |
| | | AM0014 | Natural gas-based package cogeneration |
| | | AM0024 | Methodology for greenhouse gas reductions through waste heat recovery and utilization for power generation at cement plants |
| 5 | Chemical industries | AM0021 | Baseline Methodology for decomposition of $N_2O$ from existing adipic acid production plants |
| | | AM0027 | Substitution of $CO_2$ from fossil or mineral origin by $CO_2$ from renewable sources in the production of inorganic compounds |
| 6 | Construction | | |
| 7 | Transport | | |

**Attachment 6. List of approved methodologies**

| Sectoral Scope | | Approved Methodologies | |
|---|---|---|---|
| 8 | Mining/mineral production | ACM0008 | Consolidated methodology for coal bed methane and coal mine methane capture and use for power (electrical or motive) and heat and/or destruction by flaring |
| 9 | Metal production | | |
| 10 | Fugitive emissions from fuels (solid, oil and gas) | ACM0008 | Consolidated methodology for coal bed methane and coal mine methane capture and use for power (electrical or motive) and heat and/or destruction by flaring |
| | | AM0009 ver2 | Recovery and utilization of gas from oil wells that would otherwise be flared |
| | | AM0023 | Leak reduction from natural gas pipeline compressor or gate stations |
| 11 | Fugitive emissions from production and consumption of halocarbons and sulphur hexafluoride | AM0001 ver3 | Incineration of HFC 23 Waste Streams |
| 12 | Solvent use | | |
| 13 | Waste handling and disposal | ACM0001 ver2 | Consolidated methodology for landfill gas project activities |
| | | AM0002 ver2 | Greenhouse gas emission reductions through landfill gas capture and flaring where the baseline is established by a public concession contract |
| | | AM0003 ver3 | Simplified financial analysis for landfill gas capture projects |
| | | AM0006 | GHG emission reductions from manure management systems |
| | | AM0010 | Landfill gas capture and electricity generation projects where landfill gas capture is not mandated by law |
| | | AM0011 ver2 | Landfill gas recovery with electricity generation and no capture or destruction of methane in the baseline scenario |
| | | AM0012 | Biomethanation of municipal solid waste in India, using compliance with MSW rules |
| | | AM0013 ver2 | Forced methane extraction from organic waste-water treatment plants for grid-connected electricity supply |
| | | AM0016 ver2 | Greenhouse gas mitigation from improved animal waste management systems in confined animal feeding operations |
| | | AM0022 ver2 | Avoided Wastewater and On-site Energy Use Emissions in the Industrial Sector |
| | | AM0025 ver2 | Avoided emissions from organic waste composting at landfill sites |
| 14 | Afforestation and reforestation | AR-AM0001 | Reforestation of degraded land |
| 15 | Agriculture | AM0006 | GHG emission reductions from manure management systems |
| | | AM0016 ver2 | Greenhouse gas mitigation from improved animal waste management systems in confined animal feeding operations |

# Attachment 7. Glossary

| | |
|---|---|
| AAU | Assigned Amount Unit |
| ACM | Approved Consolidated Methodology |
| AE | Applicant Entity |
| AIE | Accredited Independent Entity |
| AM | Approved Methodology |
| A/R CDM | Afforestation and Reforestation Project Activities under the Clean Development Mechanism |
| AR | Afforestaion and Reforestation |
| Art.6-SC | Article 6 Supervisory Committee |
| CDM | Clean Development Mechanism |
| CDM-AP | CDM Accreditation Panel |
| CER | Certified Emission Reduction |
| COP | Conference of the Parties (to the UNFCCC) |
| COP/MOP | the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol |
| CPR | Commitment Period Reserve |
| DNA | Designated National Authority |
| DOE | Designated Operational Entity |
| EB | the CDM Executive Board |
| EIT | Economies in Transition |
| ERT | Expert Review Team |
| ERU | Emission Reduction Unit |
| GHG | Greenhouse Gas |
| GIS | Green Investment Schemes |
| GWP | Global Warming Potential |
| HFCs | Hydrofluorocarbon |
| IE | Independent Entity |
| IET | International emissions trading under the Kyoto Protocol |
| IPCC | Intergovernmental Panel on Climate Change |
| ITL | International Transaction Log |
| JI | Joint Implementation |
| JISC | Joint Implementation Supervisory Committee (=Art.6-SC) |

| | |
|---|---|
| KP | Kyoto Protocol |
| LULUCF | Land Use, Land-Use Change and Forestry |
| MP | Methodologies Panel |
| NM | New Methodology |
| OE | Operational Entity |
| Party | Country or regional integration organization which has ratified the KP, unless otherwise specified |
| PDD | Project Design Document |
| PFCs | Perfluorocarbons |
| PP | Project Participants |
| RMU | Removal Unit |
| SAR | (the IPCC) 2nd Assessment Report |
| SBI | Subsidiary Body for Implementation |
| SBSTA | Subsidiary Body for Scientific and Technological Advice |
| $SF_6$ | Sulfur Hexafluoride |
| SOP | Share of Proceeds |
| SSC | Small Scale CDM |
| UNFCCC | United Nations Framework Convention on Climate Change |

**Climate Change Policy Division**
**Global Environment Bureau**
**Ministry of the Environment, Japan**
**1-2-2, Kasumigaseki, Chiyoda-ku,**
**Tokyo, 100-8975 Japan**
**PHONE: +81-3-5521-8330 FAX: +81-3-3580-1382**
**URL: http://www.env.go.jp/**

**CDM Programme**
**Institute for Global Environmental Strategies**
**2108-11, Kamiyamaguchi, Hayama,**
**Kanagawa, 240-0115 Japan**
**PHONE: +81-46-855-3820 FAX: +81-46-855-3809**
**EMAIL: cdm-iges@iges.or.jp**
**URL: http://www.iges.or.jp/en/cdm/index.html**