



# CDM and JI in CHARTS

Ver. 1.1

This document aims to give a plain 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 secretariat of the United Nations Framework Convention on Climate Change (<http://unfccc.int/>).

As of February 2005

# Contents

## 1. The Kyoto Protocol

1-1. Overview	P1
1-2. History	P2
1-3. List of Annex I Parties	P3
1-4. List of non-Annex I Parties	P4

## 2. The Kyoto Mechanisms

2-1. The Clean Development Mechanism (CDM)	P6
2-2. Joint Implementation (JI)	P7
2-3. Emissions Trading	P8

## 3. Overview of CDM project cycle P10

## 4. CDM-related organizations

4-1. COP/MOP	P12
4-2. Designate National Authority (DNA)	P12
4-3. CDM Executive Board (EB)	P13
4-4. Panels and Working Groups	P14
4-5. Designated Operational Entity (DOE)	P15
4-6. Project participants	P17

## 5. Conditions for registering as a CDM project activity P18

## 6. Baseline

6-1. Concept of the baseline	P20
6-2. Baseline scenario	P21
6-3. Baseline approach (para 48 of CDM M&P)	P23
6-4. Baseline methodology	P24
6-5. Clarification for drafting a proposal for a new methodology	P25
6-6. Procedures for the submission of a proposed new methodology	P27

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

7-1. Project boundary and leakage	P28
7-2. Monitoring	P28
7-3. Crediting period	P29

## 8. Procedures for validation of a CDM project activity

8-1. Overview of validation procedures	P30
8-2. Validation requirements	P31

## 9. Procedures for registration of a CDM project activity

9-1. Overview of registration procedures	P32
9-2. Procedures for review of registration	P33

## 10. Procedures for verification, certification and issuance of CERs

10-1. Overview of procedures for verification, certification and issuance of CERs	P34
10-2. Procedures for review of issuance	P35

## 11. Distribution of CERs P36

## 12. Small-scale CDM (SSC)

12-1. Definition of small-scale CDM project activity	P37
12-2. Simplified modalities and procedures	P38
12-3. Simplified baseline and monitoring methodologies	P40

# Contents

## 13. Joint Implementation (JI)

13-1. Overview	P41
13-2. JI-related organizations	P44
13-3. Conditions for JI projects	P46
13-4. Procedures for determination of JI projects (for track 2)	P47
13-5. Procedures for determination of the reductions or removals by JI projects (for track 2)	P48
13-6. Issuance and transfer of ERUs	P49

## Attachment 1: Specific guidelines for completing the CDM-PDD, CDM-NMB and CDM-NMM

1-1. General Information on CDM-PDD, CDM-NMB and CDM-NMM	P50
1-2. Specific guidelines for completing the Project Design Document (CDM-PDD)	P51
1-3. Specific guidelines for completing the proposed new methodology: baseline (CDM-NMB)	P57
1-4. Specific guidelines for completing the proposed new methodology: monitoring (CDM-NMM)	P59

## Attachment 2: The list of sectoral scope

P62

## Attachment 3: The list of approved methodologies

3-1. Consolidated baseline methodology for landfill gas project activities (ACM0001)	P64
3-2. Consolidated baseline methodology for grid- connected electricity generation from renewable sources (ACM0002)	P66

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

P68

## Attachment 5: The list of sectoral scope

P72

## Attachment 6: The list of approved methodologies

P73

## Attachment 7: Glossary

P75

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

<i>Examples of abbreviated titles used in this document, shown in [ ]</i>	<i>Corresponding formal document titles</i>
<b>CDM M&amp;P</b>	<b>CDM Modalities and Procedures</b> (Extract of Decision 17/CP.7) (FCCC/CP/2001/13/Add.2, p20-49)
<b>CP/2001/13/Ad2 para1(a),p2</b>	FCCC/ <b>CP/2001/13/Add.2, paragraph1(a), page 2</b>
<b>EB01 Rep para2(a),p3</b>	<b>Executive Board of the Clean Development Mechanism, 1<sup>st</sup> Meeting Report, paragraph2(a), page 3</b>
<b>PDD guidelines ver1,p1</b>	<b>Guidelines</b> for Completing CDM- <b>PDD</b> , CDM-NMB and CDM-NMM <b>Version 01, page 1</b>
<b>KP Art.1 para2(a)</b>	The <b>Kyotp Protocol, Article1, paragraph2(a)</b>
<b>Anx</b> stands for Annex, <b>Apx</b> for Appendix, <b>Att</b> for Attachment, and <b>Ann</b> for Annotation.	

# 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 (see 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)

- ☞ For example, EU countries commit to reduce their emissions by 8%, the USA by 7% and Japan by 6%, from their base-year emissions.
- ☞ The base-year emissions are the Party's aggregate GHG emissions in 1990 (whereas, countries may use 1995 as its base year for HFCs, PFCs, and SF<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. (see 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>

**Emissions Trading**  
<Article 17 of the protocol>

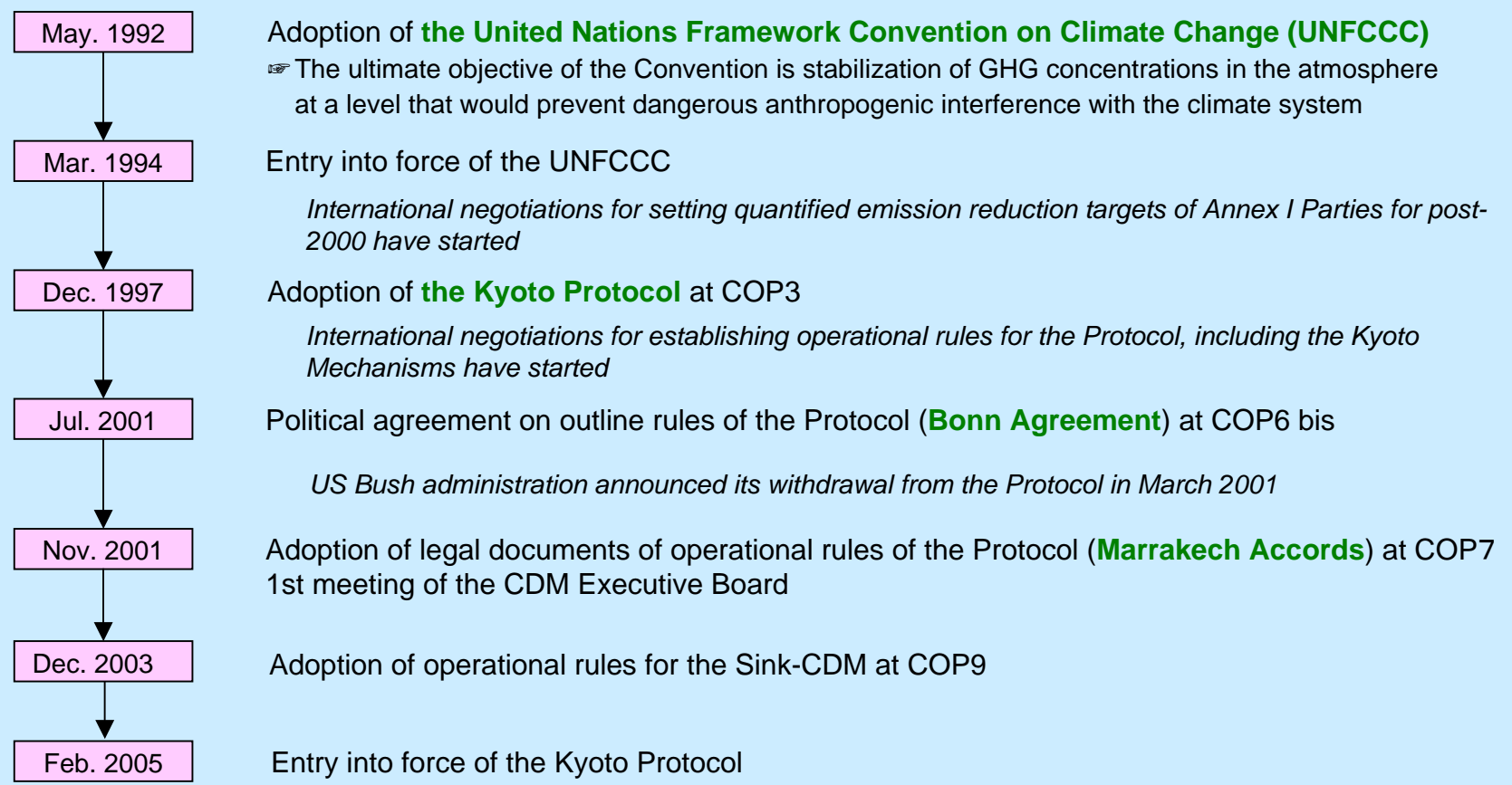
- ◆ Besides countries, private firms can use the Kyoto Mechanisms.
  - ☞ Provided the private firms meet eligibility requirements for using the Kyoto Mechanisms. (see p41)

### BOX : Global Warming Potential (GWP)

GWP is a measure of the relative radiative effect of greenhouse gases compared to CO<sub>2</sub>. GWP of methane is 21, nitrous oxide is 310, HFCs is 140-11700, PFCs is 6500-9200, and SF<sub>6</sub> is 23900 according to the the IPCC 2nd Assessment Report (SAR). 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 18 November 2004, 128 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 will enter into force 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 member country Parties. However, the table below shows their reduction targets after adjusting the reduction targets amongst the EU member country Parties.

European Union			Economies in Transition (EIT)			Other Parties		
Party	Target	Estimated base-year emissions	Party	Target	Estimated base-year emissions	Party	Target	Estimated base-year emissions
Portugal	27.0%	65.1	Russia	0%	3,040.3	Iceland	10%	2.8
Greece	25.0%	107.2	Ukraine*	0%	919.2	<i>Australia</i>	8%	424.0
Spain	15.0%	288.7	Poland	-6%	565.3	Norway	1%	52.0
Ireland	13.0%	53.9	Romania*	-8%	264.9	New Zealand	0%	73.2
Sweden	4.0%	70.7	Czech	-8%	192.2	Canada	-6%	607.2
Finland	0.0%	77.1	Bulgaria*	-8%	157.1	Japan	-6%	1,223.0
France	0.0%	559.3	Hungary*	-6%	101.6	<i>USA</i>	-7%	6,135.6
Netherlands	-6.0%	211.5	Slovakia	-8%	72.9	Switzerland	-8%	53.2
Italy	-6.5%	521.1	Lithuania*	-8%	51.5	<i>Liechtenstein*</i>	-8%	0.2
Belgium	-7.5%	143.3	Estonia*	-8%	43.5	<i>Monaco*</i>	-8%	0.1
UK	-12.5%	745.5	Latvia*	-8%	31.1	<i>Turkey</i>		
Austria	-13.0%	77.6	Slovenia*	-8%	19.2			
Denmark	-21.0%	69.7	<i>Croatia</i>	-5%				
Germany	-21.0%	1,225.0	<i>Belarus*</i>		126.6			
Luxembourg*	-28.0%	13.4						
EU	-8.0%	4,225.1						

⇒ *Countries written in Italic have not ratified the Kyoto Protocol as of December 2004.*

⇒ The base-year emissions (unit: Mt-CO<sub>2</sub>) for each Party are informal estimates based on the GHG emissions data published by the UNFCCC Secretariat, with the aim to show the relative magnitude. Emission figures for HFCs, PFCs and SF<sub>6</sub> for Parties denoted with \* are not available. EIT Parties, which do not set 1990 as their base-year for the GHG emissions are Bulgaria(1988), Hungary(1985-87Average), Poland(1988), Romania(1989) and Slovenia(1986).

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

## 1-4. List of non-Annex I Parties

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

☞ Non-Annex I Parties which have ratified the UNFCCC, and the Kyoto protocol are as follows.

Party	UNFCCC	KP	Party	UNFCCC	KP	Party	UNFCCC	KP	Party	UNFCCC	KP
Afghanistan	2002		Burkina Faso	1993		Djibouti	1995	2002	Haiti	1996	
Albania	1994		Burundi	1997	2001	Dominica	1993		Honduras	1995	2000
Algeria	1993		Cambodia	1995	2002	Dominican Republic	1998	2002	India	1993	2002
Angola	2000		Cameroon	1994	2002	Ecuador	1993	2000	Indonesia	1994	2004
Antigua And Barbuda	1993	1998	Cape Verde	1995		Egypt	1994		Iran	1996	
Argentina	1994	2001	Central African Republic	1995		El Salvador	1995	1998	Israel	1996	2004
Armenia	1993	2003	Chad	1994		Equatorial Guinea	2000	2000	Jamaica	1995	1999
Azerbaijan	1995	2000	Chile	1994	2002	Eritrea	1995		Jordan	1993	2003
Bahamas	1994	1999	China	1993	2002	Ethiopia	1994		Kazakhstan	1995	
Bahrain	1994		Colombia	1995	2001	Fiji	1993	1998	Kenya	1994	
Bangladesh	1994	2001	Comoros	1994		Gabon	1998		Kiribati	1995	2000
Barbados	1994	2000	Congo	1996		Gambia	1994	2001	Kuwait	1994	
Belize	1994	2003	Cook Islands	1993	2001	Georgia	1994	1999	Kyrgyzstan	2000	2003
Benin	1994	2002	Costa Rica	1994	2002	Ghana	1995	2003	Lao	1995	2003
Bhutan	1995	2002	Cote D'Ivoire	1994		Grenada	1994	2002	Lebanon	1994	
Bolivia	1994	1999	Cuba	1994	2002	Guatemala	1995	1999	Lesotho	1995	2000
Bosnia And Herzegovina	2000		Cyprus	1997	1999	Guinea	1993	2000	Liberia	2002	2002
Botswana	1994	2003	Democratic People's Republic of Korea	1994		Guinea-Bissau	1995		Libyan Arab Jamahiriya	1999	
Brazil	1994	2002	Democratic Republic Of The Congo	1995		Guyana	1994	2003	Madagascar	1999	2003

☞ As of 16 December 2004

☞ The years shown in the table are; year of ratification of the UNFCCC; and year of ratification of the Protocol.

☞ Some Parties use the terms "Acceptance", "Approval" or "Accession" instead of "Ratification".



## ◆ The list of non-Annex I Parties (cont.)

Party	UNFCCC	KP	Party	UNFCCC	KP	Party	UNFCCC	KP	Party	UNFCCC	KP
Malawi	1994	2001	Niger	1995	2004	Samoa	1994	2000	The Former Yugoslav Republic Of Macedonia	1998	2004
Malaysia	1994	2002	Nigeria	1994	2004	San Marino	1994		Togo	1995	2004
Maldives	1992	1998	Niue	1996	1999	Sao Tome And Principe	1999		Tonga	1998	
Mali	1994	2002	Oman	1995		Saudi Arabia	1994		Trinidad And Tobago	1994	1999
Malta	1994	2001	Pakistan	1994		Senegal	1994	2001	Tunisia	1993	2003
Marshall Islands	1992	2003	Palau	1999	1999	Serbia And Montenegro	2001		Turkmenistan	1995	1999
Mauritania	1994		Panama	1995	1999	Seychelles	1992	2002	Tuvalu	1993	1998
Mauritius	1992	2001	Papua New Guinea	1993	2002	Sierra Leone	1995		Uganda	1993	2002
Mexico	1993	2000	Paraguay	1994	1999	Singapore	1997		United Arab Emirates	1995	
Micronesia	1993	1999	Peru	1993	2002	Solomon Islands	1994	2003	United Republic Of Tanzania	1996	2002
Mongolia	1993	1999	Philippines	1994	2003	South Africa	1997	2002	Uruguay	1994	2001
Morocco	1995	2002	Qatar	1996		Sri Lanka	1993	2002	Uzbekistan	1993	1999
Mozambique	1995		Republic Of Korea	1993	2002	Sudan	1993	2004	Vanuatu	1993	2001
Myanmar	1994	2003	Republic Of Moldova	1995	2003	Suriname	1996		Venezuela	1994	
Namibia	1995	2003	Rwanda	1998	2004	Swaziland	1996		Viet Nam	1994	2002
Nauru	1993	2001	Saint Kitts And Nevis	1993		Syrian Arab Republic	1996		Yemen	1996	2004
Nepal	1994		Saint Lucia	1993	2003	Tajikistan	1998		Zambia	1993	
Nicaragua	1995	1999	Saint Vincent And The Grenadines	1996		Thailand	1994	2002	Zimbabwe	1992	

☞ As of 16 December 2004

☞ The years shown in the table are; year of ratification of the UNFCCC; and year of ratification of the Protocol.

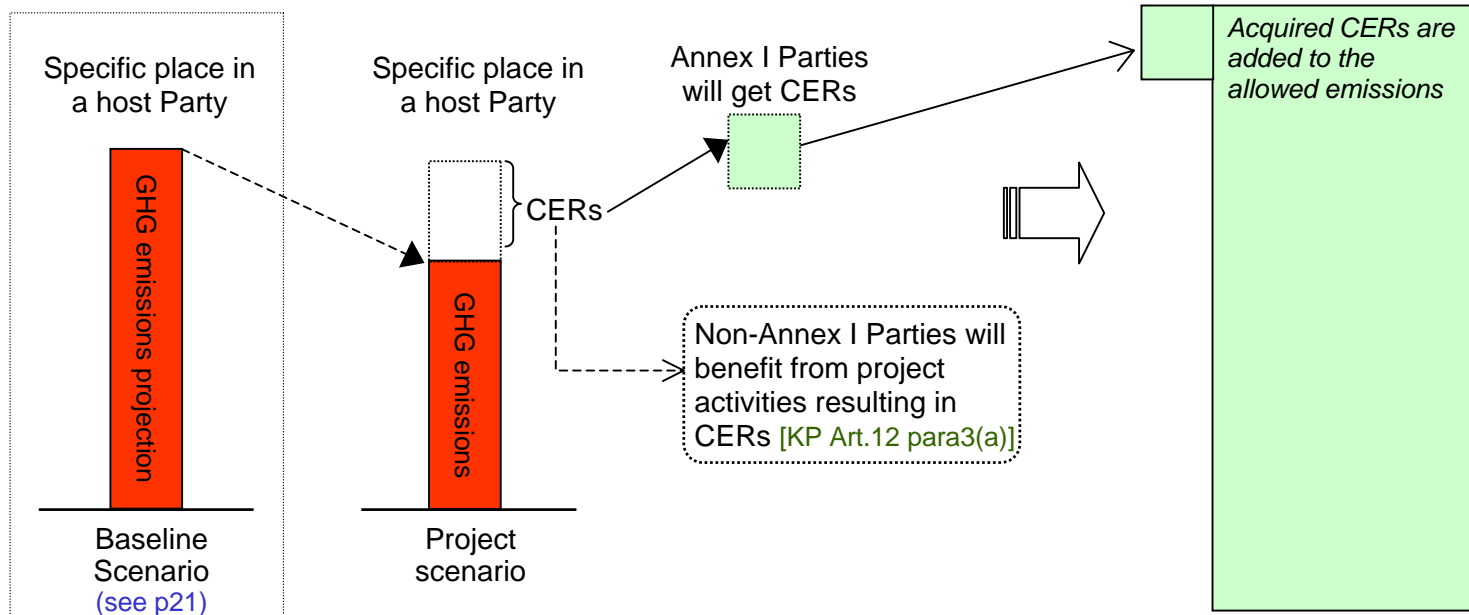
☞ Some Parties use the terms "Acceptance", "Approval" or "Accession" instead of "Ratification".

## 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 para1(b),p26]
- ◆ 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.
  - ☞ There are strict procedures, including 3rd party verification, until issuing CERs.
- ◆ Among 3 Kyoto Mechanisms, only the CDM will issue credits before the 1st commitment period. [KP Art.12 para10] (see p29)

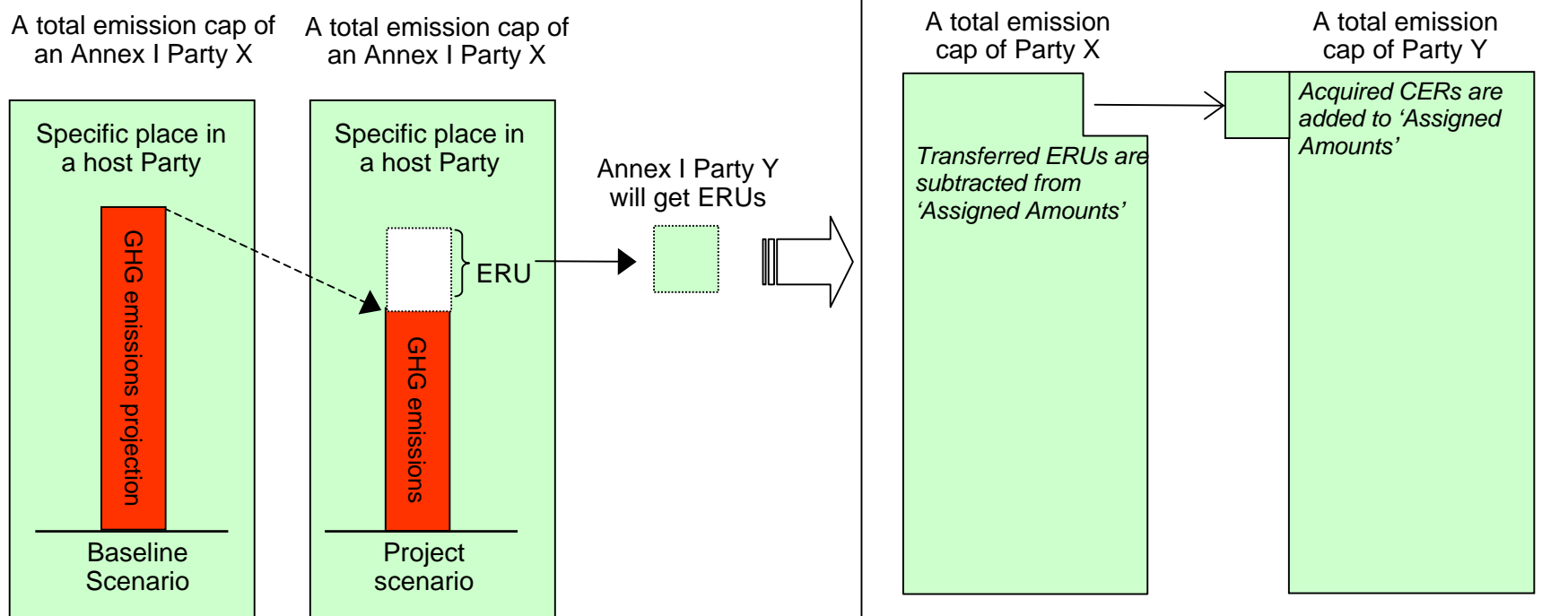
Host Party (non-Annex I) which doesn't have an emission cap



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 para1(a),p8]
- ◆ Annex I Parties can use ERUs to contribute to compliance of their quantified GHG emissions reduction targets of the Kyoto Protocol. [KP Art.12 para3(b)]
  - ☞ 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 para5,p6]

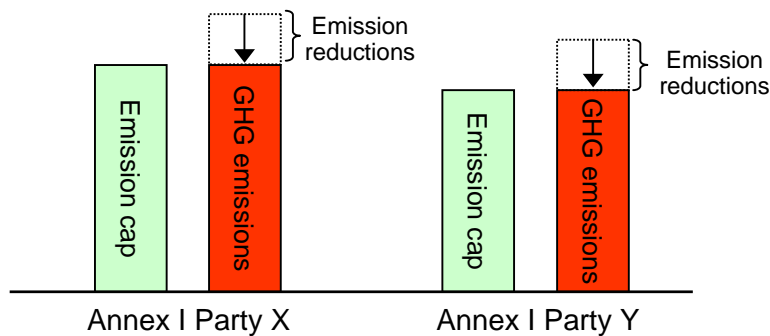
The total amount of emission cap of Annex I Parties is same



2-3. Emissions Trading

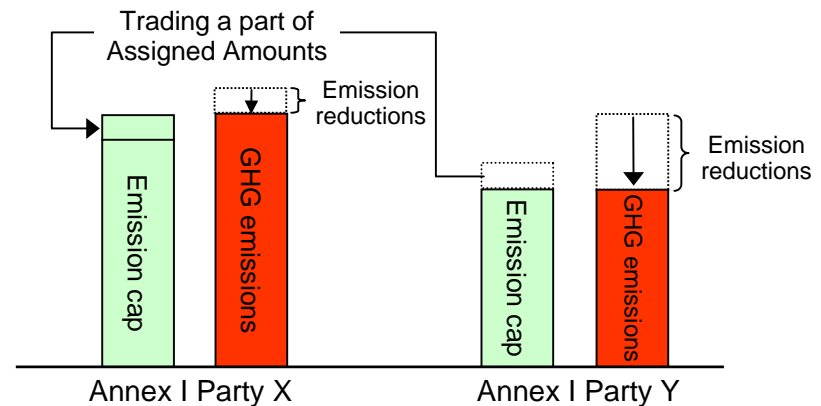
- ◆ Emissions trading is to trade a part of emission cap between Annex I Parties.
  - ☞ The total amount of emission cap of Annex I Parties will not change.
  - ☞ Only Annex B Parties of the Kyoto Protocol can participate emissions trading.
- ◆ Through market mechanism, emissions trading can decrease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

Without emissions trading



	A	B	Total
Before ET: Emission cap	10	8	18
Trading a part of the cap	-	-	-
After ET: Emission cap	10	8	18
GHG emissions	12	10	22
Necessary reduction	2	2	4
Unit cot of reduction	\$200	\$100	-
Total cost of reduction	\$400	\$200	\$600
Trading cost	-	-	-
Compliance cost	\$400	\$200	\$600

With emissions trading



	A	B	Total
Before ET: Emission cap	10	8	18
Trading a part of the cap	1	-1	0
After ET: Emission cap	11	7	18
GHG emissions	12	10	22
Necessary reduction	1	3	4
Unit cot of reduction	\$200	\$100	-
Total cost of reduction	\$200	\$300	\$500
Trading cost	150	-150	0
Compliance cost	\$350	\$150	\$500

Note: Party Y sold part of its emission cap to Party X at \$150.

◆ Annex I Parties can trade following types of credits.

☞ **Assigned amount unit (AAU)** [CP/2001/13/Ad2 para1(c),p52]

⇒ 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 para1(d),p52]

⇒ 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 para1(a)-(d),p58] and additional activities related to GHG removals by sinks [CP/2001/13/Ad1 para1(e)-(h),p58]

☞ **Emission reduction unit (ERU)** from JI

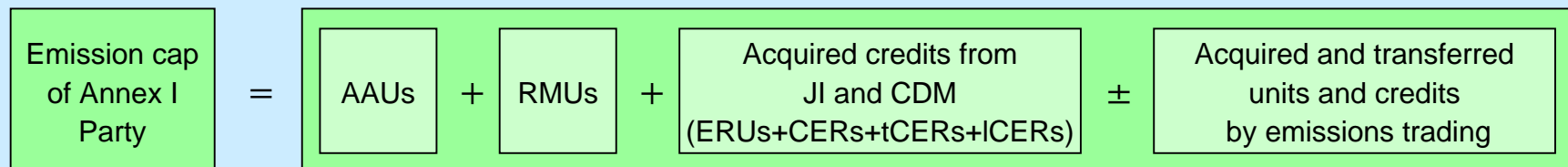
☞ **Certified emission reduction (CER)** from the CDM

☞ **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 para1(g)-(h),p16]

◆ 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 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 para15,p61][CP/2001/13/Ad2 para36,p64]

☞ The end of additional period is the 100th day after the date set by the COP/MOP. [CP/2001/13/Ad3 XIII,p74]

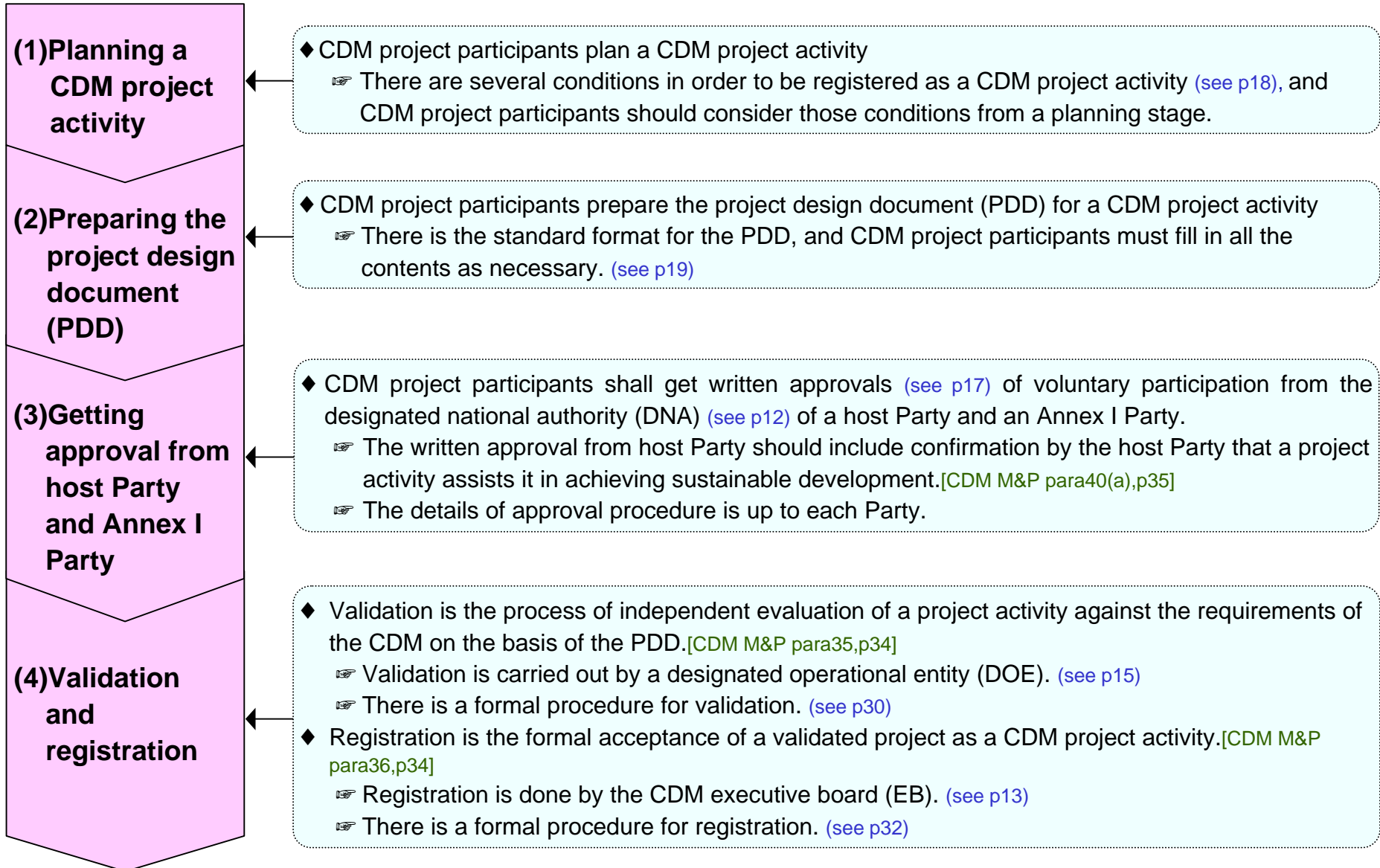
☞ There are several restrictions depending on the type of unit and credit.

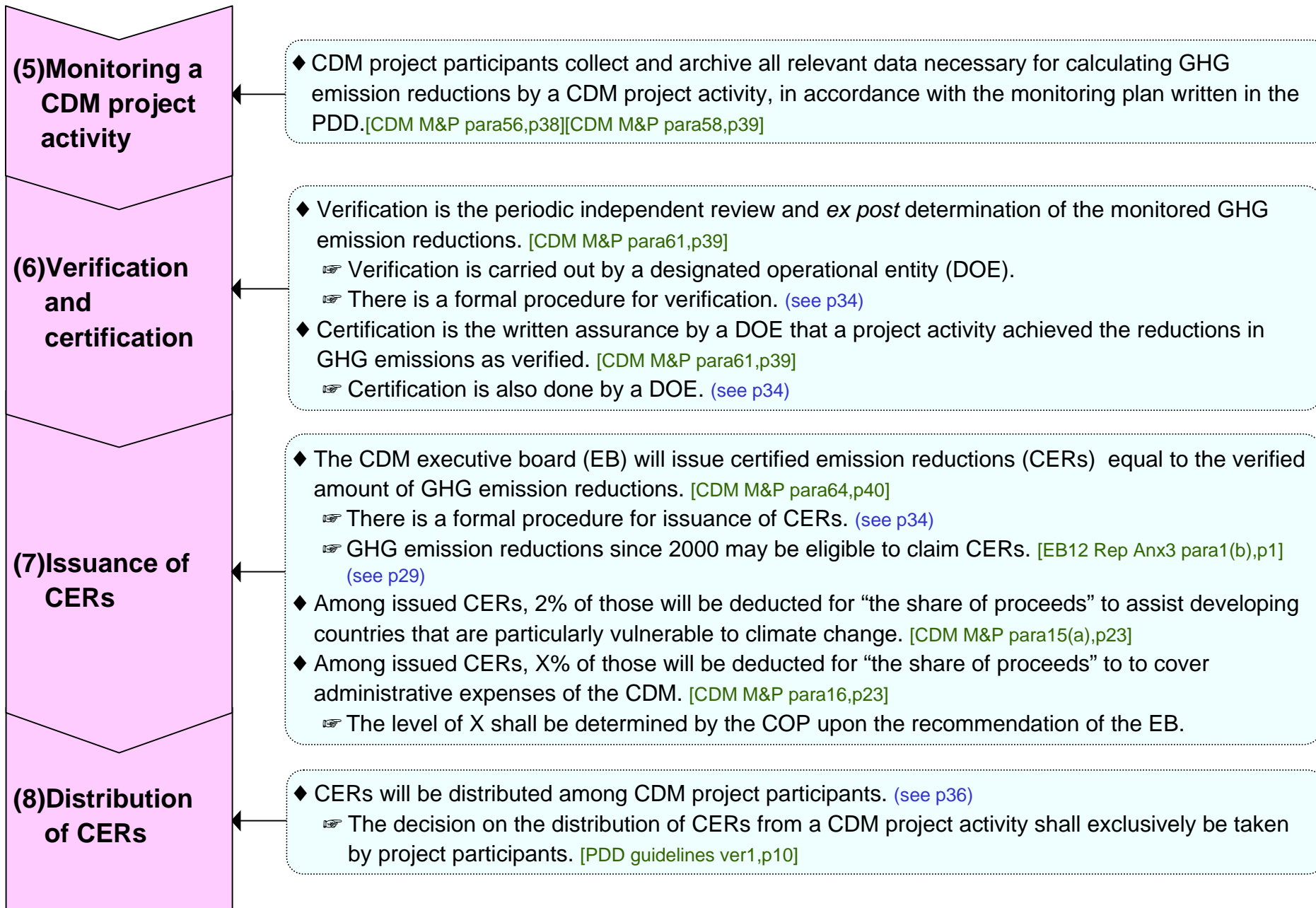
### BOX: tCER and ICER

“tCER and ICER” will expire in the end in order to address nonpermanence of an A/R project activity under the CDM.

### 3. Overview of CDM project cycle

Sections 3 to 11 describe normal-scale emission reduction CDM project activity. For small-scale CDM project activity, see page 37. Afforestation and reforestation project activity under the CDM (A/R CDM project activities) will be described by the updated version of this document.





## 4. CDM-related organizations

### 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 para4,p25] :
  - ☞ 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 [CDM M&P], 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. [CDM M&P para2,p21]

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

- ◆ Parties participating in the CDM shall set up a designated national authority (DNA) for the CDM. [CDM M&P para29,p32]
- ◆ CDM project participants shall receive written approval of voluntary participation from the DNA of each Party involved (a host Party and Annex I Parties).
  - ☞ The written approval shall include confirmation by the host Party that the project activity assists it in achieving sustainable development. [CDM M&P para40(a),p35]
  - ☞ 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 para5,p27], 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 (see p73) 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. This responsibility includes:
    - ⇒ Decisions on re-accreditation, suspension and withdrawal of accreditation;
    - ⇒ Operationalization of accreditation procedures and standards;
  - ☞ 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;
  - ☞ Elaborate and recommend to the COP/MOP for adoption at its next session procedures for conducting the reviews for the registration and Issuance of CERs;
    - ⇒ Until their adoption by the COP/MOP, the procedures shall be applied provisionally.
  - ☞ Formally accept a validated project as a CDM project activity (registration); [CDM M&P para36,p34]
  - ☞ Instruct to issue CERs for a CDM project activity to the CDM registry administrator; [CDM M&P para66,p40]
  - ☞ 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 para7-12,p28]

- ☞ 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.
  - ⇒ 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. [CDM M&P para 3(b),p21]

#### Meeting and decision of the EB [CDM M&P para13-16,p30]

- ☞ 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/Ad2para18,p30]
- ◆ 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 recommendations on submitted proposals for new baseline and monitoring methodologies (NMs);
  - ☞ Prepare draft reformatted versions of proposed NMs approved by the EB;
  - ☞ Elaborate recommendations for consideration and adoption by the EB, as appropriate, on, *inter alia*:
    - Revisions to the PDD, in particular on sections relevant to baseline and monitoring;
    - Draft decision trees and other methodological tools;
    - Amendments on the annex on indicative simplified methodologies for CDM small-scale project activities.
  - ☞ Etc.
- ◆ 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 10 members. [EB13 Rep Anx1]

**AR working group (AR-WG)**  
(Working group on afforestation and reforestation project activities)

- ◆ The AR-WG shall:
  - ☞ Prepare recommendations on submitted proposals for new baseline and monitoring methodologies for CDM A/R project activities;
  - ☞ Prepare draft reformatted versions of proposed NMs for CDM A/R 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 CDM A/R project activities, in particular on those sections relevant to baseline and monitoring.
  - ☞ Etc.
- ◆ 2 members or alternate members of the EB will act as Chair and vice Chair of the WG, respectively. In addition to the designated EB members, the panel shall be composed of 5 members. [EB14 Rep Anx8]

**SSC panel**  
(Panel to recommend draft simplified modalities and procedures for small-scale CDM project activities)

- ◆ The SSC panel shall elaborate recommendations for draft simplified modalities and procedures for small-scale CDM project activities for consideration by the EB. [TOR for SSC panel approved by the EB on 22 March 2002]
- ☞ The panel completed its tasks and finished its activity.

**SSC WG**  
(Working group to assist the EB in reviewing proposed methodologies and project categories for small-scale CDM project activities)

- ◆ The SSC WG shall prepare recommendations for consideration and adoption by the EB on submitted proposals for new small-scale project activity categories and new simplified baseline and monitoring plans and etc. [EB15 Rep Anx11]

**CDM-AP**  
(CDM accreditation panel)

- ◆ The CDM-AP shall make recommendations to the EB regarding:
  - ☞ The accreditation of an applicant OE;
  - ☞ The suspension of accreditation of a DOE;
  - ☞ The withdrawal of accreditation of a DOE;
  - ☞ The re-accreditation of a DOE.
- ◆ The CDM-AP also carries out selecting the members of a CDM accreditation assessment team (CDM-AT) and etc.
- ◆ 2 members or alternate 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 5 members. [EB03 Rep Anx1]

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

- ◆ The CDM-AT shall undertake an assessment of the applicant and/or designated OEs 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 Rep Anx1]

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

- ◆ A designated operational entity (DOE) [CDM M&P para27,p31] shall:
  - ☞ Perform validation or verification and certification related to a given CDM project activity;
    - ⇒ Upon request, the EB may allow a single DOE to perform all these functions within a single CDM project activity.
  - ☞ Demonstrate that it and its subcontractors have no real or potential conflict of interest with the participants in the CDM project activities for which it has been selected to carry out validation or verification and certification functions;
    - ⇒ If it is part of a larger organization, and where parts of that organization are, or may become, involved in any CDM project activity, the applicant operational entity shall demonstrate that no conflict of interest exists between its functions as an operational entity and any other functions that it may have, and demonstrate how business is managed to minimize any identified risk to impartiality. [CDM M&P para2(a)(ii),p42]
  - ☞ Maintain a publicly available list of all CDM project activities for which it has carried out validation, verification and certification;
  - ☞ Submit an annual activity report to the executive board;
  - ☞ Make information obtained from CDM project participants publicly available, as required by the EB.
    - ⇒ Information 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 (see p21), to describe the baseline methodology (see p24) and its application, and to support an environmental impact assessment (see p55), shall not be considered as proprietary or confidential.

- ◆ The DOEs shall be accredited by the EB and be designated by the COP/MOP. [CDM M&P para3(c),p27]
- ◆ There are standards for the accreditation of OE [CDM M&P para1,p41]. For example, an OE shall:
  - ☞ Be a legal entity (either a domestic legal entity or an international organization);
  - ☞ Employ a sufficient number of persons, and have the financial stability and a management structure to have the necessary competence to perform its functions;
  - ☞ Have, or have access to, the necessary expertise to carry out the functions specified in modalities and procedures of the CDM and relevant decisions by the COP/MOP;
  - ☞ Work in a credible, independent, non-discriminatory and transparent manner; [CDM M&P para2(a),p42]
  - ☞ Etc.

- ☞ A publicly available list of all DOEs is maintained by the EB (<http://cdm.unfccc.int/DOE/list>). [CDM M&P para20(c),p30]
- ☞ DOEs are reviewed by the EB whether they continues to comply with the accreditation standards, and on this basis be confirmed whether to be reaccredited every 3 years. [CDM M&P para20(d),p30]
- ☞ There is a formal procedure for accreditation of OEs.

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

- ◆ The EB may recommend to the COP/MOP to suspend or withdraw the designation of a DOE if it has carried out a review and found that the entity no longer meets the accreditation standards or applicable provisions in decisions of the COP/MOP.
  - ☞ The EB may recommend the suspension or withdrawal of designation only after the DOE has had the possibility of a hearing.
  - ☞ The suspension or withdrawal is with immediate effect, on a provisional basis, once the EB has made a recommendation, and remains in effect pending a final decision by the COP/MOP.
  - ☞ The affected entity shall be notified, immediately and in writing, once the EB has recommended its suspension or withdrawal.
  - ☞ The recommendation by the EB and the decision by the COP/MOP on such a case shall be made public.
    - ⇒ It is assumed that if the COP/MOP decides the affected DOE meets the accreditation standards, the DOE will recover from its suspension or withdrawal.

**Affect to registered CDM project activities by the suspension or withdrawal of designation of a DOE** [CDM M&P para22-24,p31]

- ☞ 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.
- ☞ Any suspension or withdrawal of a DOE that adversely affects registered project activities shall be recommended by the EB only after the affected project participants have had the possibility of a hearing.

### 4-6. Project participants

- ◆ Participation in a CDM project activity is voluntary. [CDM M&P para28,p32]
- ◆ A project participant 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 ver2,p10]

#### **A Party**

- ☞ Parties participating in the CDM shall designate a national authority (DNA) for the CDM. [CDM M&P para29,p32]
- ☞ A non-Annex I Party may participate in a CDM project activity if it is a Party to the Kyoto Protocol. [CDM M&P para30,p32]

#### **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 para33,p33]
- ☞ 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 ver2,p5]

#### **A change of project participants**

[PDD guidelines ver1,p11]

- ☞ A change of project participants shall immediately be communicated to the EB through the secretariat.
- ☞ The indication of change shall be signed by all project participants of the previous communication and by all new and remaining project participants.
- ☞ Each new project participant needs authorization, as required.

#### **Participation by a fund** [PDD guidelines ver2,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 ver2,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.
- ◆ 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.

## 5. Conditions for registering as a CDM project activity

◆ 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; [CDM M&P,p20]
  - ⇒ It is the host Party's prerogative to confirm whether a CDM project activity assists it in achieving sustainable development. [CDM M&P,p20]
- ☞ A CDM project activity is additional (see p21) if GHG emissions are reduced below those that would have occurred in the absence of the registered CDM project activity; [CDM M&P para43,p36]
- ☞ Annex I Parties are to refrain from using CERs generated from nuclear facilities to meet their quantified GHG emissions reduction targets; [CDM M&P,p20]
- ☞ The eligibility of land use, land-use change and forestry project activities under the CDM is limited to afforestation and reforestation (A/R); [CDM M&P para7(a),p22]
- ☞ 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. [CDM M&P,p20]
  - ⇒ Annex I Parties shall provide an affirmation that such funding does not result in a diversion of ODA. [PDD guidelines ver1,p15]

### BOX : Registration fee of the CDM project activity [EB6 Rep Anx5]

- ☞ CDM project participants shall pay registration fee at registration stage.
  - ⇒ Fee level depends on the estimated or approved average annual emissions reductions (tonnes of CO<sub>2</sub> equivalent) to be realized over the crediting period.

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

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

- ☞ The registration fee paid will be deducted from the share of proceeds (see p36) for administration due at issuance of CERs.

### BOX : Revision of the modalities and procedures for the CDM [CDM M&P para19,p23][CDM M&P para4,p25]

- ☞ 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

### The project design document (CDM-PDD)

- ◆ It is necessary to prepare a project design document (PDD) in order to be registered as a CDM project activity. The PDD shall include following items. [CDM M&P para2,p43]
  - ☞ A description of the project; (see p51)
  - ☞ A proposed baseline methodology; (see p52)
  - ☞ Statement of the estimated operational lifetime of the project and which crediting period was selected; (see p52)
  - ☞ Description of how the GHG emissions are reduced below those that would have occurred in the absence of the registered CDM project activity; (see p52)
  - ☞ Environmental impacts; (see p55)
  - ☞ Information on sources of public funding for the project activity from Annex I Parties; (see p56)
  - ☞ Stakeholder comments; (see p56)
  - ☞ Monitoring plan; (see p54)
  - ☞ Description of formulae used to calculate and estimate the emission reductions of the CDM project activity; (see p55)
  - ☞ References to support the above, if any.

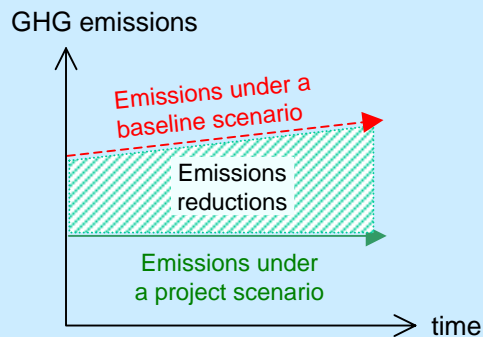
### BOX : Information note for PDD [PDD guidelines ver1,p12]

- ☞ The PDD presents information on the essential technical and organizational aspects of the project activity and is a key input into the validation, registration, and verification of the project as required under the Kyoto Protocol.
- ☞ The PDD contains information on the project activity, the approved baseline methodology applied to the project activity, and the approved monitoring methodology (see p73) applied to the project. It discusses and justifies the choice of baseline methodology and the applied monitoring concept, including monitoring data and calculation methods.
- ☞ Project participants should submit the completed version of the PDD, together with attachments if necessary, to an accredited DOE for validation. The DOE then examines the adequacy of the information provided in the PDD, especially whether it satisfies the relevant modalities and procedures concerning CDM project activities. Based on this examination, the DOE makes a decision regarding validation (see p31) of the project.

## 6. Baseline

### 6-1. Concept of the baseline

- ◆ The baseline 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 para44,p36]
  - ☞ A baseline shall cover emissions from all gases, sectors and source categories listed in Annex A of the Kyoto Protocol within the project boundary.
- ◆ The baseline 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 para46,p37]
- ◆ The baseline shall be defined in a way that CERs cannot be earned for decreases in activity levels outside the project activity or due to force majeure. [CDM M&P para47,p37]



- ◆ A baseline shall be established: [CDM M&P para45,p36]
  - (a) By project participants in accordance with provisions for the use of approved and new methodologies;
    - ⇒ If a DOE determines that a proposed project activity intends to use a new baseline or monitoring methodology, it shall, prior to the submission for registration of this project activity, forward the proposed methodology to the EB for review (see p27). [PDD guidelines ver1,p6]
  - (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;
    - ⇒ “Transparent and conservative manner” means assumptions are explicitly explained and choices are substantiated. In case of uncertainty regarding values of variables and parameters, the establishment of a baseline is considered conservative if the resulting projection of the baseline does not lead to an overestimation of emission reductions attributable to the CDM project activity (that is, in the case of doubt, values that generate a lower baseline projection shall be used). [EB05 Rep Anx3 para10(a),p2]
  - (c) On a project-specific basis;
  - (d) In the case of small-scale CDM project activities (see p37), in accordance with simplified procedures developed for such activities;
  - (e) Taking into account relevant national and/or sectoral policies and circumstances, such as sectoral reform initiatives, local fuel availability, power sector expansion plans, and the economic situation in the project sector. (see p22)



## 6-2. Baseline scenario

- ◆ The baseline for a CDM project activity is the scenario that reasonably represents GHG emissions that would occur in the absence of the proposed project activity.
- ◆ 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 project participants shall take into account national / sectoral policies and circumstances (see p22), ongoing technological improvements, investment barriers, etc.

[PDD guidelines ver1,p7]

- ☞ As part of the basis for determining the baseline scenario an explanation shall be made of how, through the use of the methodology, it can be demonstrated that a project activity is additional and therefore not the baseline scenario.
- ☞ Examples of tools that may be used to demonstrate that a project activity is additional and therefore not the baseline scenario include, among others: [EB10 Rep Anx1 para1-2]

(a) A flow-chart or series of questions that lead to a narrowing of potential baseline options; and/or

(b) A qualitative or quantitative assessment of different potential options and an indication of why the non-project option is more likely; and/or

(c) A qualitative or quantitative assessment of one or more barriers facing the proposed project activity (such as those laid out for small-scale CDM projects); and/or

(d) An indication that the project type is not common practice (e.g. occurs in less than [ $<x\%$ ] of similar cases) in the proposed area of implementation, and not required by a Party's legislation/regulations.

## Clarifications on the treatment of national and/or sectoral policies and regulations in determining a baseline scenario (see p21)

[EB16 Rep Anx3]

- ◆ The EB agreed to differentiate ways to address the following 4 types of national and/or sectoral policies in determining a baseline scenario:

### Type E+

Existing policies or regulations which give comparative advantages to more emissions-intensive technologies or fuels

- ☞ Only “Type E+” 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 “Type E+” policies or regulations were implemented since the adoption of the Kyoto Protocol, the baseline scenario should refer to a hypothetical situation without the policies or regulations being in place.

### Type E-

Policies or regulations that give positive comparative advantages to less emissions-intensive technologies

- ☞ e.g. public subsidies to promote the diffusion of renewable energy or to finance energy efficiency programs.

- ☞ “Type E-” policies or regulations that have been implemented since the adoption of the CDM M&P (11 November 2001) may not be taken into account in developing a baseline scenario.
  - ⇒ i.e. the baseline scenario should refer to a hypothetical situation without the policies or regulations being in place.

### Type L+

Sectoral mandatory regulations that aim the reduction of negative local environmental externalities and which incidentally prevent the adoption/diffusion of less GHG emitting technology.

### Type L-

Sectoral mandatory regulations that aim the reduction of negative local environmental externalities and/or energy conservation and which would incidentally also reduce GHG emissions.

- ☞ The EB noted that the Meth Panel is to continue to consider possible additional recommendations regarding national and/or sectoral policies or regulations of types L- and L+.

### 6-3. Baseline approach (para 48 of CDM M&P)

- ◆ In choosing a baseline methodology for a project activity, project participants shall select from among the following approaches the one deemed most appropriate for the project activity, and justify the appropriateness of their choice: [CDM M&P para48,p37]

(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.

- ☞ 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 Rep Anx1 para4]

#### **BOX : Additional guidance on the approach contained in paragraph para 48 (c) of CDM M&P** [EB08 Rep Anx1 para4-5]

- ☞ Project participants wishing to select this approach shall elaborate in their submission of a proposed new baseline methodology, inter alia, on:
  - (a) How they determine “similar social, economic, environmental and technological circumstances”, and
  - (b) How they assess the “performance among the top 20 per cent of their category” defined as GHG emissions performance (in terms of CO<sub>2</sub>equ emissions per unit of output).
- ☞ Project participants wishing to use this approach and a related approved methodology shall assess the applicability and use the most conservative of the following options:
  - (a) The output-weighted average emissions of the top 20 per cent of similar project activities undertaken in the previous 5 years in similar circumstances;
  - (b) The output-weighted average emissions of similar project activities undertaken in the previous 5 years under similar circumstances that are also in the top 20 per cent of all current operating projects in their category (i.e. in similar circumstances as defined above).

## 6-4. Baseline methodology

- ◆ A methodology is an application of an approach as defined in paragraph 48 of the CDM M&P, to an individual project activity, reflecting aspects such as sector and region.
- ◆ No methodology is excluded a priori so that project participants have the opportunity to propose a methodology. In considering paragraph 48, the EB agreed that, in the 2 cases below, the following applies: [PDD guidelines ver1,p6]

(a) Case of a new methodology:  
In developing a baseline methodology, the 1st step is to identify the most appropriate approach for the project activity and then an applicable methodology.

(b) Case of an approved methodology:  
In opting for an approved methodology, project participants have implicitly chosen an approach.

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

- ☞ If a proposed CDM project activity comprises different “sub-activities” requiring different methodologies, project participants 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 (see p51) ) for each “sub-activity”.

### BOX : Decrease in activity levels [EB08 Rep Anx1 para7-9,p2]

- ☞ Para 47 of CDM M&P stipulates that “the baseline shall be defined in a way that CERs cannot be earned for decreases in activity levels outside the project activity or due to force majeure”.
- ☞ An output- or product-linked definition of baseline values (i.e. CO<sub>2</sub>equ. per unit of output) shall be applied, unless the project participants can demonstrate why this is not applicable and provide an appropriate alternative.
- ☞ The Meth Panel shall evaluate, on a case-by-case basis, whether a proposed new methodology complies with this provision.

### BOX : Clarifications on ex post calculation of baselines [EB10 Rep Anx1 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 (see p51) in order to satisfy the requirements for identification of the elements of a baseline methodology.

### BOX : Guidance regarding the treatment of “existing” and “newly built” facilities [EB08 Rep Anx1 para10,p2]

- ☞ If a proposed CDM project activity seeks to retrofit or otherwise modify an existing facility, the baseline may refer to the characteristics (i.e. emissions) of the existing facility only to the extent that the project activity does not increase the output or lifetime of the existing facility. For any increase of output or lifetime of the facility which is due to the project activity, a different baseline shall apply.

## 6-5. Clarification for drafting a proposal for a new methodology [EB09 Rep Anx3 para1-7]

### Decision tree

When drafting a proposed new baseline methodology, project participants shall follow the following steps:

- (a) Choose and justify why one of the approaches listed in para 48 of CDM M&P is considered to be the most appropriate.
- (b) Elaborate a proposal for a new methodology which, in accordance with earlier guidance provided by the EB (see guidance by the EB at its 5th meeting), is to be an application of the selected approach to a project activity, reflecting aspects such as sector, technology, region. The EB agreed that no methodology is to be excluded a priori so that project participants have the opportunity to propose any methodology which they consider appropriate. The project participant shall take into account guidance by the EB on aspects to be covered by a methodology (Annex 1 to EB report of its 8th meeting).
- (c) Describe the proposed new methodology in the CDM-NMB and the CDM-NMM taking into account guidance given by the EB at its 5th and 8th meeting as well as the information provided in the CDM PDD Glossary of Terms.
- (d) Demonstrate the applicability of the proposed methodology, and, implicitly, that of the approach, to a project activity by providing relevant information in a draft CDM-PDD.

### Baseline and additionality

- When drafting a proposed new methodology shall explain how a project activity using the methodology can demonstrate that it is additional i.e. different from the baseline scenario.
- Project participants shall therefore describe how to develop the baseline scenario and “how the baseline methodology addresses the determination of project additionality.”
- In addition, the methodology shall provide elements to calculate the emissions of the baseline.
- The project participants shall ensure consistency between the elaboration of the baseline scenario and the procedure and formulae to calculate the emissions of the baseline.

- ◆ When proposing a new baseline methodology, the following information elements shall be covered and reported through the CDM-NMB: [EB08 Rep Anx1 para1-2]
  - (a) Basis for determining the baseline scenario:
    - ⇒ Explanation of how the baseline is chosen, taking into account relevant national and/or sectoral policies and circumstances;
    - ⇒ Underlying rationale for algorithm/formulae (e.g. marginal vs. average, etc.);
    - ⇒ Explanation of how, through the methodology, it is demonstrated that a project activity is additional and therefore not the baseline scenario (section B4 of the CDM-PDD).
  - (b) Formulae/algorithms shall specify:
    - ⇒ Type of variables used (e.g. fuel(s) used, fuel consumption rates, etc.);
    - ⇒ Spatial level of data (local, regional, national, etc.);
    - ⇒ Project boundary (gases and sources included, physical delineation);
    - ⇒ Vintage of data (relative to project crediting period)
  - (c) Data sources and assumptions:
    - ⇒ Where the data are obtained (official statistics, expert judgement, proprietary data, IPCC, commercial and scientific literature, etc.);
    - ⇒ Assumptions used.
- ◆ Project participants selecting an approved baseline methodology shall ensure that elements described in subparagraphs (a) to (c) above apply to their proposed project activity.

## 6-5. Clarification for drafting a proposal for a new methodology

[EB09 Rep Anx3 para3-7]

**Drafting quality**

- ☞ Proposals should be written in a concise and clear manner.
- ☞ Important procedures and concepts should be supported by equations and diagrams. Non-essential information should be avoided.
- ☞ The CDN-NMB and the CDM-NMM shall not contain information which is related to the application of the proposed new methodology to the project activity for illustrative purposes.
- ☞ Project participants shall refrain from providing glossaries or using key terminology not used in the COP documents and the CDM glossary (environmental/investment additionality), and from rewriting the CDM-PDD instructions.

**Avoid repetitions**

- ☞ Not unnecessarily repeat in the main CDM-PDD Sections A-E, submitted as a demonstration of the application of the proposed new methodology, text and methodological explanations already provided in the Annexes. The CDM-PDD Sections A-E are meant to provide information on the application of the methodology(ies) to the project activity.

**Provide complete the CDN-NMB and the CDM-NMM**

- ☞ All algorithms, formulae, and step-by-step procedures for applying the methodology shall be included here.
- ☞ These Annexes shall provide stand-alone replicable methodologies, and avoid reference to any secondary documents if they wish to convey essential information, except where considered absolutely necessary (e.g. model documentation).

**Data requirements and sources**

- ☞ Clearly specify data requirements and sources, as well as procedures to be followed if expected data are unavailable.
- ☞ For instance, the methodology could point to a preferred data source (e.g. national statistics for the past 5 years), and indicate a priority order for use of additional data (e.g. using longer time series) and/or fall back data sources to preferred sources (e.g. private, international statistics, etc.).
- ☞ Use International System Units (SI units – refer to [http://www.bipm.fr/enus/3\\_SI/si.html](http://www.bipm.fr/enus/3_SI/si.html)).

**Titles**

- ☞ Provide an unambiguous title for a proposed methodology. Avoid project-specific titles.
- ☞ The title, once approved, should allow project participants to get an indication of the applicability of an approved methodology.

**BOX : Link between baseline and monitoring methodologies** [EB10 Rep Anx1 para7,p2]

- ☞ A strong link between baseline and monitoring methodologies are to be provided. New baseline and monitoring methodologies shall be proposed and approved together.
- ☞ If project participants would like to use different combinations of approved baseline and monitoring methodologies, they shall submit a proposal for consideration of the Meth Panel and approval by the EB.

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

[<http://cdm.unfccc.int/Reference/Procedures>] [Version 06]

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

(2) The secretariat checks that the "CDM: Proposed new methodology form" (F-CDM-PNM) has been duly filled by the DOE and documentation provided by the DOE is complete.

(3) The secretariat forwards the documentation to 1 member of the MP. This member is to assess the quality of the submission and grade it as being 1 and 2.

☞ If the grade is 2, the documentation is to be sent back to the project participants.

☞ If the grade is 1, the documentation is considered as received by the EB, and be forwarded by the secretariat for consideration of the EB and the MP.

The date of receipt of the proposed NM:

if possible at next EB meeting but not later than 4 months

(4) The secretariat makes the proposed new methodology (NM) publicly available on the UNFCCC CDM web site and invite public inputs for a period of **15 working days**.

Public inputs shall be made using the "public comment form" (F-CDM-NMpu ver3)

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

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

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

(7) The Chair and the Vice-Chair of the MP select the desk reviewers from a roster of experts, no later than **7 working days** after the receipt of the proposed NM, with the assistance of the 2 MP members and the secretariat.

(8) Each desk reviewer forwards his/her recommendation to the MP, wherever possible, within **10 working days** after having received a proposed NM using the "expert desk review form" (F-CDM-NMex ver3).

(9) The MP may request the project participants additional technical information\* within a deadline stipulated by the Chair of MP.

(10) The MP prepares its preliminary recommendation regarding the approval of the proposed NM to the EB using the form "Panel recommendation to the EB" (F-CDM-NMmp ver3).

(11) The MP forwards its preliminary recommendation to project participants.

(12) Within **10 working days** after the receipt of the preliminary recommendation of the MP, the project participants may submit clarifications\* to the MP. Technical clarifications provided by the project participants shall include revisions in the CDM-NMB and CDM-NMM in highlighted form.

\*Communication will be made through the secretariat, and via the DOE. Information and clarifications provided by the project participants are made available to the EB and to the public soon after they have been received by the secretariat.

(13 a) If project participants do not provide any clarification within the 10-day period, or if the preliminary recommendation by the MP is in favour of approving the proposed NM, it is considered as a final recommendation

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

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

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

The MP makes a recommendation to the EB, **if possible at its next meeting**. A proposed NM shall be available to the MP at least **7 weeks prior** to its next meeting. In case more than 10 proposed NMs are submitted by the deadline, the Chair of the MP ascertains how many proposals are analysed at the next MP meeting and decide to postpone the analysis of some submissions. Submissions are treated on a "First come first served" basis. The EB may decide to change a deadline for submissions of proposed NMs taking into account the workload of the MP.

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

### 7-1. Project boundary and leakage

#### Project Boundary

- ◆ The project boundary shall encompass all anthropogenic emissions by sources of greenhouse gases under the control of the project participants that are significant and reasonably attributable to the CDM project activity. [CDM M&P para52,p37]
  - ☞ 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 ver1,p10]
  - ☞ Pending decisions by the EB on these terms, project participants are invited to explain their interpretation of such terms when completing and submitting the CDM-NMB and CDM-NMM. (see p57,59)

#### 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 para51,p37]
  - ⇒ In an operational context, the terms measurable and attributable should be read as “which can be measured” and “directly attributable”, respectively. [PDD guidelines ver1,p9]
- ☞ Reductions in GHG emissions shall be adjusted for leakage in accordance with the monitoring and verification provisions. (see p34) [CDM M&P para50,p37]

### 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 ver1,p9]
- ◆ A monitoring plan for a proposed project activity shall be based on a previously approved monitoring methodology or a new methodology. [CDM M&P para54,p38]
  - ☞ A monitoring methodology refers to the method used by project participants for the collection and archiving of all relevant data necessary for the implementation of the monitoring plan. [PDD guidelines ver1,p9]

- ☞ A monitoring methodology approved by the EB and made publicly available along with relevant guidance. [PDD guidelines ver1,p9]
- ☞ Project participants may propose a new monitoring methodology. In developing a monitoring methodology, the 1st step is to identify the most appropriate methodology bearing in mind good monitoring practice in relevant sectors.
- ☞ Project participants shall submit a proposal for a new methodology to a DOE by forwarding a completed “Proposed New Methodology:Baseline (CDM-NMB)” along with a completed “Proposed New Methodology: Monitoring (CDM-NMM)” and the CDM-PDD with sections A to E completed in order to demonstrate the application of the proposed new methodology to a proposed project activity.
  - ⇒ Procedures for the submission of a proposed new monitoring methodology is same as that of new baseline methodology.

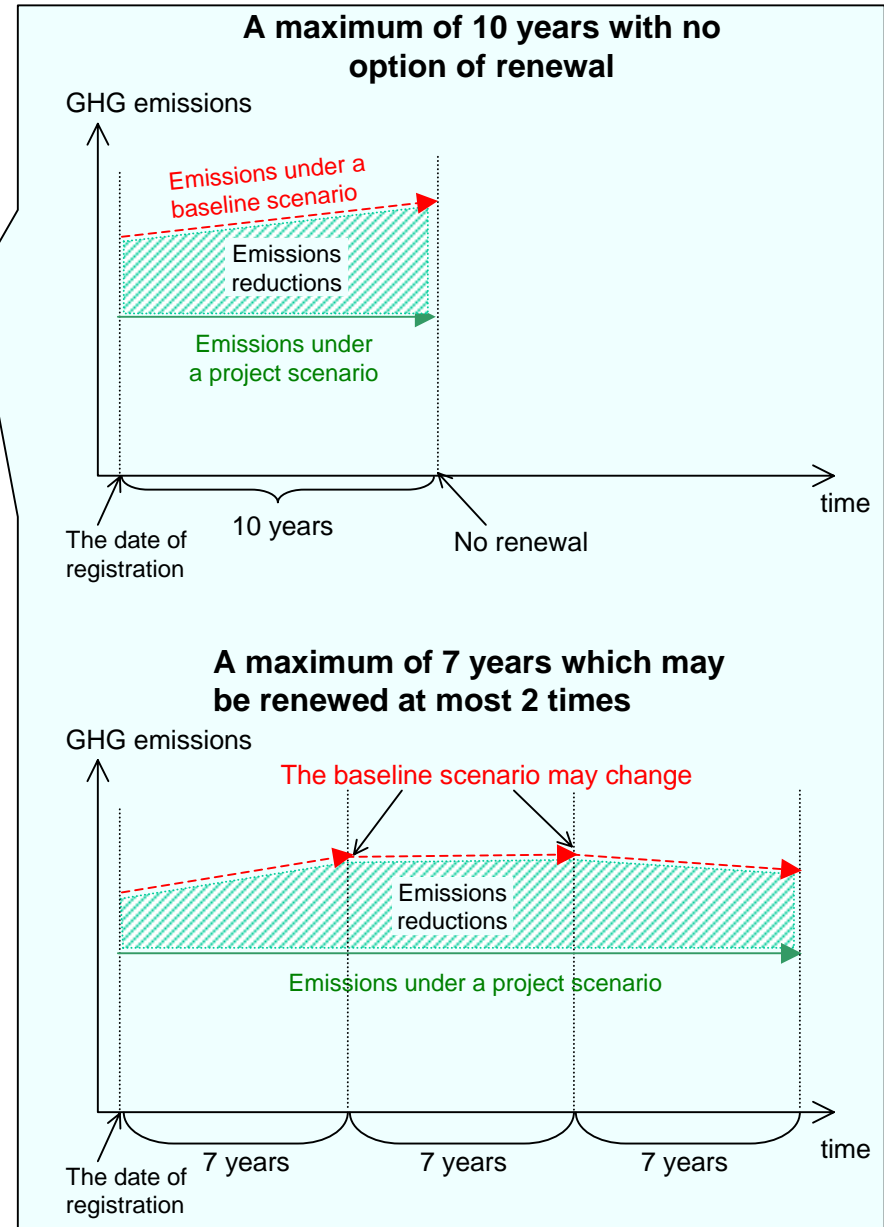


## 7-3. Crediting period

- ◆ CERs shall only be issued for a crediting period starting after the date of registration of a CDM project activity. [CP/2001/13/Ad2 para12,p23]
- ◆ Project participants select a crediting period for a proposed project activity from one of the following alternative approaches:
  - ☞ A maximum of 7 years which may be renewed at most 2 times. [CDM M&P para49,p37]
    - ⇒ 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.

### Retroactivity of a crediting period

- ☞ A project activity starting between 1 January 2000 and the date of the 1st registration of a CDM project activity may use a crediting period starting before the date of its registration. [CDM M&P para13,p23] [CP/2003/6/Ad2 para1(c),p5]
  - ⇒ Only if the project activity is submitted for registration before 31 December 2005.
- ☞ 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 ver1,p11]
  - ⇒ Project activities starting between 1 January 2000 and the date of the registration of a 1st CDM project have to provide documentation, at the time of registration, showing that the starting date fell within this period, if the project activity is submitted for registration before 31 December 2005.



## 8. Procedures for validation of a CDM project activity

<<http://cdm.unfccc.int/Reference/Procedures>>[Version 3 / Nov 2003]

### 8-1. Overview of validation procedures

#### CDM project participants

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

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

#### Designate operational entity (DOE)

(3) Review the PDD to confirm that the requirements for the CDM have been met. (see p31)[CDM M&P para37,p34]

(4) Make publicly available the PDD in PDF format, either on a web site with a link to the UNFCCC CDM web site or directly on the UNFCCC CDM web site.

Notify the secretariat **10 days** before the PDD is to be made public. The notification shall specify:

- (a) The address of the web page where the PDD will be found or whether it wishes to post the PDD directly on the UNFCCC CDM web site
- (b) The name of the proposed CDM project activity
- (c) The opening and closing date of comments on the validation requirements.

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

(8) 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.

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

No Yes

Inform project participants of reasons for non-acceptance

(10) Inform project participants of confirmation of validation and date. [CDM-M&P para40(e),p35]

Registration Procedure

#### UNFCCC secretariat

(5) Post on the UNFCCC CDM web site a link to the web page of the DOE or post the CDM PDD on its web site, and make an announcement on the UNFCCC CDM web site and in the CDM news facility about the public availability of the PDD.

(6) Promptly inform the DOE when the announcement has been made.

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

## 8-2. Validation requirements

- ◆ The DOE selected by project participants 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 para37,p34]
  - ☞ 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;
  - ☞ Project participants 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

- ◆ The DOE shall: [CDM M&P para40,p35]
  - ☞ Prior to the submission of the validation report to the EB, have received from the project participants 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 (see p15) 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 executive board.

# 9. Procedures for registration of a CDM project activity

## 9-1. Overview of registration procedures

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

### Designate operational entity (DOE)

### UNFCCC secretariat

### CDM executive board (EB)

(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.

F-CDM-REG can be downloaded from <<http://cdm.unfccc.int/Reference/Forms/Registration>>

(2) Submit all required documents using the electronic, internet-based, submission tool provided by the secretariat to each DOE.

(3) Provide, automatically, a unique reference number which is used to identify the bank transfer of the non-reimbursable registration fee. (see p18)

(4) Submit the proof of payment which shall indicate the unique reference number, using the submission tool.

(5) Upon receipt of the non-reimbursable registration fee, the secretariat immediately informs the DOE.

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

(7) After the non-reimbursable 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 made publicly available through the UNFCCC CDM web site for a period of **8 weeks**.

(10) 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. (see p15)

(8) 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 (see p33) within **8 weeks** after the date of receipt of the request for registration. [CDM M&P para41,p36]

No Yes

(9) 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 project participants and the public.

Not registered

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

9-2. Procedures for review of registration [EB16 Rep Anx5]

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 para5(o),p28]

(1) Request for review (see 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 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 project participants 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;
- (c) The project participants 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.

(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 project participants 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 project participants. 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 project participants 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.

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

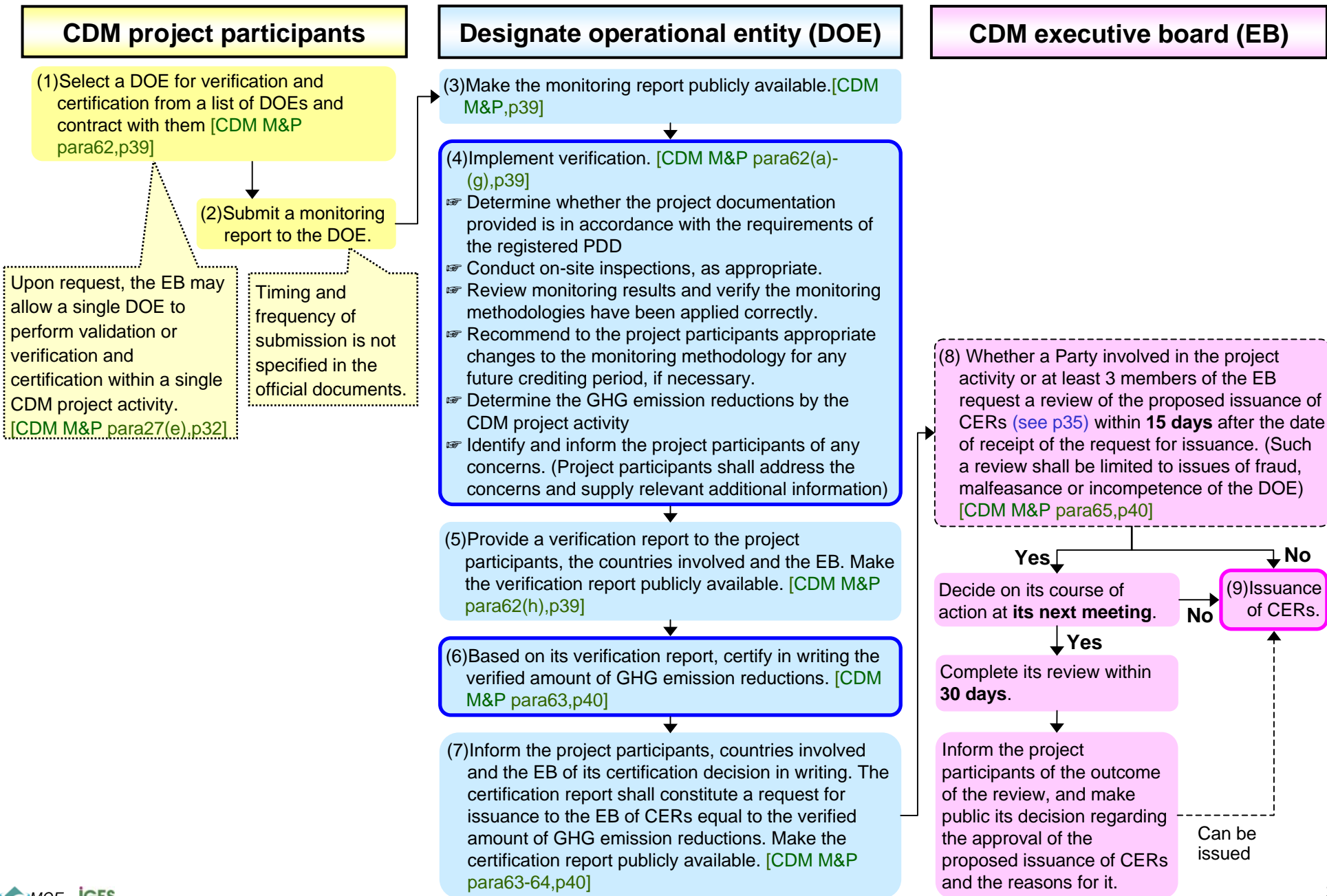
A request for review shall include the form "CDM Project Activity Registration Review" (F-CDM-RR) and provide reasons, including any supporting documentation.

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.

F-CDM-RR can be downloaded from <http://cdm.unfccc.int/Reference/Forms/Registration>

# 10. Procedures for verification, certification and issuance of CERs

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



10-2. Procedures for review of issuance [EB15 Rep 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 para5(o),p28]

(1) Request for review (see p34)

**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 project participants 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 project participants 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.

(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 project participants 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 project participants. 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 project participants 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.

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.

## 11. Distribution of CERs

(1) Upon being instructed by the EB to issue CERs for a CDM project activity, the CDM registry administrator promptly issues the specified quantity of CERs. [CDM M&P para66,p40]

- ◆ CERs are issued into the pending account of the EB in the CDM registry.
  - ☞ The CDM registry is established and maintained by the EB in order to ensure the accurate accounting of the issuance, holding, transfer and acquisition of CERs by Parties not included in Annex I. [CDM M&P Apx D para1,p47]
  - ☞ Pending account for the EB is for issuance of CERs before being transferred to other accounts. [CDM M&P Apx D para3(a),p47]

(2) The quantity of CERs corresponding to the “share of proceeds” are deducted. [CDM M&P para66(a),p40]

- ◆ The share of proceeds is utilized to cover administrative expenses and assist developing country Parties that are particularly vulnerable to the adverse effects of climate change to meet the costs of adaptation.
  - ☞ The share of proceeds to assist in meeting costs of adaptation is 2 per cent of the CERs issued for a CDM project activity. [CDM M&P para15,p23]
    - ⇒ CDM project activities in least developed country Parties shall be exempt from the share of proceeds to assist with the costs of adaptation. [CDM M&P para15,p23]
  - ☞ The level of the share of proceeds to cover administrative expenses of the CDM shall be determined by the COP upon the recommendation of the EB. [CDM M&P para16,p23]
    - ⇒ It has not determined the level yet.
- ◆ The share of proceeds is forwarded to the appropriate accounts in the CDM registry.

(3) The remaining CERs are forwarded to the registry accounts of Parties and project participants involved, in accordance with their request. [CDM M&P para66(b),p41]

- ◆ The decision on the distribution of CERs from a CDM project activity shall exclusively be taken by project participants. [PDD guidelines ver1,p10]
  - ☞ Project participants shall communicate with the EB, through the secretariat, in writing in accordance with the “modalities of communication” submitted together with the registration form.
  - ☞ If a project participant 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. [PDD guidelines ver1,p11]



## 12. Small-scale CDM (SSC)

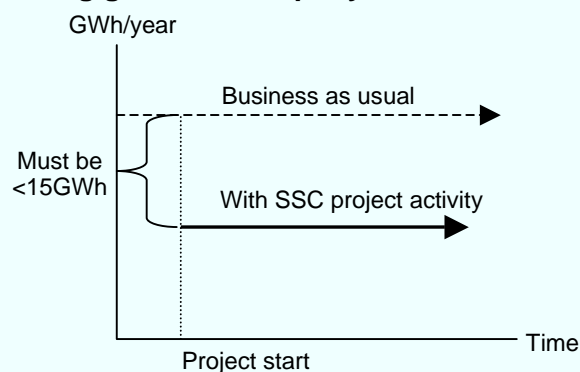
### 12-1. Definition of a small-scale CDM project activity [CP/2002/7/Ad3,p18]

Simplified modalities and procedures are applicable for the following small-scale clean development mechanism project activities. [CDM M&P para6(c),p21]

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

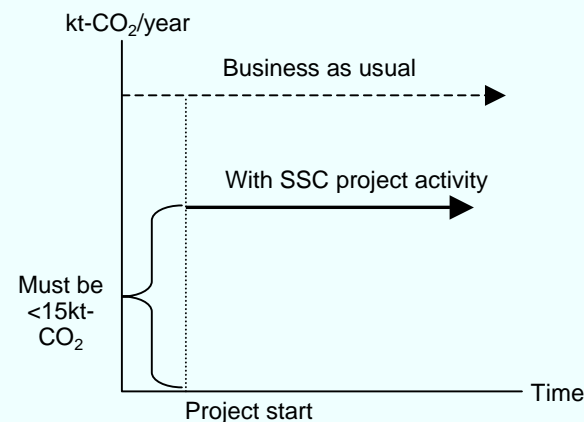
- ☞ The EB has come up with an indicative list of energy sources/eligible project activities under this category.
  - ⇒ Solar, wind, hybrid systems, biogas or biomass, water, geothermal and waste. [EB03 Ann Anx2,p11]
  - ⇒ This list shall evolve and be further elaborated over time as new project activities are proposed and registered.
- ☞ Definition of “output” is installed/rated capacity, as indicated by the manufacturer of the equipment or plant, disregarding the actual load factor of the plant.
- ☞ Project proposals may refer to MW(p), MW(e) or MW(th). As MW(e) is the most common denomination, the EB agreed to define MW as MW(e) and otherwise to apply an appropriate conversion factor.

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



- ☞ The EB has come up with an indicative list of energy sources/eligible project activities under this category
  - ⇒ Supply side projects and end-use projects (residential, service, industry, transport and cross-cutting technologies). [EB03 Ann Anx2,p13]
  - ⇒ This list shall evolve and be further elaborated over time as new project activities are proposed and registered.
- ☞ Energy efficiency is the improvement in the service provided per unit power.
- ☞ 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.

#### Type (iii) : Other project activities that both reduce anthropogenic emissions by sources and directly emit less than 15 kilotonnes of CO<sub>2</sub> equivalent annually



- ☞ Type (iii) CDM project activities could include agricultural projects, fuel switching, industrial processes and waste management [EB03 Ann Anx2,p16]. 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.

## 12-2. 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 para9,p20]
  - ☞ Project activities may be bundled or portfolio bundled at the following stages in the project cycle: the PDD, validation, registration, monitoring, verification and certification;
    - ⇒ The size of the total bundle should not exceed the definition of SSC project activities (see p37);
  - ☞ 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 normal CDM project activities are as follows:
  - ☞ The share of proceeds to cover administrative expenses and registration fees may be lower. [CP/2002/7/Ad3 para21,p22]
  - ☞ The registration by the EB shall be deemed final 4 weeks after the date of receipt of the request for registration, unless there is a request for review of the proposed CDM project activity. [CP/2002/7/Ad3 para24,p23]
    - ⇒ 8 weeks, instead of 4, for large CDM project activities.

- ◆ Simplified baseline and monitoring methodologies have been developed for 15 SSC project activity categories (see p40). [CP/2002/7/Ad3 para10,p21]
  - ☞ They are presented in CP/2002/7/Ad3 ApxB.
  - ☞ This list shall not preclude other types of SSC project activities.
- ◆ A simplified baseline and monitoring methodology listed in CP/2002/7/Ad3 ApxB may be used for a SSC project activity if the project participants 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 listed in CP/2002/7/Ad3 ApxB AttA (see p39). [CP/2002/7/Ad3 para28,p23]
  - ☞ Quantitative evidence that the project activity would otherwise not be implemented may be provided instead of a demonstration based on the barriers listed in CP/2002/7/Ad3 ApxB AttA.

### BOX : New small-scale project activity category or revisions to a methodology [CP/2002/7/Ad3 para16-18,p21]

- ☞ Project participants willing to submit a new small-scale project activity category or revisions to a methodology 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 shall expeditiously, if possible at its next meeting, review the proposed methodology.
  - ⇒ The EB may draw on expertise, as appropriate, in considering
- ☞ Once approved, the EB shall amend CP/2002/7/Ad3 ApxB.
- ☞ The EB shall review and amend, as necessary, appendix B at least once a year.
- ☞ Any amendments to appendix B apply only to project activities registered subsequent to the date of amendment and not affect registered CDM project activities during the crediting periods for which they are registered.

**The barriers** [CP/2002/7/Ad3 ApxB AttA,p26] [EB07 Rep Anx6,p19]

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

☞ **Investment barrier:**

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

☞ **Technological barrier:** a less technologically advanced alternative to the project activity involves lower risks due to the performance uncertainty or low market share of the new technology adopted for the project activity and so would have led to higher emissions;

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

☞ **Other barriers:** without the project activity, for another specific reason identified by the project participant, such as institutional barriers or limited information, managerial resources, organizational capacity, financial resources, or capacity to absorb new technologies, emissions would have been higher.

**Bundling**

◆ Project activities may be bundled or portfolio bundled at the following stages in the project cycle.

[CP/2002/7/Ad3 para9(a),p20]

- ☞ An overall monitoring plan that monitors performance of the constituent project activities on a sample basis may be proposed for bundled project activities.
- ☞ If bundled project activities are registered with an overall monitoring plan, this monitoring plan shall be implemented and each verification/certification of the emission reductions achieved shall cover all of the bundled project activities. [CP/2002/7/Ad3 para19,p22]

**Debundling**

◆ To use simplified modalities and procedures for SSC project activities, a proposed project activity shall not be a debundled component of a larger project activity. [CP/2002/7/Ad3 para12(c),p21]

- ☞ A proposed small-scale project activity shall be deemed to be a debundled component of a large project activity if there is a registered small-scale CDM project activity or an application to register another small-scale CDM project activity: [CP/2002/7/Ad3 ApxC,p27]
  - ⇒ With the same project participants;
  - ⇒ 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.

**BOX : maximum reference value of a small-scale CDM project activity**

☞ The EB agreed that if the maximum reference value of a small-scale CDM project activity is exceeded on an annual average basis during any verified period, CERs should be issued only up to the maximum value. [CP/2002/7/Ad3 para8,p20]

## 12-3. Simplified baseline and monitoring methodologies

- ◆ Indicative simplified baseline and monitoring methodologies for selected small-scale CDM project activity categories, including recommendations for determining the project boundary, leakage, baseline and monitoring, have been developed for the following categories except for III.A. [CP/2002/7/Ad3 ApxB] [Version 04: 22 October 2004]

<b>I. TYPE I - RENEWABLE ENERGY PROJECTS</b>
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
<b>II. TYPE II - ENERGY EFFICIENCY IMPROVEMENT PROJECTS</b>
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
<b>III. TYPE III - OTHER PROJECT ACTIVITIES</b>
III.A. Agriculture
III.B. Switching fossil fuels
III.C. Emission reductions by low-greenhouse gas emitting vehicles
III.D. Methane recovery
III.E. Methane avoidance

## 13. Joint Implementation (JI)

### 13-1. Overview

“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 para23,p13]

☞ 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 Art.6-SC (which means track 2). [CP/2001/13/Ad2 para25,p13]

**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.

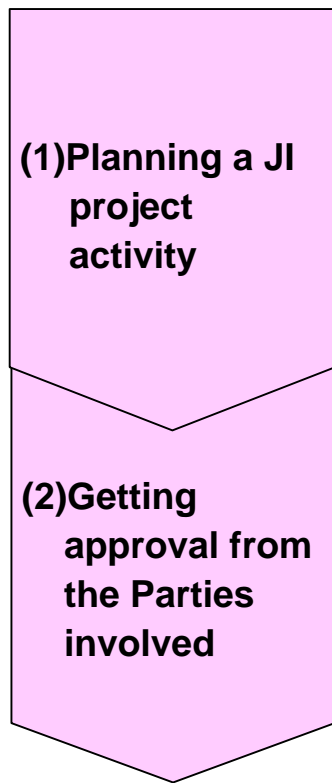
[CP/2001/13/Ad2 para24,p13]

☞ 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 has been calculated and recorded;
- ⇒ It has in place a national registry.

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

- ☞ 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 (see 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).



◆ JI project participants plan a JI project activity

- ☞ There are several conditions for a project activity to be registered as a JI project activity (see p46), 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. (see p46)

◆ JI project participants shall get approvals from designated focal point for approving JI projects of the Parties involved. [CP/2001/13/Ad2 para20(a),p11]

- ☞ A Party involved in JI projects has its national guidelines and procedures for approving JI projects. [CP/2001/13/Ad2 para20(b),p11]
- ☞ The details of approval procedure is up to each Party.

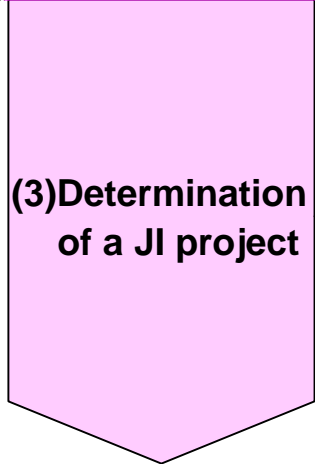
Where a host Party meets the eligibility requirements (see p41)

Where a host Party does not meet the eligibility requirements (see p41)



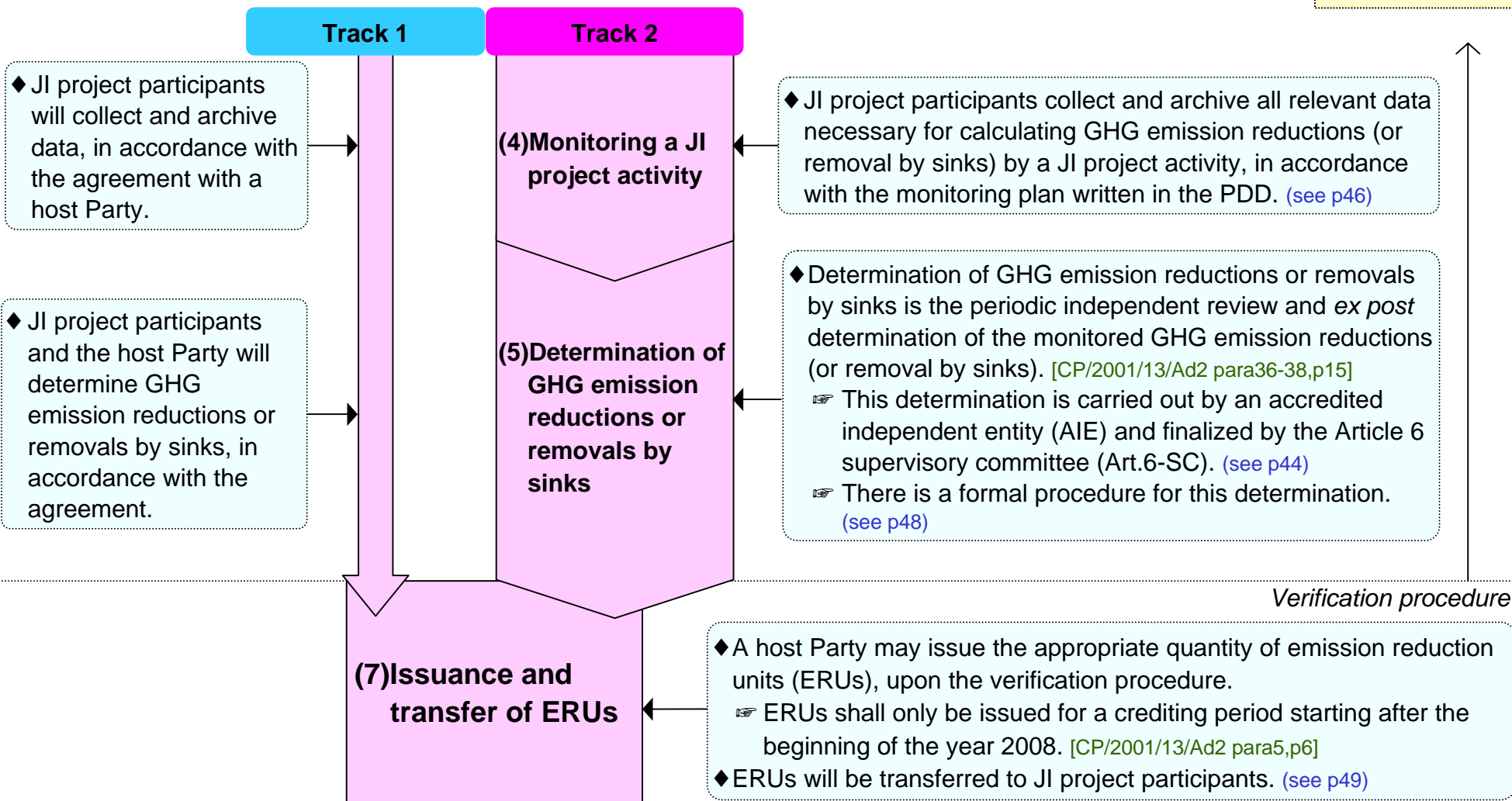
Verification procedure

◆ JI projects will be determined in consultation with the 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 para30,p13]

- ☞ This determination is carries out by an independent entity (AIE) (see p45), accredited pursuant to the standards and procedures.
- ☞ There is a formal procedure for this determination. (see p47)



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

- ☞ 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 Art.6-SC and by the SBI drawing on technical advice of the SBSTA, as needed.
  - ⇒ Any revision of the decision shall not affect ongoing JI projects.

## 13-2. JI-related organizations

### 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 Article 6 (JI) and exercise authority over the Article 6 supervisory committee. [CP/2001/13/Ad2 para2,p8]

#### For Track 2

#### Article 6 supervisory committee (Art.6-SC)

- ◆ The Article 6 supervisory committee is established at COP/MOP1. [CP/2001/13/Ad2 para3,p6]
- ◆ It shall supervise, inter alia, the verification of ERUs generated by JI project activities. [CP/2001/13/Ad2 para3,p9]
- ◆ And it is responsible for: [CP/2001/13/Ad2 para3,p9]
  - ☞ The accreditation of independent entities (see p45) in accordance with standards and procedures;
  - ☞ The review of standards and procedures for the accreditation of independent entities, giving consideration to relevant work of the CDM-EB and making recommendations to the COP/MOP on revisions to these standards and procedures;
  - ☞ The review and revision of reporting guidelines and criteria for baselines and monitoring, for consideration by the COP/MOP, giving consideration to relevant work of the CDM-EB;
  - ☞ The elaboration of the Article 6 (JI) project design document (see p46), for consideration by the COP/MOP, taking into consideration of modalities and procedures for a CDM and giving consideration to relevant work of the EB;
  - ☞ etc.
- ◆ Any administrative costs arising from procedures relating to the functions of the Art6-SC shall be borne by both the Parties included in Annex I and the project participants.
  - ☞ Specifications will be set out in a decision by the COP/MOP1. [CP/2001/13/Ad2 para7,p6]

#### Members of the Art.6-SC [CP/2001/13/Ad2 para4-8,p9]

- ☞ The Art.6-SC 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 Art.6-SC.
- ☞ Members, including alternate members, of the Art.6-SC 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 Art.6-SC 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 Art.6-SC

- ☞ The Art.6-SC 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 para9,p10]
- ☞ At least 2/3 of the members of the Art.6-SC, 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 para14,p11]
- ☞ Decisions by the Art.6-SC 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 para15,p11]



**For Track 2****Accredited Independent Entity (AIE)**

- ◆ The AIE is an independent verifier for track 2 JI, which corresponds a DOE for the CDM (see p15), 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 para30,p13]
  - ☞ Make a determination of the GHG emission reductions (or removal by sinks) reported by project participants in accordance with criteria for baseline setting and monitoring. [CP/2001/13/Ad2 para37,p15]

**Standards and procedures for the accreditation of IEs**

- ◆ The AIEs are accredited by the Art.6-SC. [CP/2001/13/Ad2 para3(b),p9]
- ◆ There are standards and procedures for the accreditation of IEs [CP/2001/13/Ad2 ApxA,p16]. For example, an IE shall:
  - ☞ Be a legal entity (either a domestic legal entity or an international organization);
  - ☞ Employ a sufficient number of persons, and have the financial stability and a management structure to have the necessary competence to perform its functions;
  - ☞ Have the necessary expertise to carry out the functions specified in the standards and procedures and relevant decisions by the COP/MOP;
  - ☞ Work in a credible, independent, non-discriminatory and transparent manner;
  - ☞ Etc.

**Suspension or withdrawal of a AIE [CP/2001/13/Ad2 para42,p15]**

- ◆ The Arti.6-SC 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 Arti.6-SC may suspend or withdraw accreditation only after the AIE has had the opportunity of a hearing and depending on the outcome of the hearing.
  - ☞ The suspension or withdrawal is with immediate effect.
  - ☞ The affected entity shall be notified, immediately and in writing, once the Art.6-SC has decided upon its suspension or withdrawal. The decision by the Art.6-SC on such a case shall be made public.

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

- ☞ 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 Art.6-SC 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 Art.6-SC only after the affected project participants have had the opportunity of a hearing.

## 13-3. 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 para4,p6]
    - ⇒ 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.
- ◆ A Party involved in a JI project shall inform the UNFCCC secretariat of its designated focal point for approving projects and its national guidelines and procedures for approving JI projects as well as monitoring and verification. [CP/2001/13/Ad2 para20,p11]
- ◆ Projects starting as of the year 2000 may be eligible as JI projects.
  - ☞ ERUs shall only be issued for a crediting period starting after the beginning of the year 2008. [CP/2001/13/Ad2 para5,p6]

### 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,para31,p14]
  - ☞ 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.
- ◆ Project design document of JI will be elaborated for consideration by the COP/MOP, taking into consideration of modalities and procedures for a CDM and giving consideration to relevant work of the CDM-EB, as appropriate. [CP/2001/13/Ad2,para3(e),p9]
- ◆ Criteria for baselines and monitoring will be reviewed and revised by the Art.6-SC for consideration by the COP/MOP, giving consideration to relevant work of the CDM-EB, as appropriate. [CP/2001/13/Ad2,para3(d),p9]

13-4. Procedures for determination of JI projects

For Track 2

JI project participants

Accredited independent entity (AIE)

Article 6 supervisory committee

(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 para31,p14]

(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 para32,p14]

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

No Yes

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

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

No Yes

(7) Determination of JI project.

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

Can be determined

Not determined

May be reconsidered for determination after appropriate revisions.

13-5. Procedures for determination of the reductions or removals by JI projects

For Track 2

Jl project participants

Accredited independent entity (AIE)

Article 6 supervisory committee

(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 para36,p15]

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

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

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

(4) Whether there is a Party involved in the project or 3 of the members of the Art.6-SC request a review by Art.6-SC within **15 days** after the date on which it is made public.  
 [CP/2001/13/Ad2 para39,p15]

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

Can be determined

## 13-6. 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 para29,p63]

◆ Each Annex I Party shall 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 para17,p61]

(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 (see p41) in order to acquire ERUs.  
 ◆ 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 para29,p13]

# Attachment 1: Specific guidelines for completing the CDM-PDD, CDM-NMB and CDM-NMM

## 1-1. General Information on CDM-PDD, CDM-NMB and CDM-NMM

[PDD guidelines ver1,p3]

### CDM-PDD, CDM-NMB and CDM-NMM

- ◆ The CDM-PDD, CDM-NMB and CDM-NMM were developed by the EB in conformity with the relevant modalities and procedures for the PDD for CDM project activities as defined in Appendix B of CDM M&P
  - ☞ If project participants wish to submit a project activity for validation and registration, they shall submit a fully completed CDM-PDD.
  - ☞ If project participants wish to propose new baseline and monitoring methodologies they shall complete and submit the CDM-NMB, CDM-NMM and a draft CDM-PDD with only sections A-E filled.
- ◆ The CDM-PDD, CDM-NMB and CDM-NMM may be obtained electronically from the UNFCCC CDM web site (<http://unfccc.int/cdm>),
- ◆ It is recommended that before or during the completion of the forms that project participants consult the most recent version of the “CDM-PDD Glossary of Terms”.
- ◆ Project participants should also consult the section “Guidance – clarifications” available on the UNFCCC CDM web site (<http://unfccc.int/cdm>).

### Revision of CDM-PDD, CDM-NMB and CDM-NMM

- ◆ The EB may revise the CDM-PDD, the CDM-NMB, and the CDM-NMM, if necessary.
  - ☞ Revisions come into effect, once adopted by the EB.
- ◆ Revisions to the CDM-PDD do not affect projects:
  - ☞ Already validated, or already submitted to the OE for validation prior to the adoption of the revised CDM-PDD;
  - ☞ Submitted to the OEs within a month of the adoption of the revised CDM-PDD
  - ☞ The EB will not accept documentation using previous versions of the CDM-PDD 6 months after the adoption of the new version.
- ◆ Revisions to the CDM-NMB and CDM-NMM do not affect new baseline and monitoring methodologies:
  - ☞ Submitted to the OEs prior to the adoption of the revised CDM-NMB and CDM-NMM;
  - ☞ Submitted to the OEs within a month of the adoption of the revised CDM-NMB and CDM-NMM.
  - ☞ The EB will not accept documentation using previous versions of the CDM-NMB and CDM-NMM 3 months after the adoption of the new versions.

### Language and templates

- ◆ In accordance with the CDM M&P, the working language of the EB is English. The CDM-PDD, the CDM-NMB and the CDM-NMM shall therefore be completed and submitted in English language to the EB.
  - ☞ However, the CDM-PDD, CDM-NMB and CDM-NMM are available on the UNFCCC CDM web site for consultation in all 6 official languages of the United Nations.
- ◆ The CDM-PDD, CDM-NMB and CDM-NMM templates shall not be altered, that is, shall be completed using the same font without modifying its format, font, headings or logo.
  - ☞ Tables and their columns shall not be modified or deleted. Rows may be added, as needed.
- ◆ The CDM-PDD, CDM-NMB and CDM-NMM are not applicable to afforestation and reforestation (A/R) CDM project activities.

## 1-2. Specific guidelines for completing the Project Design Document (CDM-PDD)

(Version 02 - in effect as of 1 July 2004) [PDD guidelines ver1,p13]

### 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 (maximum 1 page):

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

A.2. Please include in the description

- the purpose of the project activity
- the view of the project participants of the contribution of the project activity to sustainable development (max. 1 page).

A.3. Please list project participants and provide contact information in Annex 1.

A.4.1.4. Please fill in the field and do not exceed 1 page.

A.4.2. Please use the list of categories of project activities and of registered CDM project activities by category available on the UNFCCC CDM web site, please specify the category(ies) of project activities into which this project activity falls. If no suitable category(ies) of project activities can be identified, please suggest a new category(ies) descriptor and its definition, being guided by relevant information on the UNFCCC CDM web site.

A.4.3. This section should include a description of how environmentally safe and sound technology and know how to be used is transferred to the Host Party.

A.4.4. Please explain briefly how anthropogenic greenhouse gas (GHG) emission reductions are to be achieved (detail to be provided in section B) and provide the estimate of anticipated total reductions in tonnes of CO<sub>2</sub> equivalent as determined in section E. Max. length 1 page.

A.4.4.1. Please indicate the chosen crediting period and provide the total estimation of emission reductions as well as annual estimates for the chosen crediting period.

A.4.5. In case public funding from Parties included in Annex I is involved, please provide in Annex 2 information on sources of public funding for the project activity from Parties included in Annex I which shall provide an affirmation that such funding does not result in a diversion of official development assistance and is separate from and is not counted towards the financial obligations of those Parties.

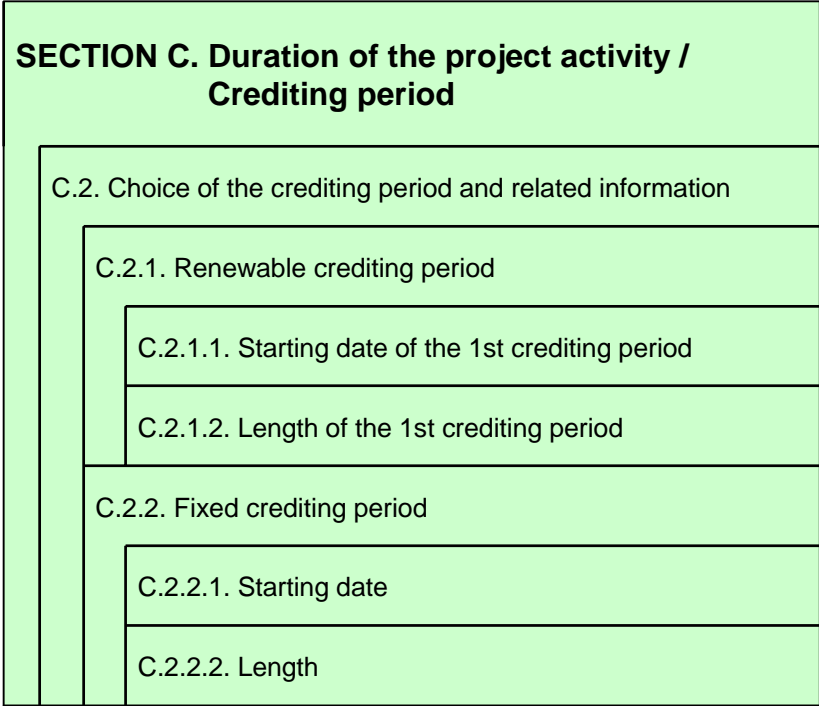
(Version 02 - in effect as of 1 July 2004) [PDD guidelines ver1,p15]

<p><b>SECTION B. Application of a baseline methodology</b></p>	<p>B.1. Please refer to the UNFCCC CDM web site for the title and reference list as well as the details of approved baseline methodologies2. Please note that the table “Baseline Information” contained in Annex 3 is to be prepared in parallel to completing the remainder of this section.</p>
<p>B.1. Title and reference of the approved baseline methodology applied to the project activity</p>	<p>B.1.1. Please justify the choice of methodology by showing that the proposed project activity meet the applicability conditions under which the methodology is applicable.</p>
<p>B.1.1. Justification of the choice of the methodology and why it is applicable to the project activity</p>	<p>B.2. Please explain the basic assumptions of the baseline methodology in the context of the project activity and show that the key methodological steps are followed in determining the baseline scenario. Provide the key information and data used to determine the baseline scenario (variables, parameters, data sources etc.) in table form.</p>
<p>B.2. Description of how the methodology is applied in the context of the project activity</p>	<p>B.3. Explanation of how and why this project is additional and therefore not the baseline scenario in accordance with the selected baseline methodology. Include 1) a description of the baseline scenario determined by applying the methodology, 2) a description of the project scenario, and 3) an analysis showing why the emissions in the baseline scenario would likely exceed emissions in the project scenario.</p>
<p>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</p>	<p>B.5. Please attach detailed baseline information in Annex 3. Please provide date of completion in DD/MM/YYYY. Please provide contact information and indicate if the person/entity is also a project participant listed in Annex 1.</p>
<p>B.4. Description of how the definition of the project boundary related to the baseline methodology selected is applied to the project activity</p>	<p>C.1.1. The starting date of a CDM project activity is the date on which the implementation or construction or real action of a project activity begins. Project activities starting between 1 January 2000 the date of the registration of a 1st clean development mechanism project, if the project activity is submitted for registration before 31 December 2005; have to provide documentation, at the time of registration, showing that the starting date fell within this period.</p>
<p>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</p>	<p>C.1.2. Please state the expected operational lifetime of the project activity in years and months.</p>
<p><b>SECTION C. Duration of the project activity / Crediting period</b></p>	
<p>C.1. Duration of the project activity</p>	
<p>C.1.1. Starting date of the project activity</p>	
<p>C.1.2. Expected operational lifetime of the project activity</p>	



**1-2. Specific guidelines for completing the CDM-PDD**

(Version 02 - in effect as of 1 July 2004) [PDD guidelines ver1,p16]



C.2. Please state whether the project activity will use a renewable or a fixed crediting period and complete C.2.1 or C.2.2 accordingly.  
 Note that the crediting period may only start after the date of registration of the proposed activity as a CDM project activity. In exceptional cases, (see instructions for section C.1.1. above) the starting date of the crediting period may be prior to the date of registration of the project activity as provided for in paragraphs 12 and 13 of decision 17/CP.7, paragraph 1 (c) of decision 18/CP.9 and through any guidance by the Executive Board, available on the UNFCCC CDM web site.

C.2.1. Each crediting period shall be at most 7 years and may be renewed at most 2 times, provided that, for each renewal, a designated operational entity determines and informs the executive board that the original project baseline is still valid or has been updated taking account of new data where applicable;

C.2.1.1. Please state the dates in the following format: (DD/MM/YYYY).

C.2.1.2. Please state the length of the 1st crediting period in years and months.

C.2.2. Fixed crediting period shall be at most ten (10) years.

C.2.2.1. Please state the dates in the following format: (DD/MM/YYYY).

C.2.2.2. Please state the length of the crediting period in years and months.

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

Where project participants wish to propose a new monitoring methodology, please complete form "Proposed New Methodology: Monitoring"(CDM-NMM) ) in accordance with procedures for submission and consideration of proposed new methodologies (see Part III of these Guidelines). This section shall provide a detailed description of the monitoring plan, including an identification of the data and its quality with regard to accuracy, comparability, completeness and validity, taking into consideration any guidance contained in the methodology. The monitoring plan is to be attached in annex 4.

The monitoring plan needs to provide detailed information related to the collection and archiving of all relevant data needed to - estimate or measure emissions occurring within the project boundary, - determine the Baseline, and - identify increased emissions outside the project boundary.

The monitoring plan should reflect good monitoring practice appropriate to the type of project activity. The plan should follow the instructions and steps defined in the approved monitoring methodology. Project participants shall implement the registered monitoring plan and provide data, in accordance with the plan, through their monitoring report.

Please note that data monitored and required for verification and issuance are to be kept for 2 years after the end of the crediting period or the last issuance of CERs for this project activity, whatever occurs later.

1-2. Specific guidelines for completing the CDM-PDD

(Version 02 - in effect as of 1 July 2004) [PDD guidelines ver1,p18]

<b>SECTION D. Application of a monitoring methodology and plan</b>	
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.1. Please refer to the UNFCCC CDM web site for the name and reference as well as details of approved methodologies. Where project participants wish to propose a new monitoring methodology, please complete the form for "Proposed New Methodology: Monitoring" (CDM-NMM) and subsequently complete, sections A-E of the CDM-PDD to demonstrate the application of the proposed new methodology to the project activity. If a national or international monitoring standard has to be applied to monitor certain aspects of the project activity, please identify this standard and provide a reference to the source where a detailed description of the standard can be found. Please fill sections D.2.2 or D.2.3 below in accordance with the approved monitoring methodology selected.

D.2. Please justify the choice of methodology by showing that the proposed project activity and the context of the project activity meet the conditions under which the methodology is applicable.

D.2.1.1. Description of data to be collected and how data will be archived. Data shall be archived for 2 years following the end of the crediting period. Please add rows to the table, as needed.

D.2.1.2. Formulae should be consistent with the formulae outlined in the description of the baseline methodology.

D.2.1.3. Description of data to be collected and how data will be archived. Data shall be archived for 2 years following the end of the crediting period. Please add rows to the table below, as needed.

D.2.1.4. Formulae should be consistent with the formulae outlined in the description of the baseline methodology.

D.2.2.1. Description of data to be collected and how data will be archived. Data shall be archived for 2 years following the end of the crediting period. Please add rows to the table below, as needed.

D.2.2.2. Formulae should be consistent with the formulae outlined in the description of the baseline methodology.

D.2.3.1. Monitored data shall be archived for 2 years following the end of the crediting period. Please add rows to the table below, as needed.

D.2.3.2. Formulae should be consistent with the formulae outlined in the description of the baseline methodology.

(Version 02 - in effect as of 1 July 2004) [PDD guidelines ver1,p20]

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

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.2.4. Formulae should be consistent with the formulae outlined in the description of the baseline methodology.

D.3. Quality control (QC) and quality assurance (QA) procedures are being undertaken for data monitored

D.3. Data items in tables contained in sections D.2.1 or D.2.2, as applicable.

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

D.5. Please provide contact information and indicate if the person/entity is also a project participant listed in Annex 1 of this document.

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

Please fill section E. following the selected baseline and monitoring methodologies.

E.1. Estimate of GHG emissions by sources

E.1. Please provide estimated anthropogenic emissions by sources of greenhouse gases of the project activity within the project boundary (for each gas, source, formulae/algorithm, emissions in units of CO<sub>2</sub> equivalent). Alternatively, provide directly estimated emission reductions due to the project activity.

E.2. Estimated leakage

E.2. Please provide estimate of any leakage, defined as: the net change of anthropogenic emissions by sources of greenhouse gases which occurs outside the project boundary, and that is measurable and attributable to the project activity. Estimates should be given for each gas, source, formulae/algorithm, emissions in units of CO<sub>2</sub> equivalent.

E.3. The sum of E.1 and E.2 representing the project activity emissions

E.4. Estimated anthropogenic emissions by sources of greenhouse gases of the baseline

E.4. Estimates should be given for each gas, source, formulae/algorithm, emissions in units of CO<sub>2</sub> equivalent.

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

E.6. 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 CDM-PDD.

**SECTION F. Environmental impacts**

F.1. Documentation on the analysis of the environmental impacts, including transboundary impacts

F.1. Please attach the documentation to the CDM-PDD.

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

**1-2. Specific guidelines for completing the CDM-PDD**

(Version 02 - in effect as of 1 July 2004) [PDD guidelines ver1,p21]

<p><b>SECTION G. Stakeholders' comments</b></p>	<p>G.1. Please describe the process by which comments by local stakeholders have been invited and compiled. An invitation for comments by local stakeholders shall be made in an open and transparent manner, in a way that facilitates comments to be received from local stakeholders and allows for a reasonable time for comments to be submitted. In this regard, project participants shall describe a project activity in a manner which allows the local stakeholders to understand the project activity, taking into account confidentiality provisions of the CDM modalities and procedures.</p>
<p>G.1. Brief description how comments by local stakeholders have been invited and compiled</p>	<p>G.2. Please identify stakeholders that have made comments and provide a summary of these comments.</p>
<p>G.2. Summary of the comments received</p>	<p>G.3. Please explain how due account have been taken of comments received.</p>
<p>G.3. Report on how due account was taken of any comments received</p>	<p>Annex 1. Please copy and paste table as needed.</p>
<p><b>Annex 1. Contact information on participants in the project activity</b></p>	<p>Annex 2. Please provide information from Parties included in Annex I on sources of public funding for the project activity which shall provide an affirmation that such funding does not result in a diversion of official development assistance and is separate from and is not counted towards the financial obligations of those Parties.</p>
<p><b>Annex 2. Information regarding public funding</b></p>	<p>Annex 3. Please provide a table containing the key elements used to determine the baseline for the project activity including elements such as variables, parameters and data sources. For approved methodologies you may find a draft table on the UNFCCC CDM web site.</p>
<p><b>Annex 3. Baseline information</b></p>	
<p><b>Annex 4. Monitoring plan</b></p>	

**1-3. Specific guidelines for completing the proposed new methodology: baseline (CDM-NMB)**

(Version 02 - in effect as of 1 July 2004) [PDD guidelines ver1,p27]

**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. Overall summary description****SECTION C. Choice of and justification as to why one of the baseline approaches listed in paragraph 48 of CDM modalities and procedures is considered to be the most appropriate**

C.1. General baseline approach

C.2. Justification of why the approach chosen in 3.1 above is considered the most appropriate

**SECTION D. Explanation and justification of the proposed new baseline methodology**

D.1. Explanation of how the methodology determines the baseline scenario (that is, indicate the scenario that reasonably represents the anthropogenic emissions by sources of GHG that would occur in the absence of the proposed project activity)

D.2. Criteria used in developing the proposed baseline methodology

A.1. Provide an unambiguous title for a proposed methodology. Avoid project-specific titles. The title, once approved, should allow project participants to get an indication of the applicability of an approved methodology.

A.2. Use the list of categories of project activities and of registered CDM project activities by category available on the UNFCCC CDM web site, please specify the category(ies) of project activities for which this proposed new methodology may be used. If no suitable category(ies) of project activities can be identified, please suggest a new category(ies) descriptor and its definition, being guided by relevant information on the UNFCCC CDM web site.

A.3. Provide conditions under which the methodology is applicable to CDM project activities: (e.g. circumstances, region, data availability, resource availability). Please indicate if an approved methodology exists for the same conditions of application.

A.4. Please outline how the accuracy and completeness of the new methodology compares to that of approved methodologies, in particular with regard to approved methodologies for the same conditions of application.

Summarize the description of the proposed new methodology. Provide information on how baseline emissions are determined. Provide step by step instructions for the baseline methodology, including how through the methodology, it can be demonstrated that a project activity is additional and therefore not the baseline scenario (detailed explanation of the methodology to be provided in section 6). Please do not exceed more than 1 page.

C.1. Please check a single option.  
If the 3rd approach is being checked kindly refer to additional guidance provide by the Executive Board (see guidance and clarifications by the Executive Board on the "Guidance clarifications" web page of the UNFCCC CDM web site).

D.1. Please state the basic assumptions of the baseline methodology and describe the key analytical steps that should be followed in determining the baseline scenario. Describe how the methodology determines the most likely scenario the baseline scenario from among the plausible scenario alternatives.

1-3. Specific guidelines for completing the CDM-NMB

(Version 02 - in effect as of 1 July 2004) [PDD guidelines ver1,p28]

**SECTION D. Explanation and justification of the proposed new baseline methodology**

D.3. Explanation of how, through the methodology, it can be demonstrated that a project activity is additional and therefore not the baseline scenario (section B.3 of the PDD)

D.4. How national and/or sectoral policies and circumstances can be taken into account by the methodology

D.5. Project boundary (gases and sources included, physical delineation)

D.6. Elaborate and justify formulae/algorithms used to determine the baseline scenario. Variables, fixed parameters and values have to be reported (e.g. fuel(s) used, fuel consumption rates)

D.7. Elaborate and justify formulae/algorithms used to determine the emissions from the project activity. Variables, fixed parameters and values have to be reported (e.g. fuel(s) used, fuel consumption rates)

D.8. Description of how the baseline methodology addresses any potential leakage of the project activity

D.9. Elaborate and justify formulae/algorithms used to determine the emissions reductions from the project activity. Variables, fixed parameters and values have to be reported (e.g. fuel(s) used, fuel consumption rates)

**SECTION E. Data sources and assumptions**

E.1. Describe parameters and or assumptions (including emission factors and activity levels)

E.2. List of data used indicating sources (e.g. official statistics, expert judgment, proprietary data, IPCC, commercial and scientific literature) and precise references and justify the appropriateness of the choice of such data

E.3. Vintage of data (e.g. relative to starting date of the project activity)

E.4. Spatial level of data (local, regional, national)

**SECTION F. Assessment of uncertainties (sensitivity to key factors and assumptions)**

**SECTION G. Explanation of how the baseline methodology allows for the development of baselines in a transparent and conservative manner**

D.3. Paragraph 43 of the CDM modalities and procedures stipulates that a CDM project activity is additional if its emissions are below those of its baseline (see guidance by the EB at its 5th meeting). "The baseline for a CDM project activity is the scenario that reasonably represents the anthropogenic emissions by sources of greenhouse gases that would occur in the absence of the proposed project activity" (paragraph 44 CDM modalities and procedures).

Please refer to guidance and clarifications on baseline and monitoring methodologies in the Guidance/Clarifications section of the UNFCCC CDM web site.

Please also include information on algorithms and formulae, if used.

D.5. Please describe and justify the project boundary bearing in mind that it shall encompass all anthropogenic emissions by sources of greenhouse gases under the control of the project participants that are significant and reasonably attributable to the project activity. Please describe and justify which the boundary.

D.8. Please note: Leakage is defined as the net change of anthropogenic emissions by sources of greenhouse gases which occurs outside the project boundary and which is measurable and attributable to the CDM project activity.

Please explain how leakage is to be estimated ex-ante and indicate in the monitoring methodology form (CDM-NMM) how it is to be monitored ex-post. Explain if leakage will be assumed or calculated either as a relative amount (i.e. percentage) of the total emission reductions due to the project activity or as an absolute amount of emissions.

Please describe algorithms, data, information and assumptions and provide the total estimate of leakage.

Also include formulae and algorithms to be used in section E of the CDM-PDD attached.

Please highlight any factors and assumptions that would have a significant impact on the baseline and/or the calculation of baseline emission levels and how uncertainty related to those assumptions and factors are to be addressed.

**1-4. Specific guidelines for completing the proposed new methodology: monitoring (CDM-NMM)**

(Version 02 - in effect as of 1 July 2004) [PDD guidelines ver1,p33]

**SECTION A. Identification of methodology**

A.1. Title of the proposed methodology

A.1. Provide an unambiguous title for a proposed methodology. Avoid project-specific titles. The title, once approved, should allow project participants to get an indication of the applicability of an approved methodology.

A.2. List of category(ies) of project activity to which the methodology may apply

A.2. Using the list of categories of project activities and of registered CDM project activities by category available on the UNFCCC CDM web site, please specify the category(ies) of project activities for which this proposed new methodology can be used. If no suitable category(ies) of project activities can be identified, please suggest a new category(ies) descriptor and its definition, being guided by relevant information on the UNFCCC CDM web site.

A.3. Conditions under which the methodology is applicable to CDM project activities

A.3. Provide conditions under which the methodology is applicable to CDM project activities: (e.g. circumstances, region, data availability, resource availability). Please indicate if an approved methodology exists for the same conditions of application.

A.4. What are the potential strengths and weaknesses of this proposed new methodology?

A.4. Please outline how the accuracy and completeness of the new methodology compares to that of approved methodologies, in particular with regard to approved methodologies for the same conditions of application.

**SECTION B. Proposed new monitoring methodology**

B.1. Brief description of the new methodology

Please provide a detailed description of the monitoring plan, including the identification of data and its quality with regard to accuracy, comparability, completeness and validity. Different types of project activities will have different monitoring requirements. For some project activities, emission reductions are calculated as the difference between the project activity and the baseline emissions. For others emission reductions are monitored directly. Depending on the type of project activity, please fill out their option 1 or option 2.

Option 1 (section 2.2): Please describe the data and information that will be collected in order to monitor the emissions in the baseline scenario and the project scenario.  
Option 2 (section 2.3): Describe the data and information that will be collected in order to directly monitor and calculate the emission reductions from the project activity.

B.2. Option 1: Monitoring of the emissions in the project scenario and the baseline scenario

B.1. Please outline the main points and give a reference to a detailed description of the monitoring methodology.

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.2.1. Monitored data shall be archived for 2 years following the end of the crediting period. Please add rows to the table below, as needed.  
Header of tables and titles of columns shall not be modified and columns shall not be deleted. Please add rows to the table below, as needed.

1-4. Specific guidelines for completing the CDM-NMM

(Version 02 - in effect as of 1 July 2004) [PDD guidelines ver1,p34]

<b>SECTION B. Proposed new monitoring methodology</b>	
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 greenhouse gases (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.2.2. Formulae should be consistent with the formulae outlined in the description of the baseline methodology.

B.2.3. Monitored data shall be archived for 2 years following the end of the crediting period. Header of tables and titles of columns shall not be modified and columns shall not be deleted. Please add rows to the table below, as needed.

B.2.4. Formulae should be consistent with the formulae outlined in the description of the baseline methodology.

B.3. Values should be consistent with those in section E of the CDM-PDD.

B.3.1. Monitored data shall be archived for 2 years following the end of the crediting period. Header of tables and titles of columns shall not be modified and columns shall not be deleted. Please add rows to the table below, as needed.

B.3.2. Formulae should be consistent with the formulae outlined in the description of the baseline methodology.

B.4. Please explain if leakage will be monitored during the implementation of the project activity. If relevant, please explain and justify if leakage will not be estimated ex-post. Explain if leakage will be calculated as the difference between emissions occurring outside the boundaries of the project and emissions in the baseline scenario, or if leakage will be monitored directly.

B.4.1. Monitored data shall be archived for 2 years following the end of the crediting period. Header of tables and titles of columns shall not be modified and columns shall not be deleted. Please add rows to the table below, as needed.

B.4.2. Formulae should be consistent with the formulae outlined in the description of the baseline methodology.



(Version 02 - in effect as of 1 July 2004) [PDD guidelines ver1,p35]

**SECTION B. Proposed new monitoring methodology**

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?

B.5. Formulae should be consistent with the formulae outlined in the description of the baseline methodology.

B.6. Please list information used in the calculation of emissions which is not measured or calculated, for example use of any default emission factors.

B.7. See tables in sections B.2 or B.3 and B.4 above.

Header of tables and titles of columns shall not be modified and columns shall not be deleted. Rows are allowed to be added, as needed.

◆ The tool provides a general framework for demonstrating and assessing additionality. Project participants proposing new baseline methodologies may incorporate this consolidated tool in their proposal. Project participants 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 project participants 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 (see p29).
- ☞ Evidence that the incentive from the CDM was seriously considered in the decision. This evidence shall be based on (preferably official, legal and/or other corporate) documentation that was available to 3rd parties 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 project participants 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 project participants 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. If one of the other alternatives has the best indicator, then the CDM project activity can not be considered as the most financially attractive;
  - The financial benchmark, if Option III is used. If the CDM project activity has a less favourable indicator (e.g. lower IRR) than the benchmark, then the CDM project activity cannot be considered as financially attractive.

↓ Pass

**Step 3. Barrier analysis**

Determine whether the proposed project activity faces barriers that prevent the implementation of this type of proposed project activity, and do not prevent the implementation of at least one of the alternatives.

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

- ☞ Establish that there are barriers that would prevent the implementation of the type of proposed project activity from being carried out if the project activity was not registered as a CDM activity. Such barriers may include, among others, investment barriers other than the economic/financial barriers in Step 2 above, technological barriers and barriers due to prevailing practice.
- ☞ Provide transparent and documented evidence, and offer conservative interpretations of this documented evidence, as to how it demonstrates the existence and significance of the identified barriers.

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

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

Pass

**Step 4. Common practice analysis**

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

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

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

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

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

Pass

**Step 5. Impact of CDM registration**

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

Pass

**The proposed CDM project activity is additional**

## Attachment 3: Approved consolidated baseline methodology

### 3-1. Consolidated baseline methodology for landfill gas project activities (ACM0001) [EB15 Rep Anx1]

#### 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 (see p65)

#### Additionality

- ☞ Tool for the demonstration and assessment of additionality shall apply.

#### 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 does not involve electricity generation, project participants 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 displaced (CE<sub>electricity,y</sub>).

#### Leakage

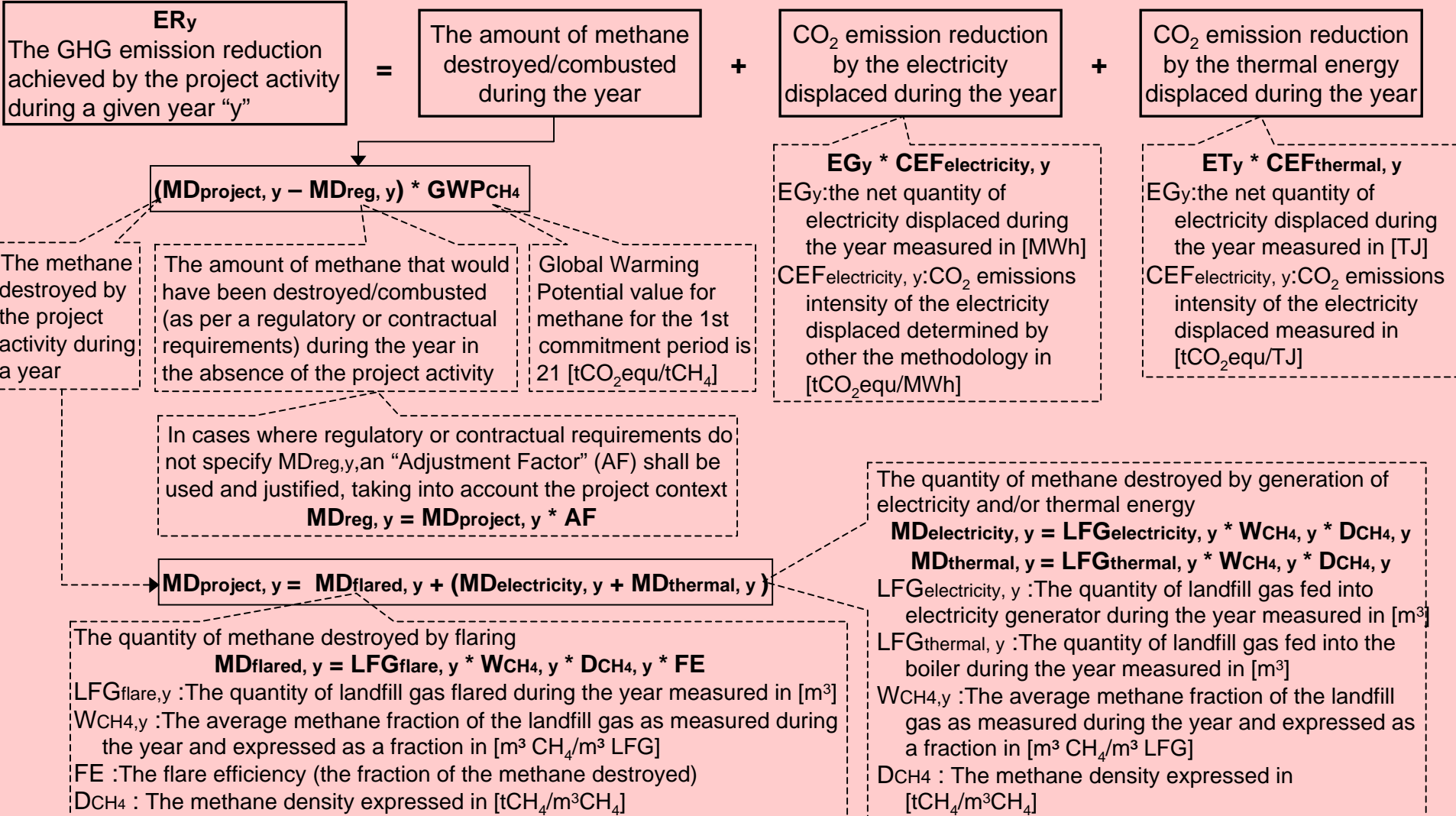
- ☞ No leakage effects need to be accounted under this methodology.

#### 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)

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)

### 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.

### Emission reductions and baseline (see p67)

### Additionality

- ☞ Tool for the demonstration and assessment of additionality shall apply.

### Project boundary

- ☞ For the baseline determination, project participants 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, project participants shall account fugitive emissions from non-condensable gases contained in geothermal steam and 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.
- ☞ Electricity transfers from connected electricity systems to the project electricity system are defined as electricity imports and electricity transfers to connected electricity systems are defined as electricity exports.
  - ⇒ For the purpose of determining the emission factor of the baseline emissions, project participants shall take into account electricity imports and exports. (for the detail, see [EB15 Rep Anx2,p2])

### Leakage

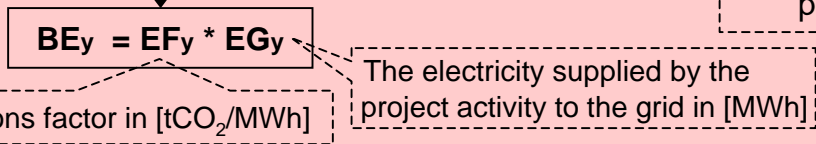
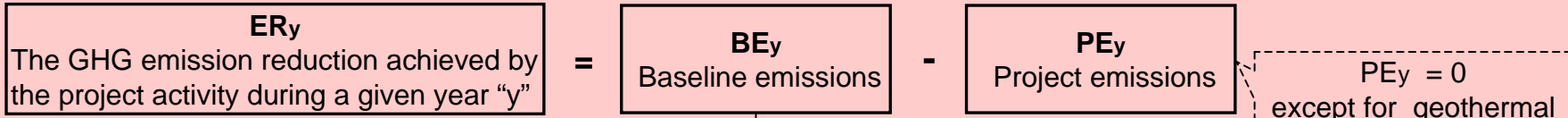
- ☞ Project participants do not need to consider emissions arising due to activities such as power plant construction, fuel handling (extraction, processing, and transport), and land inundation as leakage in applying this methodology.

### 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)

Emission reductions



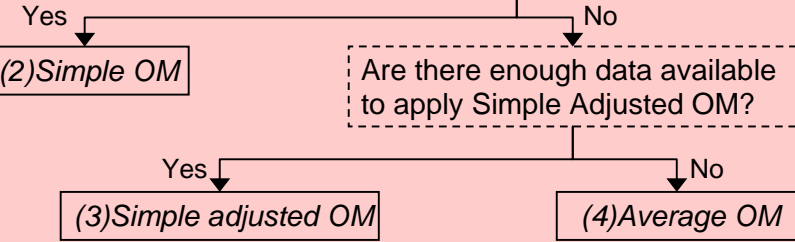
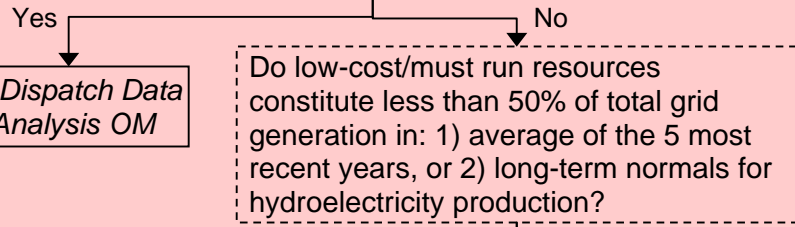
(for details, see [EB15 Rep Anx2,p2])

**EF<sub>y</sub> = 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. These justifying elements are to be assessed by the EB

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

Are there enough data available to analyze dispatch data?



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.

**EF<sub>BM,y</sub>** (the Build Margin emission factor)[tCO<sub>2</sub>/MWh]  
Project participants should choose between the following 2 options a sample group that has the larger annual generation:

- The 5 power plants that have been built most recently, or
- The power plants capacity additions in the electricity system that comprise 20% of the system generation [in MWh] and that have been built most recently.

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

**EF<sub>BM,y</sub>** is calculated by dividing CO<sub>2</sub> emissions [tCO<sub>2</sub>] of the chosen sample group by the electricity [MWh] delivered to the grid by that group.

Project participants 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.

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

## Example 1

### Type I.A. Renewable energy projects: Electricity generation by the user

#### Technology/measure

- ☞ This category comprises renewable technologies that supply individual households or users. These technologies include solar power, hydropower, wind power, and other technologies that produce electricity all of which is used on-site by the user, such as solar home systems, and wind battery chargers.
  - ⇒ The renewable generating units may be new or replace existing fossil fuel fired generation. The capacity of these renewable energy generators shall not exceed 15 MW.
  - ⇒ Combined heat and power (co-generation) systems are eligible under categories I.C and I.D.

#### Boundary

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

#### Baseline

$$\text{Baseline emissions} = (\text{Annual energy baseline [kWh/year]}) \times (\text{CO}_2 \text{ emission coefficient for the fuel displaced [kg-CO}_2\text{/kWh]})$$

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

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

IPCC default values for emission coefficients may be used. A default value **0.9 kg CO<sub>2</sub>/kWh**, which is derived from diesel generation units, may be used. A higher emissions factor may be used, with adequate justification.

Note: There are 2 options to calculate annual energy baseline. The other option is described in [CP/2002/7/Ad3 ApxB \[Version 04: 22 October 2004\]](#).

#### Leakage

- ☞ If the renewable energy technology is equipment transferred from another activity, leakage calculation is required.

#### Monitoring

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



## Example 2

### Type I.D. Renewable electricity generation for a grid

#### Technology/measure

- ☞ This category comprises renewables, such as photovoltaics, hydro, tidal/wave, wind, geothermal, and biomass, that supply electricity to an electricity distribution system that is or would have been supplied by at least one fossil fuel or non-renewable biomass fired generating unit.
  - ⇒ If the unit added has both renewable and non-renewable components, the eligibility limit of 15MW for a SSC project activity applies only to the renewable component. If the unit added co-fires [non-]renewable biomass and fossil fuel, the capacity of the entire unit shall not exceed the limit of 15MW.
  - ⇒ Biomass combined heat and power (co-generation) systems that supply electricity to a grid are included in this category. To qualify under this category, the sum of all forms of energy output shall not exceed 45 MW<sub>thermal</sub>.

#### Boundary

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

#### Baseline

Baseline emissions = (the kWh produced by the renewable generating unit [kWh]) x (CO<sub>2</sub> emission coefficient [kg-CO<sub>2</sub>/kWh])

The average of the “approximate operating margin” and the “build margin”

or

The weighted average emissions [kg- CO<sub>2</sub>/kWh] of the current generation mix

The weighted average emissions [kg-CO<sub>2</sub>/kWh] of all generating sources serving the system, excluding hydro, geothermal, wind, low-cost biomass, nuclear and solar generation.

The weighted average emissions [kg-CO<sub>2</sub>/kWh] of recent capacity additions to the system, which capacity additions are defined as the greater [in MWh] of **most recent 20%** of existing plants or the **5 most recent plants**.

Note: For a system where all fossil fuel fired generating units use fuel oil or diesel fuel, an emission coefficient is a modern diesel generating unit of the relevant capacity operating at optimal load as given in Table I.D.1. in [CP/2002/7/Ad3 ApxB \[Version 04: 22 October 2004\]](#).

#### Leakage

- ☞ If the renewable energy technology is equipment transferred from another activity, leakage calculation is required.

#### Monitoring

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

### Example 3

#### Type II.C. Demand-side energy efficiency programmes for specific technologies

##### Technology/measure

- ☞ This category comprises programmes that encourage the adoption of energy-efficient equipment, lamps, ballasts, refrigerators, motors, fans, air conditioners, appliances, etc. at many sites.
- ☞ These technologies may replace existing equipment or be installed at new sites.
- ☞ The aggregate energy savings by a single project may not exceed the equivalent of 15 GWh per year.

##### Boundary

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

##### Baseline

Baseline emissions = (Annual energy baseline [kWh/year]) x (CO<sub>2</sub> emission coefficient [kg-CO<sub>2</sub>/kWh])

$$\left( \sum_i (n_i * p_i * o_i) \text{ [kWh/year]} \right) / (1 - \text{fraction} [\%])$$

$n_i$  = the number of installed devices

$p_i$  = the power of the devices replaced

⇒ In the case of a retrofit programme, “power” is the weighted average of the devices replaced.

⇒ In the case of new installations, “power” is the weighted average of devices on the market.

$o_i$  = the average annual operating hours of the installed devices.

Fraction is average technical distribution losses for the grid serving the locations where the devices are installed.

An emission coefficient is calculated in accordance with provisions of category I.D projects.

Note: If the energy displaced is a fossil fuel, see [CP/2002/7/Ad3 ApxB \[Version 04: 22 October 2004\]](#).

##### Leakage

- ☞ If the energy efficiency technology is equipment transferred from another activity, leakage calculation is required.

##### Monitoring

Recording the “power” of the device installed using nameplate data or bench tests of a sample of the units installed and metering a sample of the units installed for their operating hours using run time meters.

or

Metering the “energy use” of an appropriate sample of the devices installed. For technologies that represent fixed loads while operating, such as lamps, the sample can be small while for technologies that involve variable loads, such as air conditioners, the sample may need to be relatively large.

- ☞ In either case, monitoring shall include annual checks of a sample of non-metered systems to ensure that they are still operating (other evidence of continuing operation, such as on-going rental/lease payments could be a substitute).
- ☞ If the devices installed replace existing devices, the number and “power” of the replaced devices shall be recorded and monitored.

## Example 4

### Type III. D. Methane recovery

#### Technology/measure

- ☞ This project category comprises methane recovery from coalmines, agro-industries, landfills, wastewater treatment facilities and other sources. Measures shall both reduce anthropogenic emissions by sources and directly emit less than 15,000 t-CO<sub>2</sub> equivalent annually.
  - ⇒ CO<sub>2</sub> emissions from combustion of non-biogenic methane shall be accounted for in the project activity.

#### Boundary

- ☞ The project boundary is the physical, geographical site of the methane recovery facility.

#### Baseline

Baseline emissions = [the amount of methane that would be emitted during the crediting period in the absence of the project activity]

The baseline shall cover only the capture and flaring that would not have happened in the absence of the project activity.

In the case of landfill gas, waste gas, waste water treatment and agro-industries projects:  
 If the recovered methane is used for electricity generation, the project activity is also eligible under category I.D.  
 If the recovered methane is used for heat generation it is also eligible under category I.C.  
 In these cases project participants may submit 1 single project design document for all of the components of the project activity.

#### Leakage

- ☞ No leakage calculation is required.

#### Monitoring

- ☞ The amount of methane recovered and used as fuel or combusted shall be monitored. Periodic samples of the methane content of the gas recovered may be needed to calculate the amount of methane recovered.

## Attachment 5: The list of sectoral scope

Scope Number	Sectoral Scope	Approved Methodologies	Approved Small Scale Methodologies		
1	Energy industries (renewable - / non-renewable sources)	AM0004 AM0005 AM0007 AM0010 AM0014 AM0015	AMS-I.A. AMS-I.D.	AMS-I.B. AMS-II.B.	AMS-I.C.
2	Energy distribution		AMS-II.A.		
3	Energy demand		AMS-II.C.	AMS-II.E.	
4	Manufacturing industries	AM0007 AM0008 AM0014	AMS-II.D.		
5	Chemical industries				
6	Construction				
7	Transport		AMS-III.C.		
8	Mining/mineral production				
9	Metal production				
10	Fugitive emissions from fuels (solid, oil and gas)	AM0009	AMS-III.D.		
11	Fugitive emissions from production and consumption of halocarbons and sulphur hexafluoride	AM0001			
12	Solvent use				
13	Waste handling and disposal	AM0002 AM0003 AM0006 AM0010 AM0011 AM0012 AM0013 AM0016	AMS-III.D.	AMS-III.E.	
14	Afforestation and reforestation				
15	Agriculture	AM0006 AM0016	AMS-III.E.		

## Attachment 6: The list of approved methodologies

Meth. Number	Methodologies Title (including baseline and monitoring methodologies)	Sectoral Scope	Original NM Number	
ACM0001	Consolidated methodology for landfill gas project activities	13	NM0004 rev NM0010 rev	NM0005 NM0021
ACM0002	Consolidated methodology for grid-connected electricity generation from renewable sources	1	NM0001 rev NM0023 NM0030-rev NM0043	NM0012-rev NM0024-rev NM0036 NM0055
AM0001	Incineration of HFC 23 Waste Streams	11	NM0007	
AM0002	Greenhouse Gas Emission Reductions through Landfill Gas Capture and Flaring where the Baseline is established by a Public Concession Contract	13	NM0004	
AM0003	Simplified Financial Analysis for Landfill Gas Capture Projects	13	NM0005	
AM0004	Grid-connected Biomass Power Generation that avoids Uncontrolled Burning of Biomass	1	NM0019	
AM0005	Baseline methodology (barrier analysis, baseline scenario development and baseline emission rate, using combined margin) for small grid-connected zero-emissions renewable electricity generation	1	NM0023	
AM0006	GHG emission reductions from manure management systems	13, 15	NM0022	
AM0007	Analysis of the least-cost fuel option for seasonally-operating biomass cogeneration plants	1, 4	NM0028	
AM0008	Industrial fuel switching from coal and petroleum fuels to natural gas without extension of capacity and lifetime of the facility	4	NM0016	
AM0009	Recovery and utilization of gas from oil wells that would otherwise be flared	10	NM0026	
AM0010	Landfill gas capture and electricity generation projects where landfill gas capture is not mandated by law	1 13	NM0010	
AM0011	Landfill gas recovery with electricity generation and no capture or destruction of methane in the baseline scenario	13	NM0021	
AM0012	Baseline methodology for biomethanation of municipal solid waste in India, using compliance with MSW rules	13	NM0032	
AM0013	Forced methane extraction from organic waste-water treatment plants for grid-connected electricity supply	13	NM0039	
AM0014	Natural gas-based package cogeneration	1, 4	NM0018	
AM0015	Bagasse-based cogeneration connected to an electricity grid	1	NM0001	
AM0016	Greenhouse gas mitigation from improved animal waste management systems in confined animal feeding operations	13, 15	NM0034-rev2	

Meth. Number	Methodologies Title (including baseline and monitoring methodologies)	Sectoral Scope	Original NM Number
AM0017	Steam system efficiency improvements by replacing steam traps and returning condensate	3	NM17-rev
AM0018	Steam optimization systems	3	NM0037-rev
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 project	1	NM0053

## Attachment 7: Glossary

AAU	Assigned Amount Unit
ACM	Approved Consolidated Methodology
AIE	Accredited Independent Entity
AR-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
DNA	Designated National Authority
DOE	Designated Operational Entity
EB	the CDM Executive Board
EIT	Economies in Transition
ERU	Emission Reduction Unit
GWP	Global Warming Potential
HFCs	Hydrofluorocarbon
IE	Independent Entity
IPCC	Intergovernmental Panel on Climate Change
JI	Joint Implementation
KM	Kyoto Mechanisms
KP	Kyoto Protocol
LULUCF	Land Use, Land-Use Change and Forestry
MP	Methodology 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
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
SSC	Small Scale CDM
UNFCCC	United Nations Framework Convention on Climate Change



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