



# *CDM and JI in*

# CHARTS

## Ver. 5.1

### March 2006

Updated up to the results of the 23rd meeting of the CDM EB

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

## 1. The Kyoto Protocol

1-1. Overview	P1
1-2. History	P2
1-3. List of Annex I Parties	P3

## 2. The Kyoto Mechanisms

2-1. The Clean Development Mechanism (CDM)	P4
2-2. Joint Implementation (JI)	P5
2-3. International Emissions Trading	P6

## 3. CDM project cycle

P8

## 4. CDM-related entities

4-1. COP/MOP	P10
4-2. Designated National Authority (DNA)	P10
4-3. CDM Executive Board (EB)	P11
4-4. Panels and Working Groups	P12
4-5. Designated Operational Entity (DOE)	P13
4-6. Project participants (PPs)	P15
4-7. Modalities of communication	P16

## 5. Conditions for CDM projects

P17

## 6. Baseline

6-1. Concept of the baseline and additionality	P18
6-2. Baseline scenario	P19
6-3. Baseline methodology	P20
6-4. Procedures for the submission of a proposed new methodology	P22
6-5. Procedures for the revision of an approved methodology	P24

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

7-1. Project boundary and leakage	P25
7-2. Monitoring	P25
7-3. Crediting period	P26

## 8. Validation of a CDM project activity

8-1. Overview of validation procedures	P28
8-2. Validation requirements	P29

## 9. Registration of a CDM project activity

9-1. Overview of registration procedures	P30
9-2. Procedures for review of registration	P31

## 10. Verification, certification and issuance of CERs

10-1. Overview of procedures for verification, certification and issuance of CERs	P32
10-2. Procedures for review of issuance	P33

## 11. Procedures for request for deviation

P34

## 12. Distribution of CERs

P35

## 13. Small-scale CDM (SSC)

13-1. Definition of a small-scale CDM project activity	P36
13-2. Simplified modalities and procedures	P38
13-3. Simplified baseline and monitoring methodologies	P40
13-4. Bundling of SSC projects activities	P41

# Contents

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

14-1. Overview of A/R CDM project activity	P42
14-2. Non-permanence of A/R CDM project activities (tCER and ICER)	P43
14-3. Calculation of GHG removals	P46
14-4. Small-scale A/R CDM project activity	P47

## 15. Joint Implementation (JI)

15-1. JI project cycle	P48
15-2. JI-related entities	P51
15-3. Conditions for JI projects	P54
15-4. Determination of JI projects	P55
15-5. Determination of the reductions or removals by JI projects	P56
15-6. Issuance and transfer of ERUs	P57

## 16. International Emissions Trading

16-1. Overview of International Emissions Trading	P58
16-2. Commitment period reserve (CPR)	P59

## 17. Terms for the Kyoto Mechanisms

17-1. Eligibility requirements to participate the Kyoto Mechanisms	P60
17-2. Limitations of the acquisition and issuance of KP units	P61
17-3. Restrictions to carry over KP units	P62
17-4. Restrictions in case a Party is not in compliance for its commitments	P62

## 18. Modalities for dealing with KP units

18-1. National registry	P63
18-2. CDM registry	P65
18-3. International transaction log (ITL)	P66
18-4. From issuance to retirement of KP units	P67

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

1-1. Contents of the Project Design Document (CDM-PDD)	P70
1-2. Contents of the proposed new methodology: baseline (CDM-NMB)	P72
1-3. Contents of the proposed new methodology: monitoring (CDM-NMM)	P73

## Attachment 2. Tool for the demonstration and assessment of additionality (Ver2)

P74

## Attachment 3. Examples of approved consolidated baseline methodology

3-1. Consolidated baseline methodology for landfill gas project activities (ACM0001 Ver2)	P76
3-2. Consolidated baseline methodology for grid-connected electricity generation from renewable sources (ACM0002 Ver5)	P78

## Attachment 4. Clarifications regarding biomass

P83

## Attachment 5. List of approved methodologies

P84

## Attachment 6. Glossary

P86

## Changes from previous version (Ver. 5.0 / January 2006)

<i>Page</i>	<i>Chapter</i>	<i>Change</i>
1	1-1. Overview	Added "consequences for non-compliance"
12	4-4. Panels and Working Groups	Updated number of members of MP and CDM AP Replaced EB-RT by EB-RIT
17	5. Conditions for CDM projects	Updated "Registration fee of the CDM project activity"
23	6-4. Procedures for the submission of a proposed new methodology	Updated (14) and (15a) from 10 days to 4 weeks
24	6-5. Procedures for the revision of an approved methodology	Updated "BOX: Revision of an AM" from 4 weeks to 8 weeks
25	7-2. Monitoring	Revised "Monitoring" Added "BOX: Conditions of use of measurement instruments in the monitoring"
32	10-1. Overview of procedures for verification, certification and issuance of CERs	Updated overall
40	13-3. Simplified baseline and monitoring methodologies	Added new categories (III.F to III.I)
41	13-4. Bundling of SSC projects activities	Updated and revised overall
53	15-2. JI related entities	Added Joint Implementation accreditation panel (JI-AP)
83	Attachment 4. Clarifications regarding biomass	Updated "Definition of renewable biomass" and revised overall
84-85	Attachment 5. List of approved methodologies	Updated overall
	Examples of simplified baseline and monitoring methodologies for SSC	Deleted

# 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<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), HFCs, PFCs, and SF<sub>6</sub>.

Countries have different targets for the 5-year period of 2008-2012 (1st commitment period) (p3).

- ☞ 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<sub>6</sub>).
- ☞ '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. [CP/2001/13/Ad2, p13 para29][CP/2001/13/Ad2, p33 para33][CP/2001/13/Ad2, p53 para5]  
☞ Provided the private firms meet eligibility requirements for using the Kyoto Mechanisms (p60).

- ◆ Party not in compliance shall be applied the following consequences. [CP/2001/13/Ad3, p76 para5]

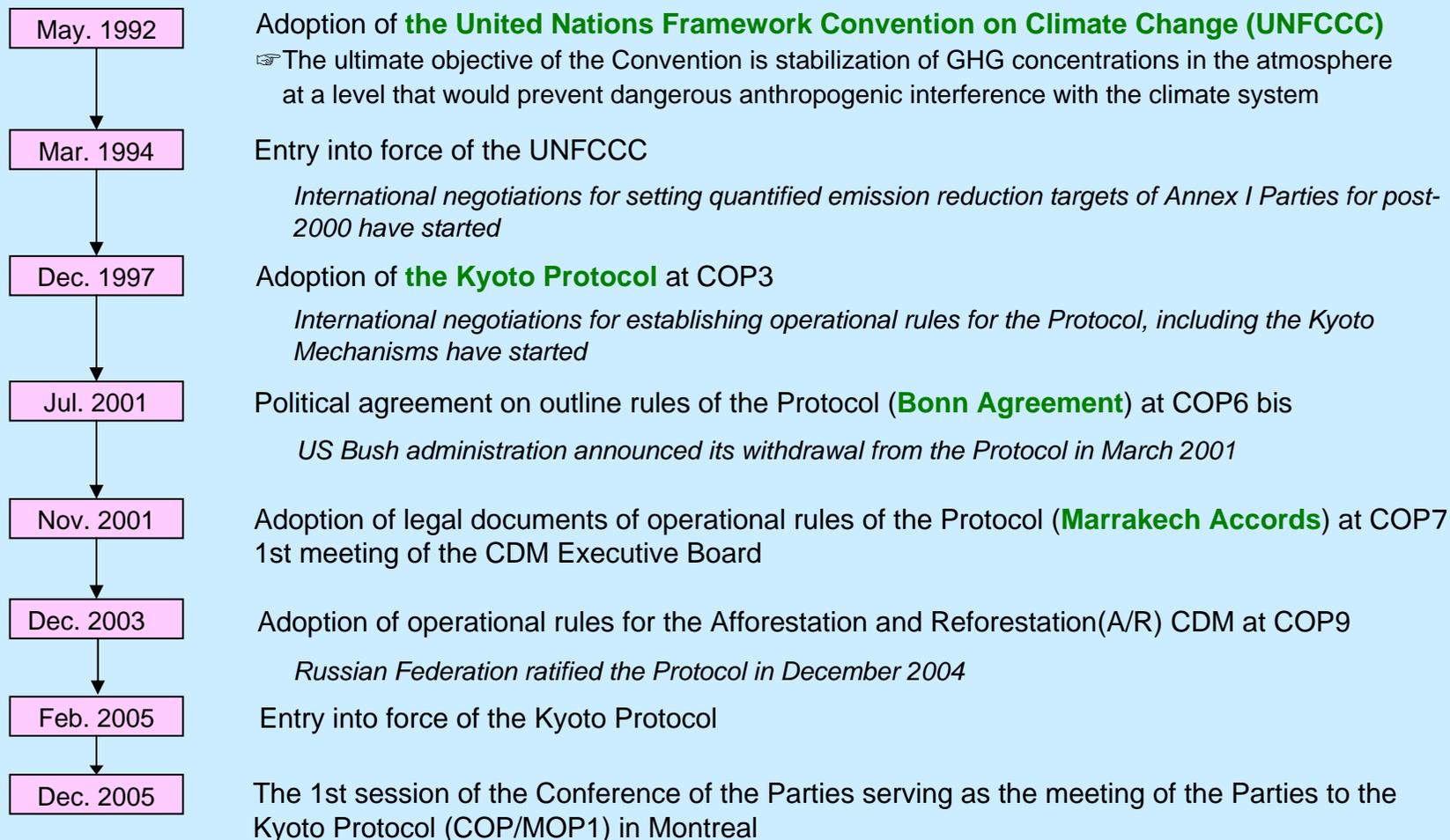
- ☞ Deduction from the Party's assigned amount for the 2nd commitment period of a number of tonnes equal to 1.3 times the amount in tonnes of excess emissions;
- ☞ Development of a compliance action plan; and
- ☞ Suspension of the eligibility to make transfers under Article 17 of the Protocol until the Party is reinstated.

### BOX: Global Warming Potential (GWP)

GWP is a measure of the relative radiative effect of greenhouse gases compared to CO<sub>2</sub>. 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<sub>6</sub> is 23900. Thus, 1t of methane emissions is equivalent to 21t of CO<sub>2</sub> 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:



### 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<sub>2</sub> emissions for 1990 of the Annex I Parties, have deposited their instruments of ratification, acceptance, approval or accession. [KP Art.25 para1]

☞ As of 28 February 2006, 162 Parties have ratified the Protocol.

☞ 61.6% of the total CO<sub>2</sub> 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	<i>Australia</i>	8%	417.9
Spain	15.0%	283.9	<i>Croatia</i>	-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	<i>USA</i>	-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	<i>Monaco</i>	-8%	0.1
UK	-12.5%	748.0	Estonia	-8%	43.5	<i>Turkey</i>		
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 GHG emissions in 1990 (unit: million t-CO<sub>2</sub> 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(1985-87 Average), 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.

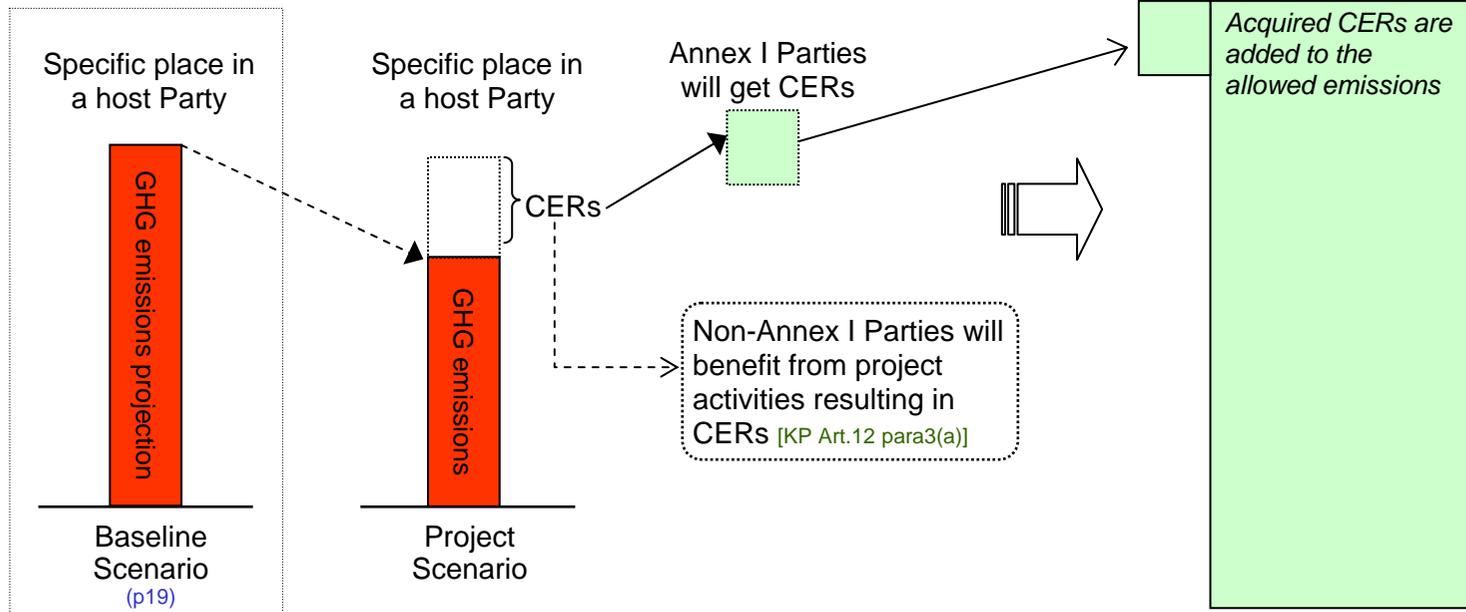
☞ There are 129 non-Annex I Parties which have ratified the UNFCCC, and the Kyoto Protocol, as of 28 February 2006.

## 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]

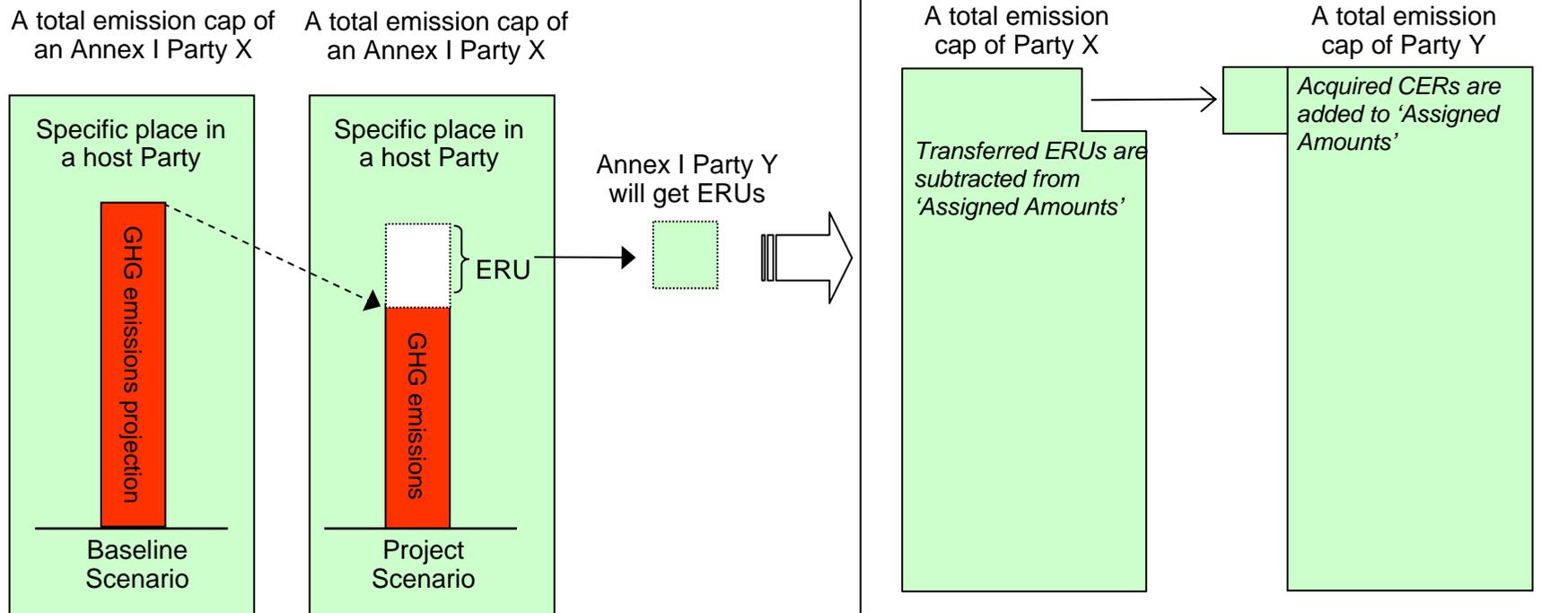
Host Party (non-Annex I) which doesn't have an emission cap



## 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]

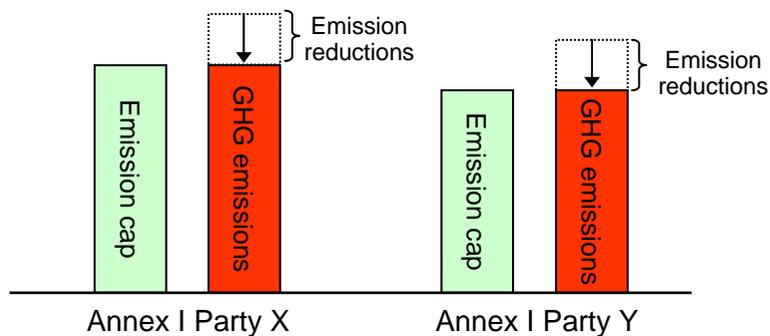
The total amount of emission cap of Annex I Parties is same



## 2-3. International Emissions Trading

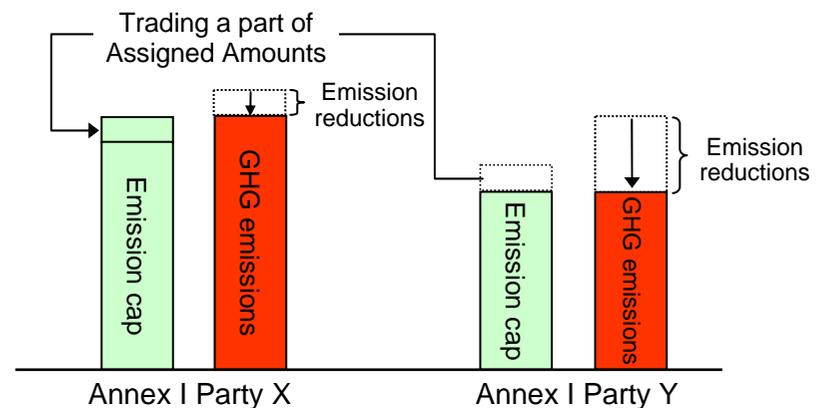
- ◆ International Emissions Trading is to trade a part of emission cap between Annex I Parties.
  - ☞ The total amount of emission cap of Annex I Parties will not change.
  - ☞ Only Annex B Parties of the Kyoto Protocol can participate International Emissions Trading.
- ◆ Through market mechanism, International 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 cost of reduction	\$200	\$100	-
Total cost of reduction	\$400	\$200	\$600
Trading cost	-	-	-
Total compliance cost	\$400	\$200	<b>\$600</b>

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 cost of reduction	\$200	\$100	-
Total cost of reduction	\$200	\$300	\$500
Trading cost	150	-150	0
Total compliance cost	\$350	\$150	<b>\$500</b>

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

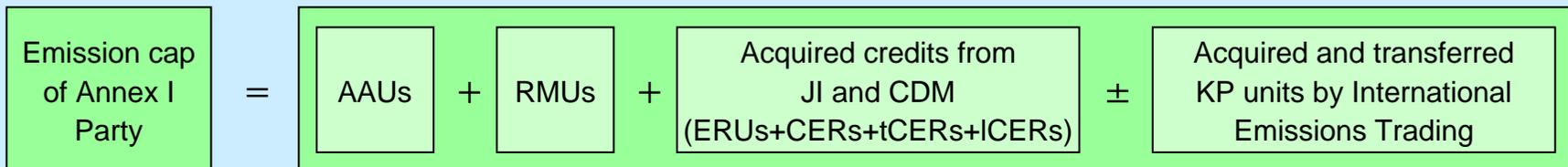
☞ **Certified emission reduction (CER)** from the CDM

☞ **Temporary CER (tCER)** and **long-term CER (ICER)**

⇒ tCER and ICER are issued from A/R project activities under the CDM. [CP/2003/6/Ad2, p16 para1(g)-(h)]

◆ Minimum trading unit is 1t-CO<sub>2</sub> equivalent.

◆ GHG emission cap of an Annex I Party at the end of the 1<sup>st</sup> commitment period is as follows.



### 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 1<sup>st</sup> 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]

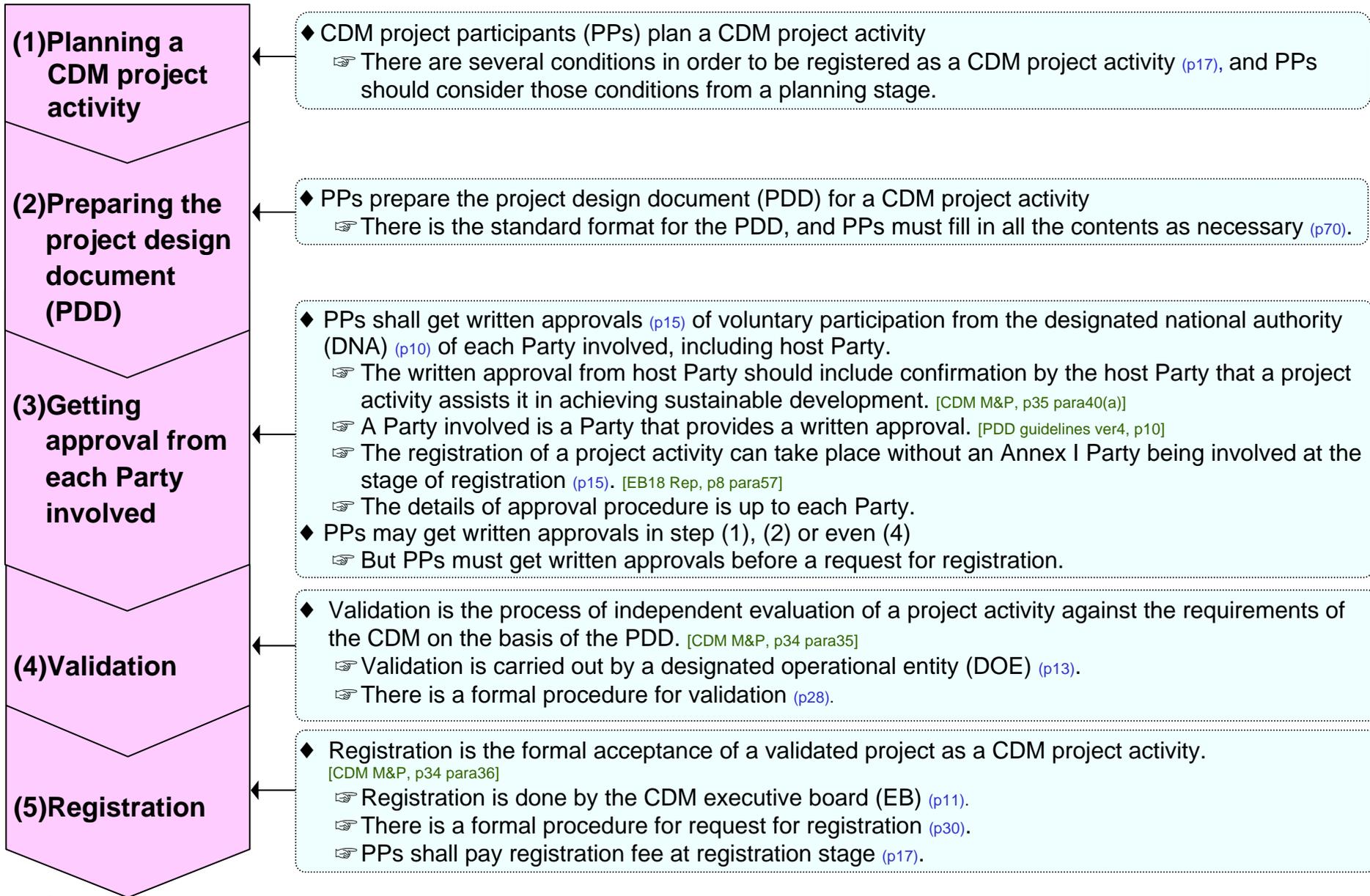
☞ There are several restrictions depending on the type of KP units (p62).

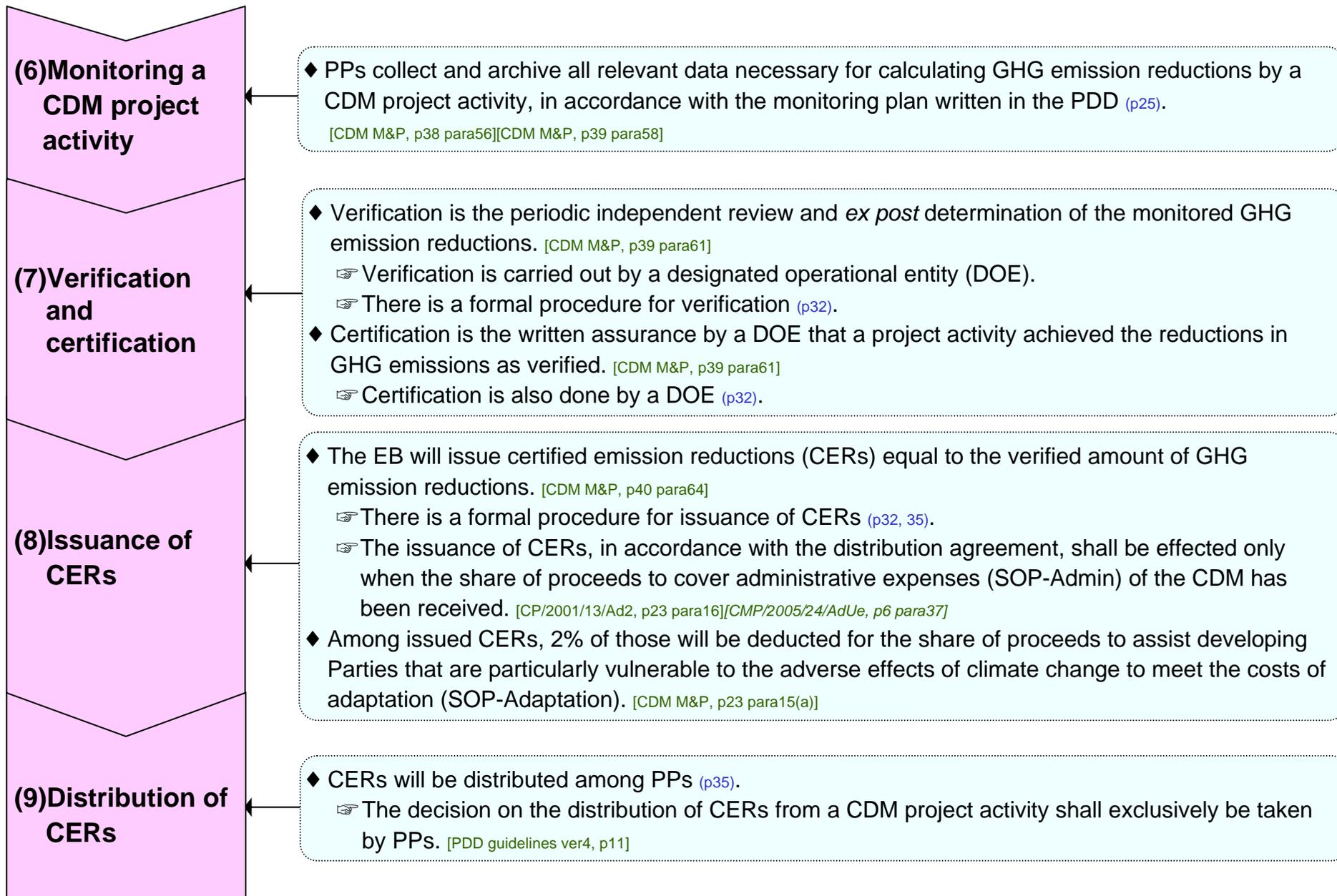
### BOX: tCER and ICER

“tCER and ICER” 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.





## 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. [EB23 Anx4, para2-3]
- ◆ 2 members of the EB will act as Chair and vice Chair of the panel, respectively.]
- ◆ In addition to the designated EB members, the panel shall be composed of 15 members. [EB23 Anx4, p2 para5]

#### 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. [EB23 Anx14, 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 7 members. [EB23 Anx14, 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. [EB23 Anx20, 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. [EB23 Anx20, para3]

#### EB-RIT

(Registration and Issuance Team)

- ◆ EB-RIT serves the purpose to prepare appraisals of requests for registration (p30) and issuance of CERs (p32) assessing whether their requirements are met and/or appropriately dealt with by DOEs, and identify general issues related to registration and issuance for consideration by the EB. [EB23 Anx34, para3]
- ◆ The EB-RIT is composed of 10 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. [EB23 Anx34, para5]

#### 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 [EB23 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 6 members. [EB23 Anx1, p3 para13]

#### 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) (p84) 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”.

## 4-5. Designated Operational Entity (DOE)

**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&amp;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<sub>2</sub> 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 listserv.
- ☞ 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 listserv, 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 [EB23 Rep Anx35]

- ☞ PPs shall pay registration fee at registration stage.(p30)
- ☞ The revised registration fee shall be the share of proceeds to cover administrative expenses (SOP-Admin)(p35) applied to the expected average annual emission reduction for the project activity over its crediting period.
  - ⇒ SOP-Admin is USD 0.10/CER issued for the first 15,000 t-CO<sub>2</sub> and USD 0.20/CER issued for any amount in excess of 15,000 t-CO<sub>2</sub>, for which issuance is requested in a given calendar year.
  - ⇒ The maximum registration fee shall be USD 350,000.
  - ⇒ No registration fee has to be paid for CDM project activities with expected average annual emission reduction over the crediting period below 15,000 t-CO<sub>2</sub>.
- ☞ The registration fee shall be deducted from the SOP-Admin.
  - ⇒ In effect, the registration fee is an advance payment of the SOP-Admin for the emission reductions achieved during the first year.
  - ⇒ If an activity is not registered, any registration fee above USD 30,000 shall be reimbursed.
- ☞ 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]

### 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

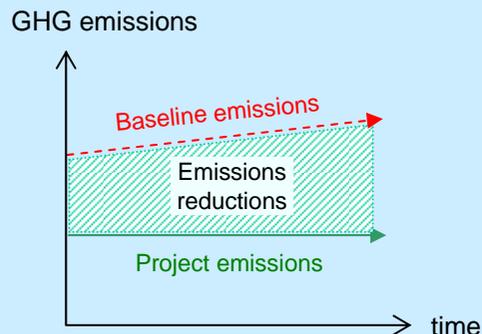
### BOX: Carbon dioxide capture and storage (CCS)

- ☞ 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

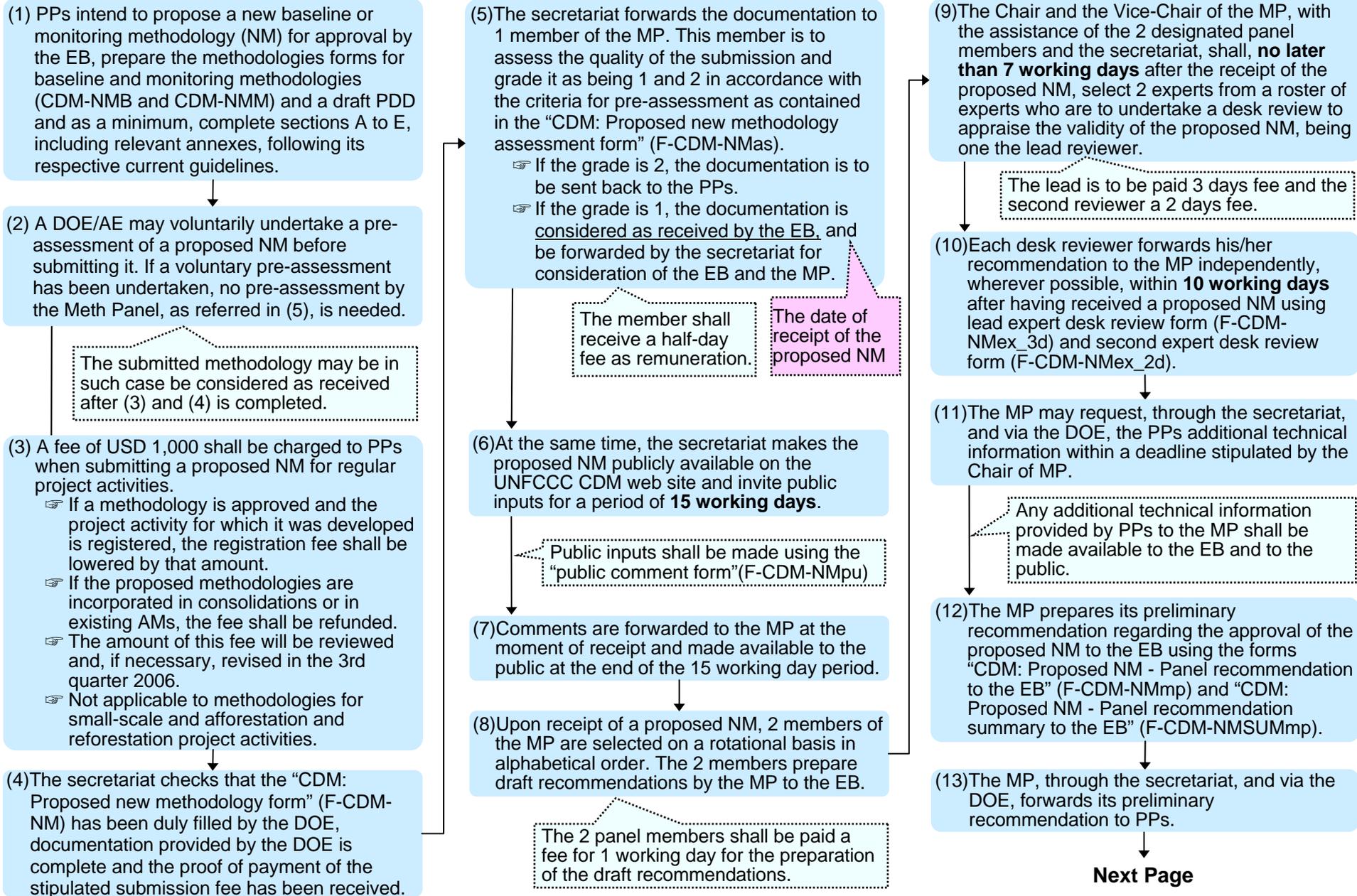
[EB22 Anx2, p2 para11]

- ☞ 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]

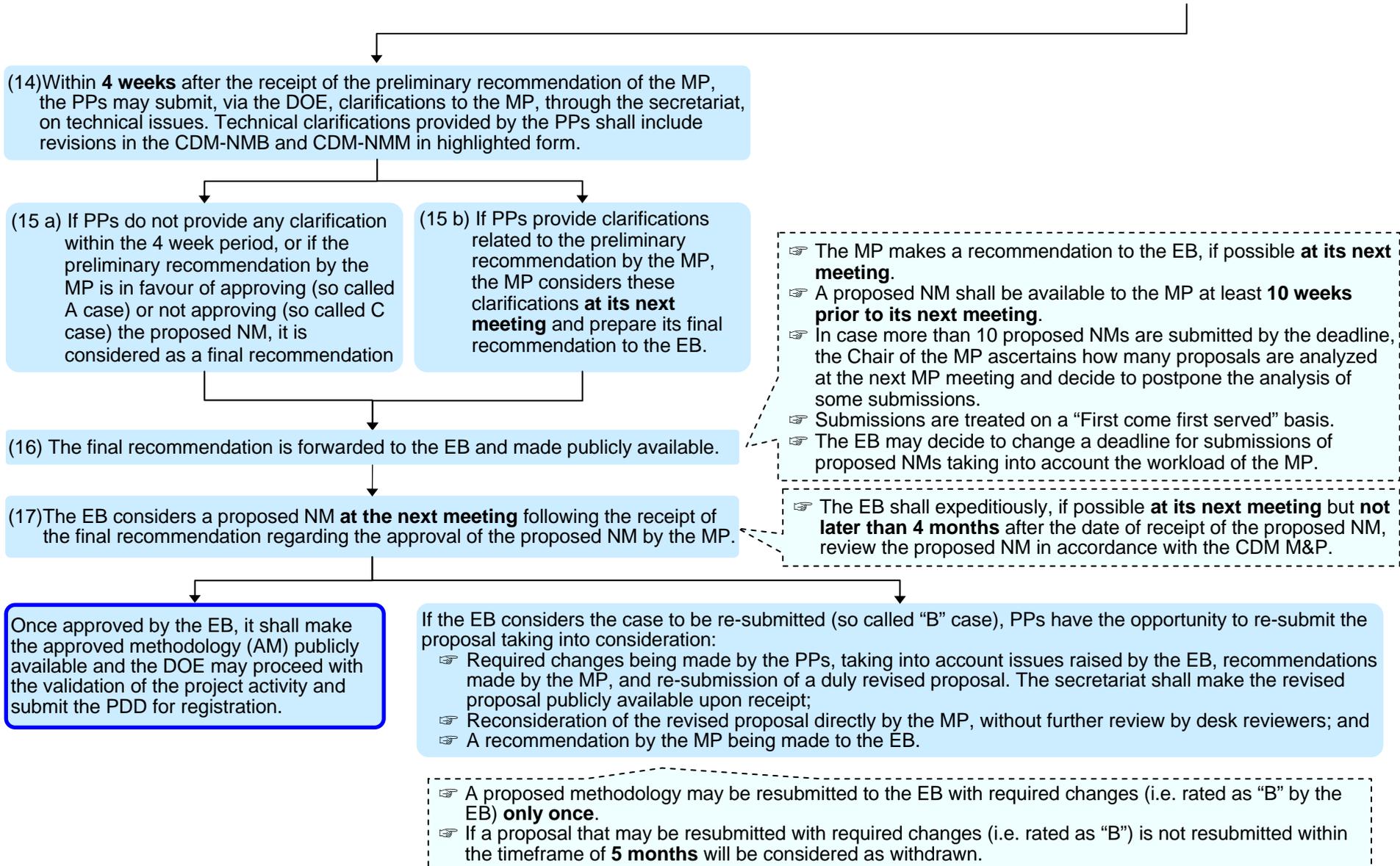
- ☞ Where a project activity involves the replacement or retrofit of existing equipment or facilities, it is reasonable to assume that emission reductions shall only be accounted from the date of replacement until the point in time when the existing equipment would have been replaced in the absence of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



Next Page

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



## 6-5. Procedures for the revision of an approved methodology

[EB23 Anx3][Version 3]

(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 previous AM for which requests for registration are submitted before or **within 8 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".

These procedures shall apply *mutatis mutandis* to approved methodologies for A/R project activities and approved small scale methodologies.

## 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 approved by the EB and made publicly available along with relevant guidance. [PDD guidelines ver4, p10]
- ☞ PPs may propose a new monitoring methodology.
  - ⇒ Procedures for the submission of a proposed new monitoring methodology is same as that of new baseline methodology (p22).

#### BOX: Conditions of use of measurement instruments in the monitoring [EB23 Rep, p5 para24]

- ◆ The specific uncertainty levels, methods and associated accuracy level of measurement instruments and calibration procedures to be used for various parameters and variables should be identified in the PDD, along with detailed quality assurance and quality control procedures.
- ◆ In addition standards recommended shall either be national or international standards.
- ◆ The verification of the authenticity of the uncertainty levels and instruments are to be undertaken by the DOE during the verification stage.

### 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

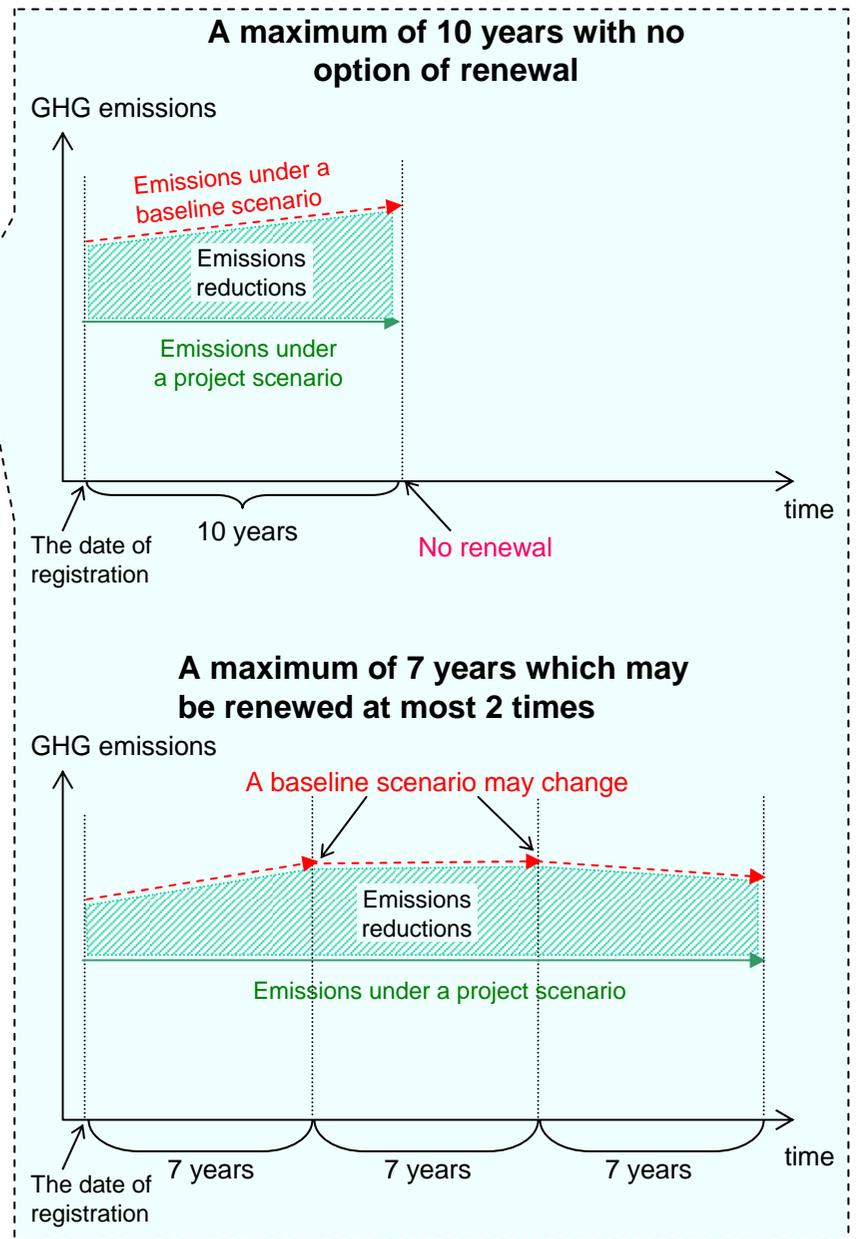
[CDM M&P, p37 para49] :

- ☞ 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]



**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

#### CDM project participants (PPs)

(1) Select a DOE for validation from a list of DOEs and contract with them. [CDM M&P, p34 para37]

(2) Submit a PDD and any supporting documentation to the DOE.

#### Designated operational entity (DOE)

(3) Review the PDD to confirm that the requirements for the CDM have been met (p29). [CDM M&P, p34 para37]

(4) Establish a web site where CDM-PDDs shall be made publicly available in PDF format with a link to the UNFCCC CDM web site; or directly publicly available on the UNFCCC CDM web.

Submit the following information to be made publicly available:

- (a) The name of the proposed CDM project activity
- (b) The address of the web page where the CDM-PDD will be found or the CDM-PDD which would be made available on the UNFCCC CDM web site.

(6) Receive comments from Parties, stakeholders and accredited NGOs within **30 days**. [CDM M&P, p35 para40(c)]  
The DOE promptly acknowledges receipt of comments.

(7) Specify how comments on a PDD are communicated, providing both e-mail and fax details. Display at the end of the **30 days** period all comments received.

(8) Make a determination whether the project activity should be validated. [CDM M&P, p35 para40(d)]

No

Inform PPs of reasons for non-acceptance

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

Yes

(9) Inform PPs of confirmation of validation. [CDM-M&P, p35 para40(e)]

Registration Procedure

#### UNFCCC secretariat

- (5 a) In case the DOE is accredited for all sectoral scope(s), the secretariat, through the CDM information system, makes automatically available the link to the web page of the DOE or the CDM-PDD on the UNFCCC CDM web site. The system will forward the announcement to the DOE.
- (5 b) In case the DOE is not accredited for all sectoral scope(s), the secretariat shall determine within **3 days** whether the proposed project activity has been accepted as a witnessing opportunity. If it is accepted, step (5 a) will apply. If it is not accepted, the secretariat will initiate appropriate steps within the accreditation procedure.

## 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-RIT (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]

(9) Marked in the UNFCCC 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).

### 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 Yes

(8) Registration as CDM project activity.

Can be registered

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.

Not registered

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

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

[Procedures for making the monitoring report available to the public in accordance with paragraph 62 of the modalities and procedures for the CDM version 01 / 7 April 2005][Procedures relating to verification report and certification report/request for issuance of CERs version 01 / 8 June 2005] <<http://cdm.unfccc.int/Reference/Procedures>>

### Designated operational entity (DOE)

(1) CDM project participants contract with a DOE for verification and certification from a list of DOEs and submit a monitoring report. [CDM M&P, p39 para60]  
 ⇒ Timing and frequency of submission is not specified in the official documents.

(2) Make the monitoring report directly publicly available in PDF format on the UNFCCC CDM web site using a dedicated interface by selecting from a list of registered project activities the particular activity to be verified, specifying the start and ending date of the monitoring period.  
 ⇒ Unless the EB has agreed grant an exception, a DOE shall not perform verification functions on a CDM project activity for which it has performed the function of validation/registration.

(4) Implement verification and provide a verification report. [CDM M&P, p39 para62(a)-(h)]  
 (5) Based on its verification report, certify in writing the verified amount of GHG emission reductions. [CDM M&P, p40 para63]

(6) Submit the form “CDM form to submit verification and certification reports and to request issuance”(F-CDM-REQCERS) including, inter alia, the verification and certification reports, using the electronic submission tool available to DOEs on the UNFCCC CDM website which links the submitted form to the related monitoring report.

### UNFCCC secretariat

(3) Immediately upon completion of the entry by the DOE in the dedicated interface, the information shall be made available on the UNFCCC CDM web site and the public shall be informed of the availability of the monitoring report through the CDM news facility. The secretariat shall promptly inform the DOE and PPs when the announcement has been made.

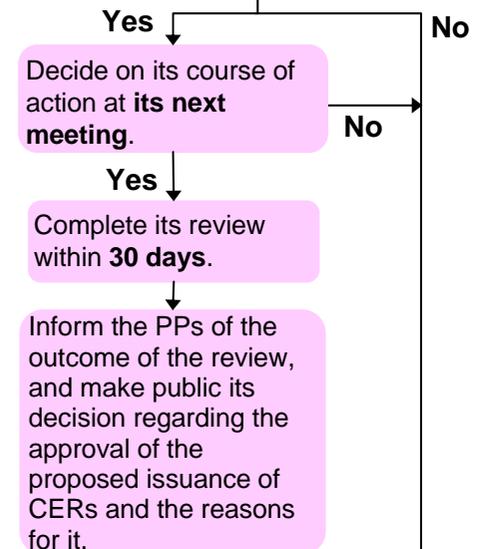
(7) Expediently determine whether the submission by the DOE is complete.  
 ⇒ The date of receipt of a request for issuance is the date when the secretariat has determined that the request is complete.

(8) The form, the verification and certification reports shall be made available on the UNFCCC CDM web site. The web site shall be distributed to:  
 ⇒ EB by e-mail through its listserv  
 ⇒ PPs, in accordance with the modalities of communication (p16)  
 ⇒ Parties involved through DNA  
 ⇒ DOE by e-mail to the contact person(s)  
 ⇒ Public through the UNFCCC CDM news facility.

(9) The UNFCCC secretariat shall identify for each request for issuance the member of EB-RIT (p12).  
 ⇒ The member assigned to undertake the task will be informed and shall have a maximum of **2 days** to indicate whether s/he has or not a conflict of interest which should be described. If a conflict of interest situation exists another member shall be assigned. The appraisal shall indicate whether verification and certification requirements have been met and/or appropriately dealt with by the DOE. The EB-RIT member shall prepare an appraisal using the form “Appraisal of issuance requests (F-CDM-ISSappr)” and submit it to the secretariat within **6 calendar days**. The secretariat shall forward the appraisal to the Board within **1 working day**. [EB23 Anx34, p4 para25-29]

### CDM executive board (EB)

(10) 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]



(11) Instruct the CDM Registry administrator (p65) to issue the specified amount of CERs for the specified time period.

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][EB23 Rep Anx35]
  - ☞ The SOP-Admin shall be:
    - ⇒ USD 0.10 per CER issued for the 1st 15,000 t-CO<sub>2</sub> equivalent for which issuance is requested in a given calendar year;
    - ⇒ USD 0.20 per CER issued for any amount in excess of 15,000 t-CO<sub>2</sub> equivalent for which issuance is requested in a given calendar year.
  - ☞ 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 ver2, p16-19]

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

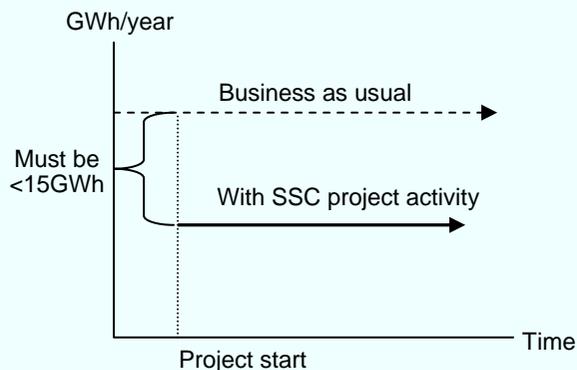
- ☞ Maximum “output” is defined as installed/rated capacity, as indicated by the manufacturer of the equipment or plant, disregarding the actual load factor of the plant;
- ☞ “Appropriate equivalent” of 15 MW is defined as 15 MW (electric).
  - ⇒ Projects referring to MW (peak) or MW (thermal) will have 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 ver2, p12]

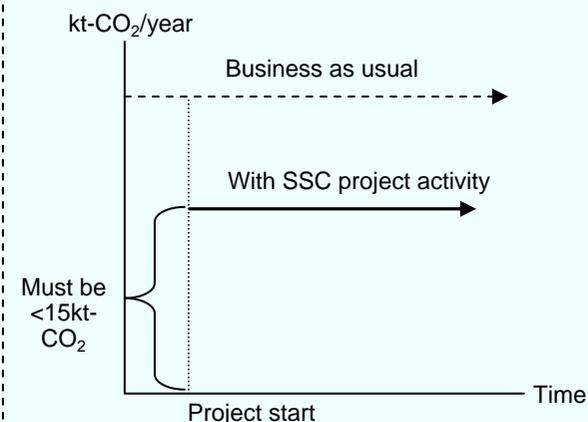
- ◆ To determine equipment performance, PPs shall use:
  - ☞ (a) The appropriate value specified in Appendix B (=CP/2002/7/Ad3 ApxB);
  - ☞ (b) If the value specified in (a) is not available, the national standard for the performance of the equipment type;
  - ☞ (c) If the value specified in (b) is not 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  $15 \times 3.6 \text{ TJ} = 54 \text{ TJ}$ , 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<sub>2</sub> equivalent annually



- ☞ Type (iii) projects shall not exceed total direct emissions of 15,000 t-CO<sub>2</sub> 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<sub>2</sub> recycling, carbon electrodes, adipic acid production and the use of HFCs, PFCs and SF<sub>6</sub> making reference to the emission reductions generated by such projects expressed in CO<sub>2</sub> 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.

[SSC guidelines ver2, p17]

**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<sub>2</sub>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.

## 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-RIT, 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 ver2, 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 ver2, p6]

**Overall monitoring plan** [SSC guidelines ver2, 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 ver2, 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 ver2, 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. <<http://cdm.unfccc.int/methodologies/SSCmethodologies/approved.html>>

### 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
- III.F. Avoidance of methane production from biomass decay through composting
- III.G. Landfill methane recovery
- III.H. Methane recovery in wastewater treatment
- III.I. Avoidance of methane production in wastewater treatment through replacement of anaerobic lagoons by aerobic systems

### New types of SSC project activities

[SSC guidelines ver2, 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 [SSC guidelines ver2, p8]

- ◆ 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 its 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 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. [SSC guidelines ver2, p34 para10]

### Debundling [SSC guidelines ver2, p10]

- ◆ A proposed small-scale project activity is deemed to be a debundled component of a large project activity and it is not eligible to use the simplified modalities and procedures for SSC project activities, 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.

[SSC guidelines ver2, p34-35]

### General Characteristics

- ☞ Project activities wishing to be bundled shall indicate this when making the request for registration.
- ☞ PPs provide a written statement along with the submission of the bundle indicating at registration:
  - ⇒ That all PPs agreed that their individual project activities are part of the bundle;
  - ⇒ One PP who represents all PPs in order to communicate with the EB (p16).
- ☞ The composition of bundles shall not change over time.
- ☞ All project activities in the bundle shall have the same crediting period.
- ☞ Bundled project activities shall be submitted in a single submission to the EB and pay only one fee (p17) proportional to the amount of expected average annual emission reductions of the total bundle;
- ☞ If 3 EB members or a Party involved in a component project activity requests the review of the component project activity (p31), the total bundle remains under review
- ☞ A form with information related to the bundle (F-CDM-BUNDLE) must be included in the submission.

### Letter of approval

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

### Validation and verification

- ☞ One DOE can validate this bundle.
- ☞ One verification report is 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.

### Use of a single PDD covering all activities

- ☞ If all project activities in the bundle belong to the same type, same category and technology/measure, PPs may submit a single CDM-SSC-PDD covering all activities in the bundle. In this case (a single PDD is used) a single verification and certification report shall be submitted by the DOE.
- ☞ In all other cases (if the bundle includes project activities with (a) the same type, same category and different technology/measure; (b) same type, different categories and technologies/measures and; and (c) different types), PPs would have to make the submission of the bundle using a CDM-SSC-PDD for each of the component project activities contained in the bundle. In these cases a single verification and certification report can be submitted for the bundle provided that it appraises each of the component project activities of the bundle separately and covers the same verification period.

# 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<sub>2</sub> once sequestered in trees could be release back into the atmosphere in an occasion of such as forest fire or die back from pests. The issue of non-permanence is addressed by creating different type of CERs, namely temporary CERs (**tCERs**) and long-term CERs (**ICERs**) (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/ICERs 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 ICER)

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

- ☞ The PPs shall select one of the following approaches to addressing non-permanence of an A/R CDM project activity [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 **ICERs** for the net GHG removals by sinks achieved by the project activity during each verification period
- ☞ The approach chosen to address non-permanence shall remain fixed for the crediting period including any renewals.

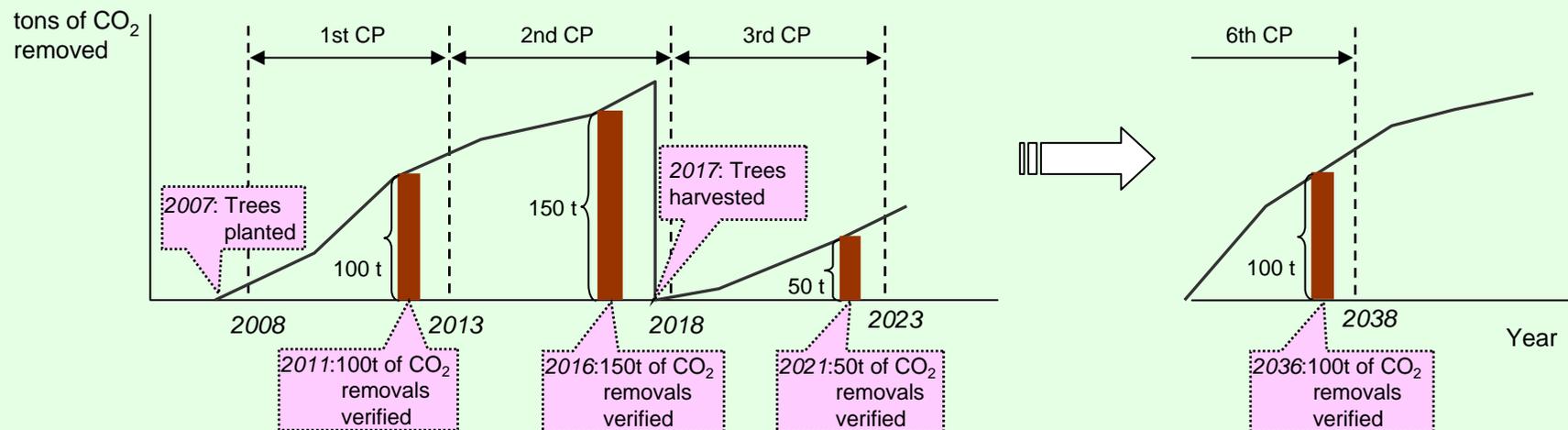
### Expiry of tCERs and ICERs

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

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

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

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

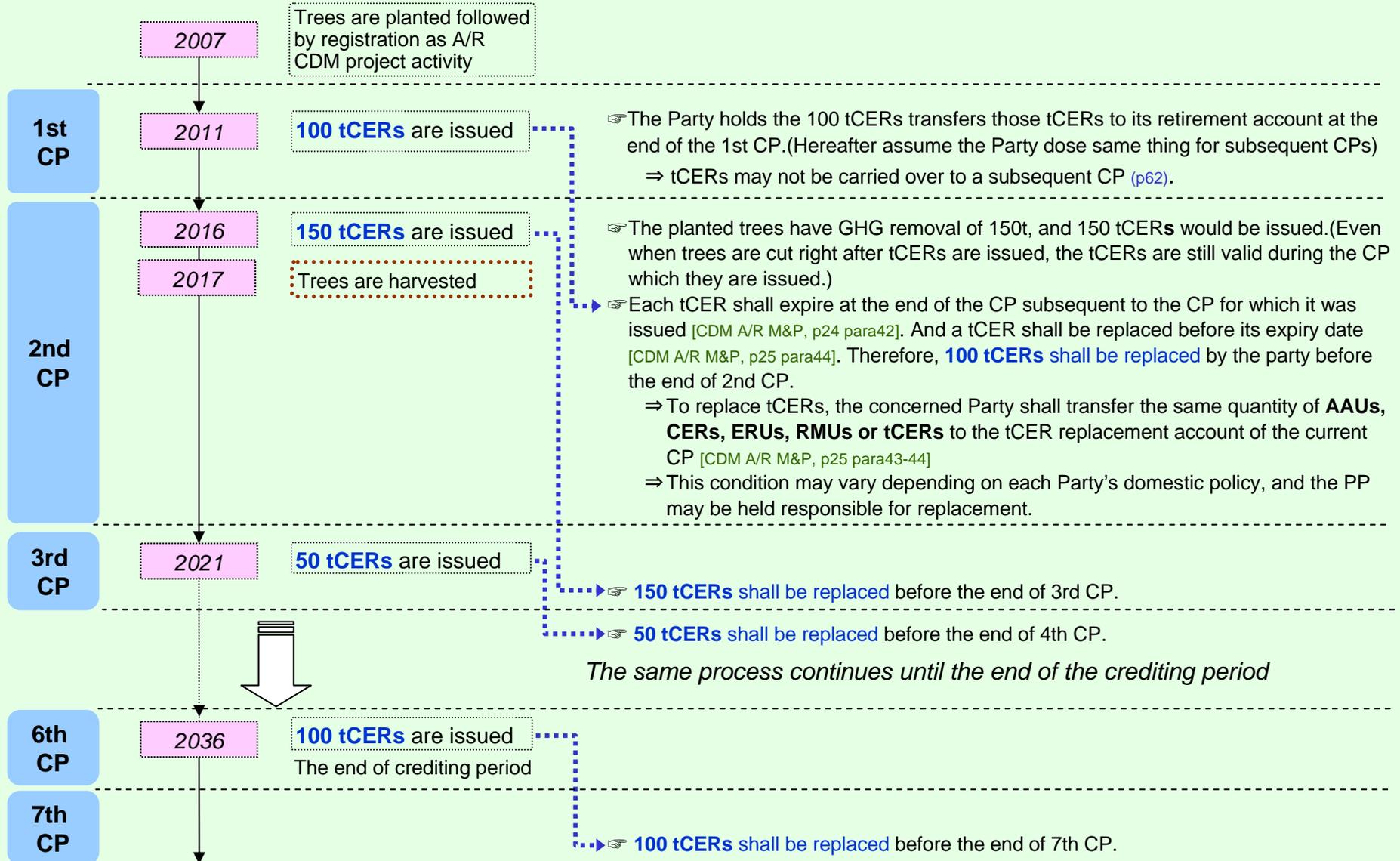


14-2. Non-permanence of A/R CDM project activities (tCER and ICER)

Example: From issuance to replacement of tCERs

Actions taken by PPs

Actions taken by Annex I Parties

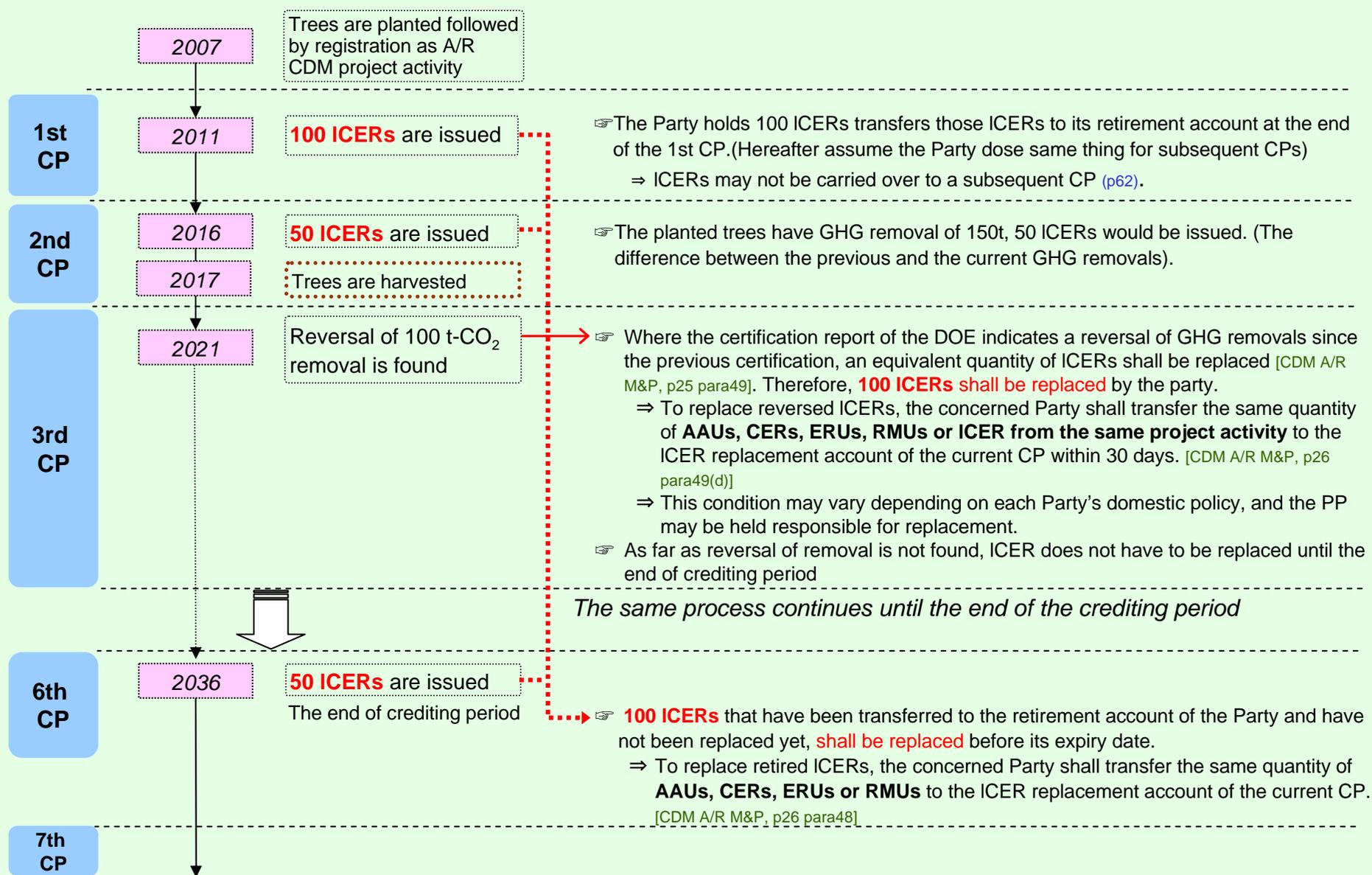


14-2. Non-permanence of A/R CDM project activities (tCER and ICER)

Example: From issuance to replacement of **ICERs**

Actions taken by PPs

Actions taken by Annex I Parties



## 14-3. Calculation of GHG removals

### Equations for the calculation of tCER and ICER [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 ICERs

(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, ver4 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, ver4 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, ver4 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, ver4 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<sub>2</sub>/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<sub>2</sub>/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<sub>2</sub> per year, the excess removals will not be eligible for the issuance of **tCERs** or **ICERs**.  
[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]

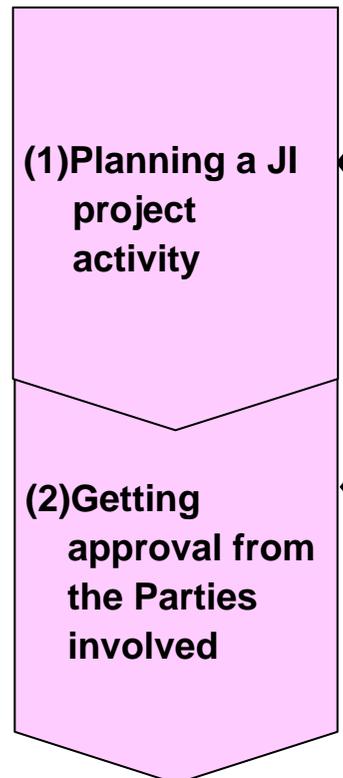
☞ The host Party may however only issue and transfer ERUs upon meeting the requirements below:

- ⇒ 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).

15-1. JI project cycle



◆ 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).

◆ 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)

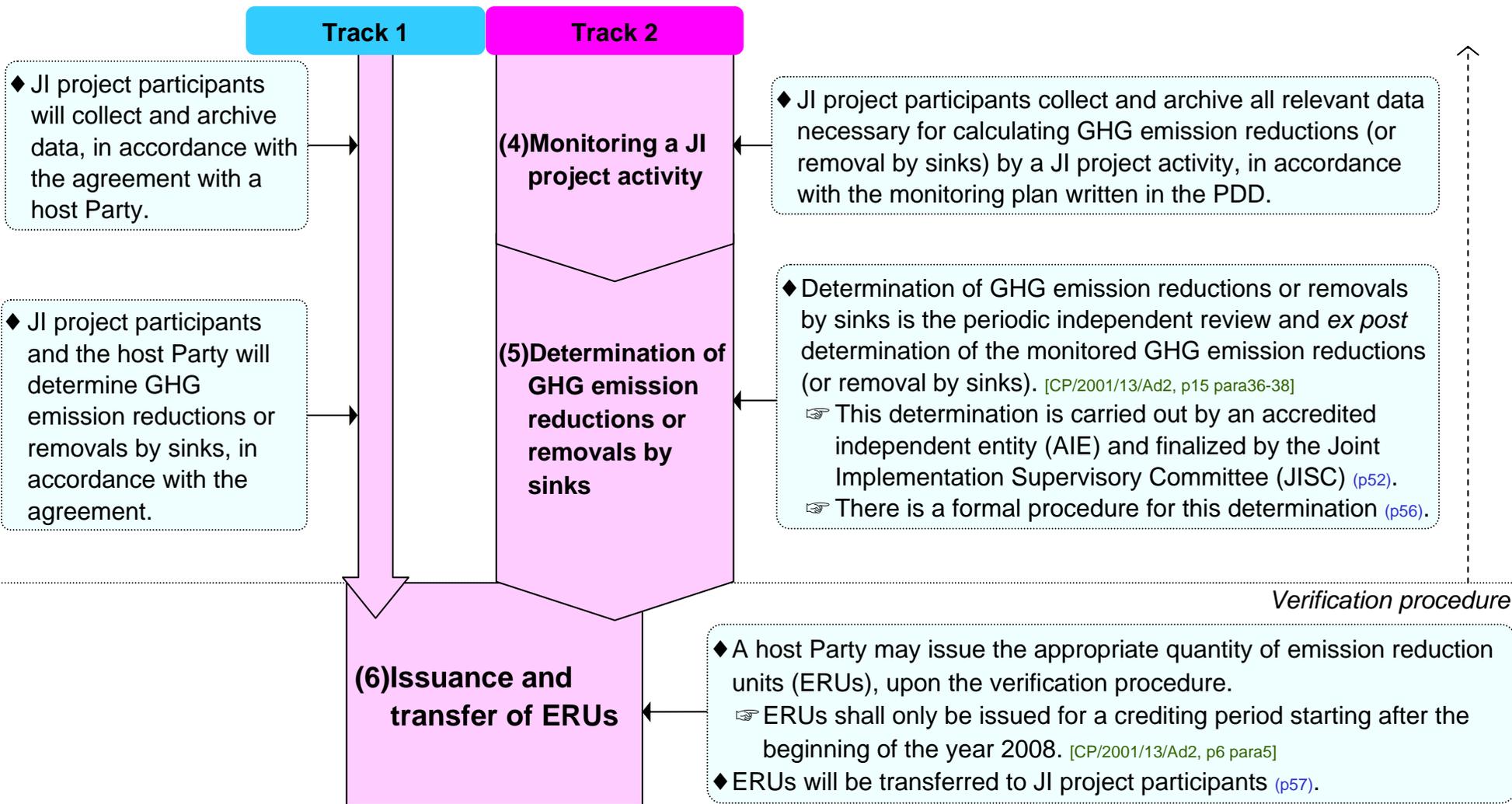


◆ JI projects will be determined in consultation with a host Party

◆ 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).

Verification procedure



## 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;
  - ☞ Accredite 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****Joint Implementation accreditation panel (JI-AP)**

- ◆ The JI-AP shall make recommendations to the JISC regarding:
  - ☞ The accreditation of an applicant independent entity;
  - ☞ The suspension, withdrawal and re-accreditation of an AIE. [JISC01 Anx4, para3]
- ◆ The JI-AP also carries out selecting the members of a JI accreditation assessment team (JI-AT). [JISC01 Anx4, para4]
- ◆ The JI-AP shall be composed of 6 members, in addition to the designated JISC members who act as Chair and Vice-Chair.
  - ☞ 1 member of the JI-AP shall be an expert in baseline setting and monitoring. [JISC01 Anx4, para12]

**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 PPs in accordance with criteria for baseline setting and monitoring. [CP/2001/13/Ad2, p15 para37]
- ◆ 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].
- ◆ 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]

**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.

**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 PPs 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

- (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]

Accredited independent entity (AIE)

- (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]

Joint Implementation Supervisory Committee (JISC)

- (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**: 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 PPs and the public. [CP/2001/13/Ad2, p14 para35]
  - No**: (7) Determination of JI project.

May be reconsidered for determination after appropriate revisions.

Not determined

Can be determined

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 PPs, 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 No

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 the reductions or removals.

Review

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

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

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, ICERs, 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.

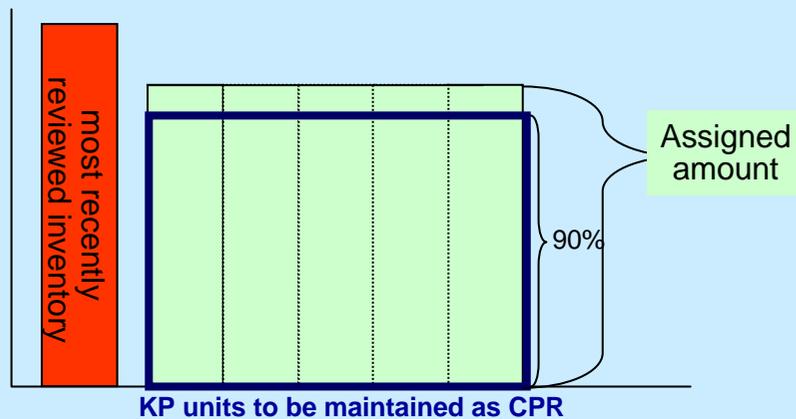
⇒ The 1st review shall be carried out no later than 1 year after the end of the 1st commitment period.

⇒ 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)

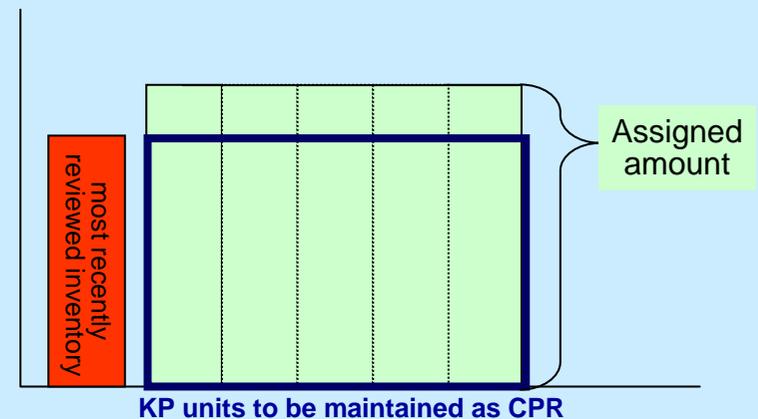
- ◆ Commitment period reserve (CPR) aims at preventing Annex I Parties to oversell KP units through IET, and as a result for their GHG emissions to exceed its holdings of KP units at the end of the 1st commitment period.
- ◆ Each Annex I Party maintains holdings of KP units (AAUs, ERUs, CERs, tCERs, ICERs 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

### Supplementality 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 ICERs

- ◆ 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 ICERs

- ◆ tCERs and ICERs 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, ICERs 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**

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

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

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

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

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

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

**(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<sub>2</sub> 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 = ICER
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 ICERs

[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 ICERs,** that have expired in a holding account of the CDM registry, and ICERs 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 ICER), 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 ICERs) (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 ICER has to occur, 1 month prior to the expiry of each tCER or ICER. [CDM A/R M&P, p26 para55]
  - ☞ Where a Annex I Party does not replace tCERs or ICERs in accordance with the rules, the ITL shall forward a record of non-replacement to the secretariat, for consideration as part of the review process for the relevant Party, under Art.8 of the KP, to the EB and to the Party concerned. [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<sub>6</sub>
- ☞ 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.

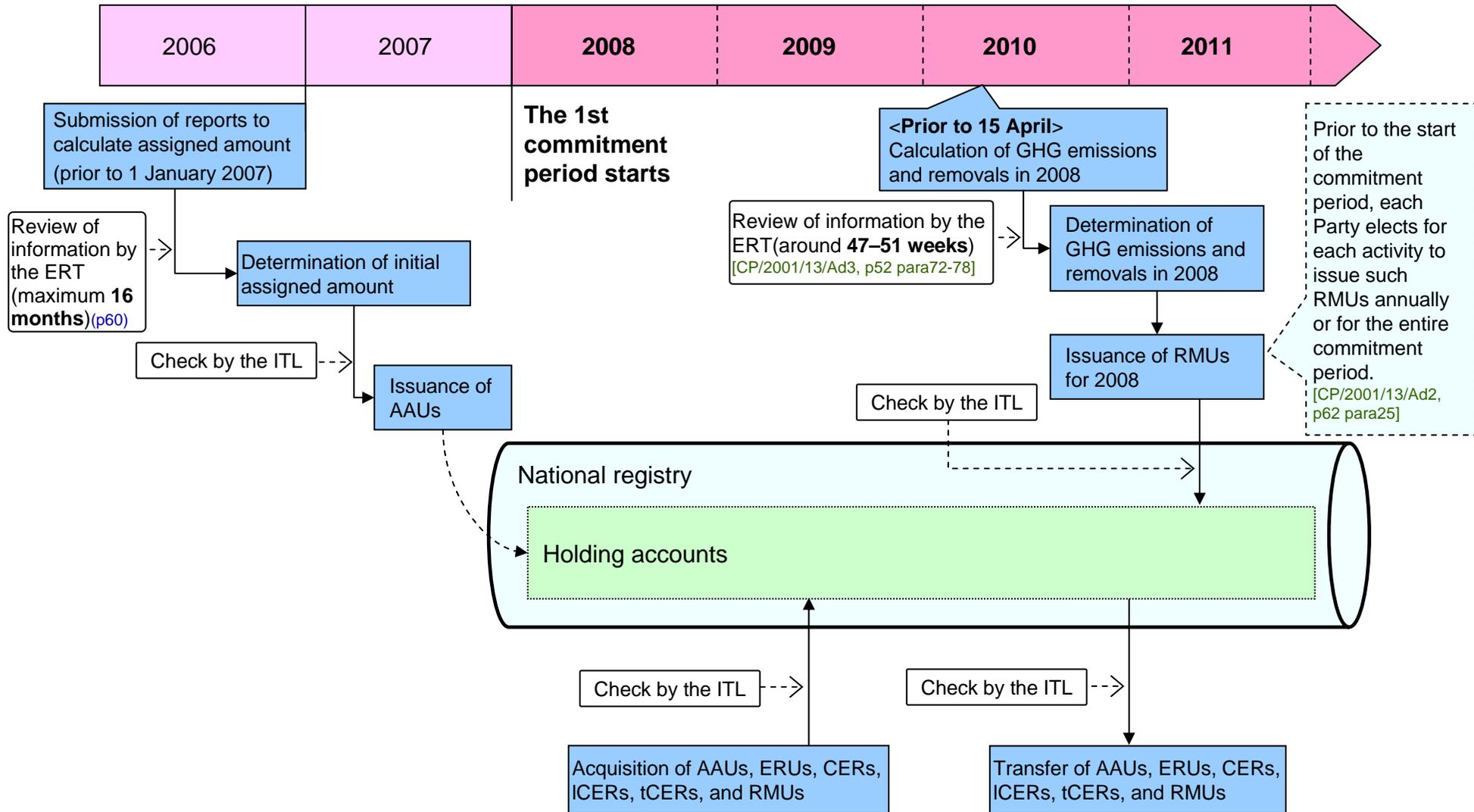
#### (3) Issuance of AAUs

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

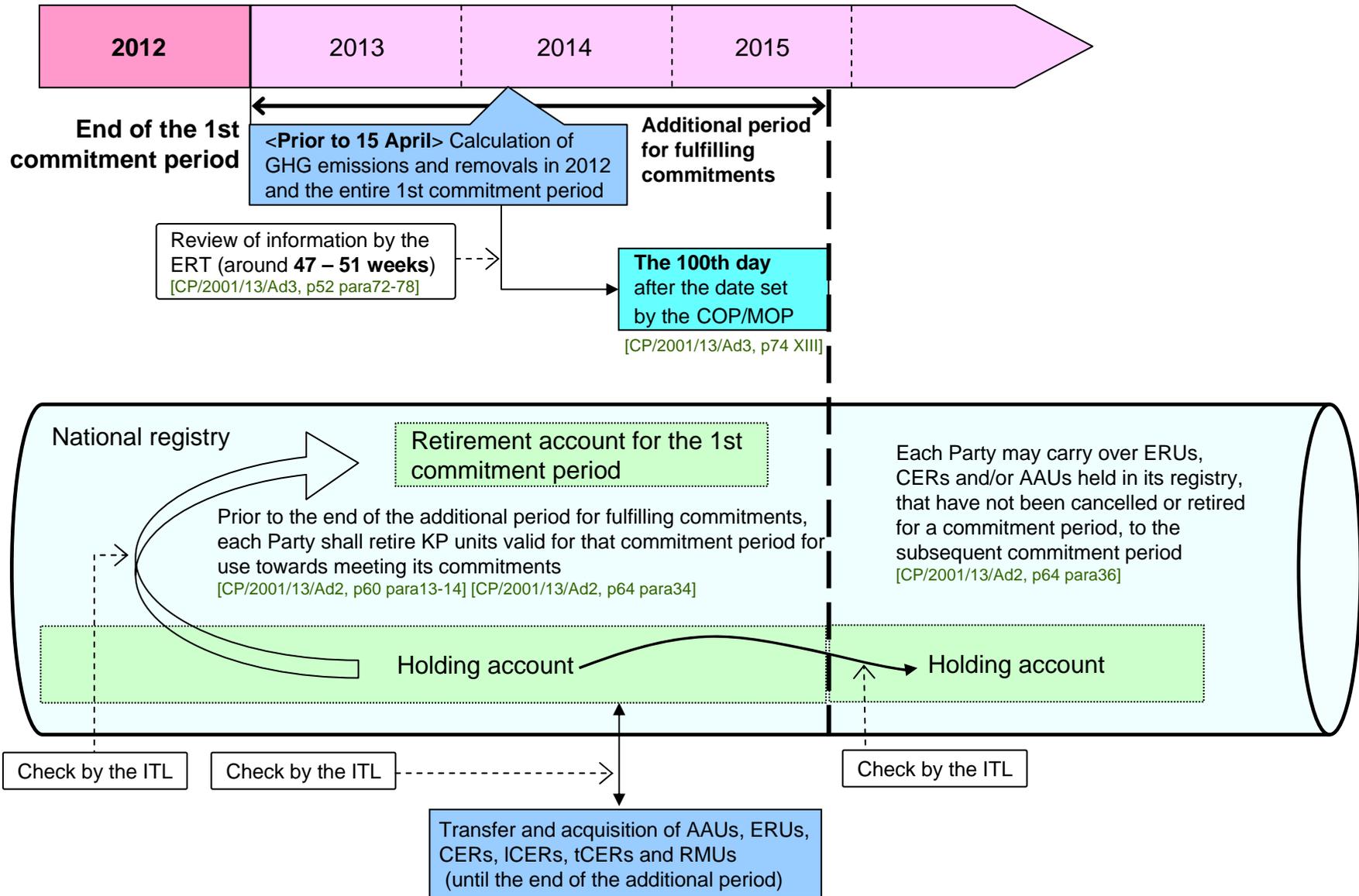
- ☞ AAUs should be issued prior to any transactions taking place for that commitment period

18-4. From issuance to retirement of KP units

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](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

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

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

**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<sub>2</sub> 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<sub>2</sub> 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<sub>2</sub> 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<sub>2</sub> 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<sub>2</sub> 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](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 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 2<sup>nd</sup> and 3<sup>rd</sup> 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](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<sub>2</sub> 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<sub>2</sub> 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<sub>2</sub> 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<sub>2</sub> 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<sub>2</sub> 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?

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.

**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<sub>2</sub> 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<sub>2</sub> emissions by multiplying the quantity of electricity required with the CO<sub>2</sub> emissions intensity of the electricity.

#### Leakage

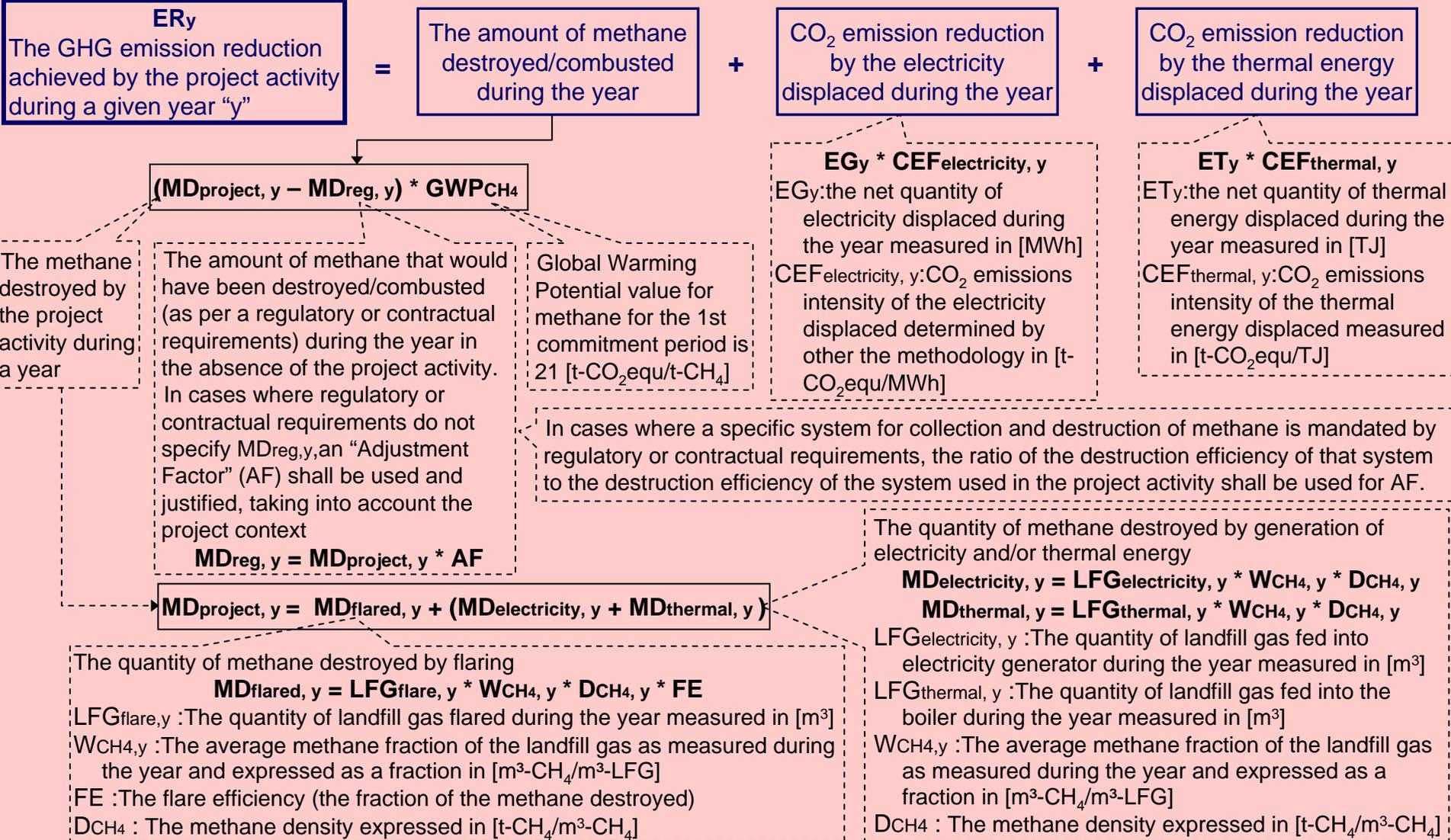
- ☞ No leakage effects need to be accounted under this methodology.

#### 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



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<sub>4</sub>) 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 Ver5)

### 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<sub>2</sub> 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<sub>2</sub> from non-condensable gases and CO<sub>2</sub> 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 [EB23 Anx9, 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 Ver5)

Baseline and Emission Reductions

**ER<sub>y</sub>**  
The GHG emission reduction achieved by the project activity during a given year “y”

**BE<sub>y</sub>**  
Baseline emissions

**PE<sub>y</sub>**  
Project emissions

PE<sub>y</sub> = 0  
except for geothermal project activities

**BE<sub>y</sub> = EF<sub>y</sub> \* EG<sub>y</sub>**

Power plant capacity additions registered as CDM project activities should be excluded from all calculations below

The electricity supplied by the project activity to the grid in [MWh]

The baseline emissions factor in [t-CO<sub>2</sub>/MWh]

**EF<sub>y</sub> (Combined Margin EF) = w<sub>OM</sub> \* EF<sub>OM,y</sub> + w<sub>BM</sub> \* EF<sub>BM,y</sub>**

The weights **w<sub>OM</sub>** and **w<sub>BM</sub>**, by default, are 50% (i.e., **w<sub>OM</sub> = w<sub>BM</sub> = 0.5**). Alternative weights can be used, as long as **w<sub>OM</sub> + w<sub>BM</sub> = 1**, and appropriate evidence justifying the alternative weights is presented (p82). These justifying elements are to be assessed by the EB.

**EF<sub>OM,y</sub>** (the Operating Margin emission factor)[t-CO<sub>2</sub>/MWh]  
**EF<sub>OM,y</sub>** is calculated based on one of the following 4 methods (p80):

Are there enough data available to analyze dispatch data?

Yes

No

(1) Dispatch Data Analysis OM

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

No

(2) Simple OM

Are there enough data available to apply Simple Adjusted OM?

Yes

No

(3) Simple adjusted OM

(4) Average OM

**EF<sub>BM,y</sub>** (the Build Margin emission factor)[t-CO<sub>2</sub>/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. (If 20% falls on part capacity of a plant, that plant is fully included in the calculation.)

**EF<sub>BM,y</sub>** is calculated by dividing CO<sub>2</sub> emissions [t-CO<sub>2</sub>] 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<sub>BM,y</sub>** 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<sub>BM,y</sub>** must be updated annually ex post for the year in which actual project generation and associated emissions reductions occur. For subsequent crediting periods, **EF<sub>BM,y</sub>** should be calculated ex-ante, as described in option 1 above.

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 [EB23 Anx9,p5])

## 3-2. Consolidated baseline methodology for grid-connected electricity generation from renewable sources (ACM0002 Ver5)

Calculation methods for  $EF_{OM,y}$  (the Operating Margin emission factor) [t-CO<sub>2</sub>/MWh]**(1) Dispatch Data Analysis OM** [EB23 Anx9, 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<sub>2</sub>/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<sub>2</sub> emissions [t-CO<sub>2</sub>].
- (v) Divide the amount of CO<sub>2</sub> emissions above by the generation of the CDM project [MWh] in the year, which gives the Dispatch Data OM emission factor [t-CO<sub>2</sub>/MWh].

**(2) Simple OM** [EB23 Anx9, 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<sub>2</sub>/MWh] is calculated as the generation-weighted average emissions per electricity unit of the generating sources above in a year.

**(3) Simple Adjusted OM** [EB23 Anx9, 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<sub>2</sub>/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<sub>2</sub>/MWh] is calculated as “ $\lambda$  x (emission factor of low-cost/must-run power sources)” + “(1-  $\lambda$ ) x (other power sources)”

**(4) Average OM** [EB23 Anx9, p9]

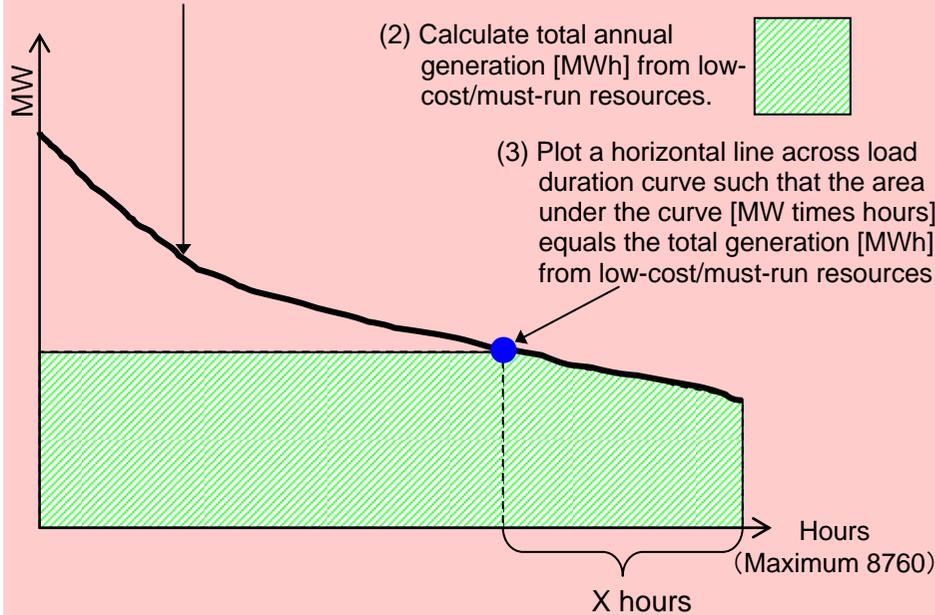
The average OM emission factor [t-CO<sub>2</sub>/MWh] is calculated as the generation-weighted average emissions per electricity unit of all generating sources serving the system.

- 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 Ver5)

How to calculate  $\lambda$  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.

(3) Plot a horizontal line across load duration curve such that the area under the curve [MW times hours] equals the total 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)  $\lambda = X/8760$

\*If the lines do not intersect at step (3), then  $\lambda$  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 [EB23 Anx9, p3]

◆ Determining the OM emission factor

☞ For imports from connected electricity system located in another country

⇒ The emission factor is 0 [t-CO<sub>2</sub>/MWh]

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

⇒ 0 [t-CO<sub>2</sub>/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.

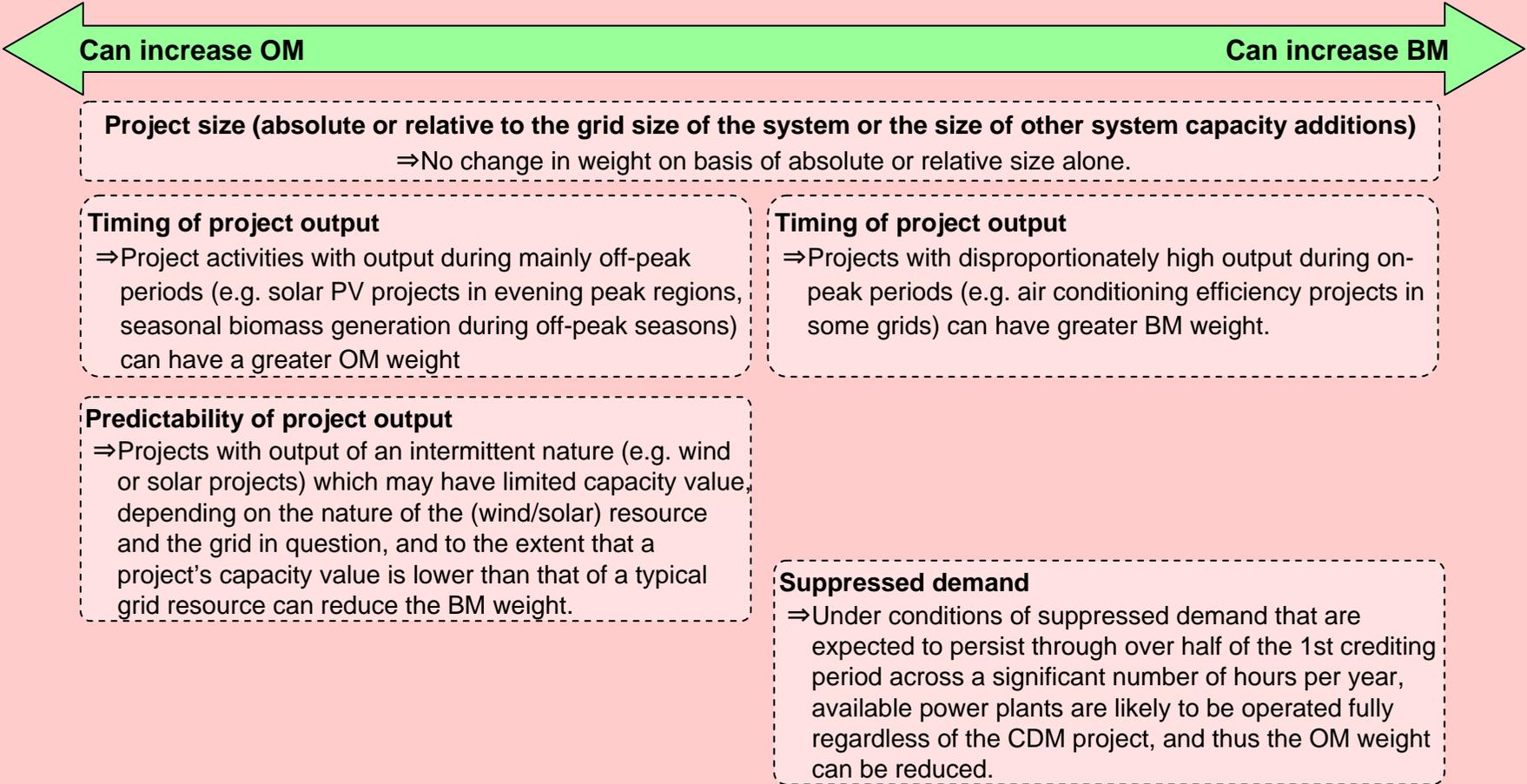
Electricity exports [EB23 Anx9, p4]

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 Ver5)

**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.



**Can increase OM**

**Can increase BM**

**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. 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.

### Definition of renewable biomass [EB23 Anx18]

- ◆ Biomass is “renewable” if one of the following 5 conditions applies:
  - ☞ The biomass is originating from land areas that are forests where:
    - (a) The land area remains a forest; and
    - (b) Sustainable management practices are undertaken on these land areas to ensure, in particular, the level of carbon stocks; and
    - (c) Any national or regional forestry and nature conservation regulations are complied with.
  - ☞ The biomass is woody biomass and originates from croplands and/or grasslands where:
    - (a) The land area remains cropland and/or grasslands or is reverted to forest; and
    - (b) Sustainable management practices are undertaken on these land areas to ensure, in particular, the level of carbon stocks; and
    - (c) Any national or regional forestry, agriculture and nature conservation regulations are complied with.
  - ☞ The biomass is non-woody biomass and originates from croplands and/or grasslands where:
    - (a) The land area remains cropland and/or grasslands or is reverted to forest; and
    - (b) Sustainable management practices are undertaken on these land areas to ensure, in particular, the level of carbon stocks; and
    - (c) Any national or regional forestry, agriculture and nature conservation regulations are complied with.
  - ☞ The biomass is a biomass residue and the use of that biomass residue in the project activity does not involve a decrease of carbon pools, in particular dead wood, litter or soil organic carbon, on the land areas where the biomass residues are originating from.
    - ⇒ For example, a CDM project involves the collection of dead wood from a forest, which would not be collected in the absence of the CDM, the extracted biomass cannot be regarded as renewable, since it would result in a decrease of carbon stocks.
  - ☞ The biomass is the non-fossil fraction of an industrial or municipal waste.
- ◆ Otherwise, where none of these conditions applies, the biomass is considered as “nonrenewable”.

## Attachment 5. List of approved methodologies

Sectoral Scope		Approved Methodologies	
1	Energy industries (renewable - / non-renewable sources)	ACM0002 ver5	Consolidated methodology for grid-connected electricity generation from renewable sources
		ACM0004 ver2	Consolidated baseline methodology for waste gas and/or heat and/or pressure for power generation
		ACM0006 ver2	Consolidated methodology for grid-connected electricity generation from biomass residues
		ACM0007	Methodology for conversion from single cycle to combined cycle power 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 ver2	Emissions reduction through partial substitution of fossil fuels with alternative fuels in cement manufacture
		ACM0005 ver2	Consolidated Methodology for Increasing the Blend in Cement Production
		ACM0009	Consolidated methodology for industrial fuel switching from coal or petroleum fuels to natural gas
		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
5	Chemical industries	AM0021	Baseline Methodology for decomposition of N <sub>2</sub> O from existing adipic acid production plants
		AM0027	Substitution of CO <sub>2</sub> from fossil or mineral origin by CO <sub>2</sub> from renewable sources in the production of inorganic compounds
		AM0028	Catalytic N <sub>2</sub> O destruction in the tail gas of Nitric Acid Plants
6	Construction		
7	Transport		

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 ver3	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 ver3	Avoided emissions from organic waste through alternative waste treatment processes		
14	Afforestation and reforestation	AR-AM0001	Reforestation of degraded land
15	Agriculture	AM0006	GHG emission reductions from manure management systems
		AM0016 ver3	Greenhouse gas mitigation from improved animal waste management systems in confined animal feeding operations

## Attachment 6. 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	Afforestation 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
JI-AP	Joint Implementation Accreditation Panel
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 Participant
RMU	Removal Unit
SAR	(the IPCC) 2nd Assessment Report
SBI	Subsidiary Body for Implementation
SBSTA	Subsidiary Body for Scientific and Technological Advice
SF <sub>6</sub>	Sulfur Hexafluoride
SOP	Share of Proceeds
SSC	Small Scale CDM
UNFCCC	United Nations Framework Convention on Climate Change

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

<i>Examples of abbreviated titles used in this charts, shown in [ ]</i>	<i>Corresponding formal document symbol and title</i>
<b>KP Art.2 para1(a)</b>	The <b>Kyoto Protocol, Article2, paragraph1(a)</b>
<b>CP/2001/13/Ad2, p1 para2(a)</b>	<b>FCCC/CP/2001/13/Add.2, page 1 paragraph 2(a)</b>
<b>CMP/2005/18/AdUe, p1 para2(a)</b>	<i>Examples contain [AdUe] mean documents agreed in COP/MOP1 and are currently <b>Advanced Unedited</b> version. These examples will be replaced after formal document symbol is put.</i>
<b>CDM M&amp;P</b>	<b>CDM Modalities and P</b> rocedures (Annex to Decision 17/CP.7) (FCCC/CP/2001/13/Add.2, p26-41)
<b>CDM A/R M&amp;P</b>	<b>M</b> odalities and <b>P</b> rocedures for <b>A</b> fforestation and <b>R</b> eforestation project activities under the <b>CDM</b> (Annex to Decision 19/CP.9) (FCCC/CP/2003/6/Add.2, p16-27)
<b>EB01 Rep, p2 para3(a)</b>	<b>Executive Board of the Clean Development Mechanism, 1<sup>st</sup> Meeting Report, page 2 paragraph 3(a)</b>
<b>EB01 Anx1, p2 para3(a)</b>	<b>Executive Board of the Clean Development Mechanism, Annex 1 to the 1<sup>st</sup> Meeting Report, page 2 paragraph 3(a)</b>
<b>PDD guidelines ver4, p1</b>	<b>Guidelines for Completing CDM-PDD, CDM-NMB and CDM-NMM Version 04, page 1</b>
<b>SSC guidelines ver2, p1</b>	<b>Guidelines for Completing CDM-SSC-PDD, F-CDM-SSC-Subm and F-CDM-SSC-BUNDLE, Version 02, page 1</b>
<b>AR CDM guidelines ver4, p1</b>	<b>Guidelines for Completing CDM-AR-PDD, CDM-AR-NMB and CDM-AR-NMM Version 04, page 1</b>
<b>JISC01 Rep, p2 para3</b>	<b>Joint Implementation Supervisory Committee, 1<sup>st</sup> Meeting Report, page 2 paragraph 3(a)</b>
<b>Anx</b> stands for <b>Annex</b> , <b>Apx</b> for <b>Appendix</b> , <b>Att</b> for <b>Attachment</b> , and <b>Ann</b> for <b>Annotation</b> .	



**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](mailto:cdm-iges@iges.or.jp)  
URL: <http://www.iges.or.jp/en/cdm/index.html>

© Ministry of the Environment, Japan, 2006.

This copy is made as part of Integrated Capacity Strengthening for CDM/JI (ICS-CDM/JI) Programme and published by the Institute for Global Environmental Strategies (IGES).

Whilst information in this report is believed to be true and accurate at the date of going to press, neither the authors nor publisher can accept any legal responsibility or liability for any errors or omissions that may be made.