

International Regulations for forestry activities within the CDM



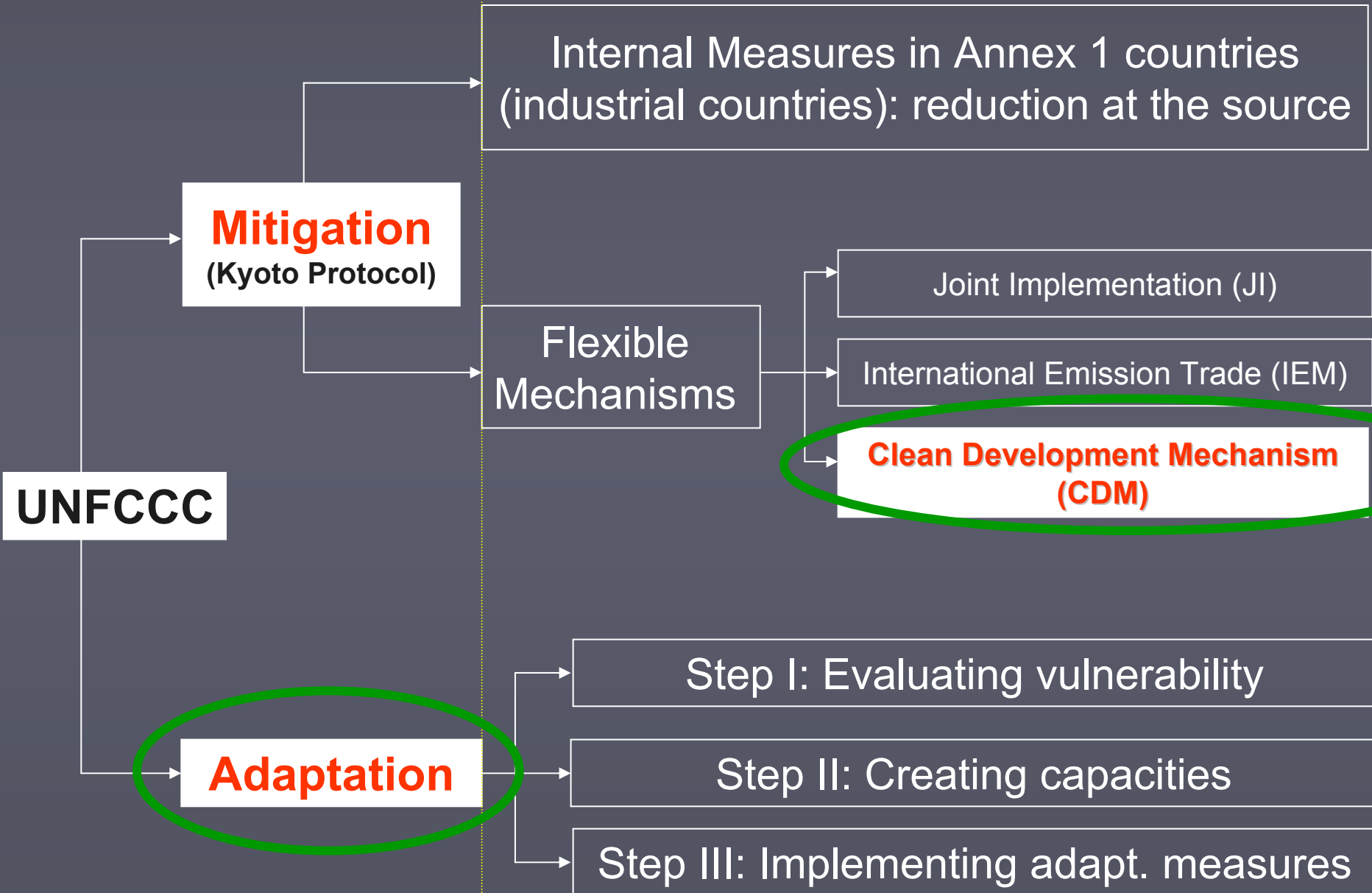
inter
cooperation



Jürgen Blaser and Carmenza Robledo
Intercooperation
Workshop in Islamabad, 30 May 2007

Strategies

Instruments and approaches



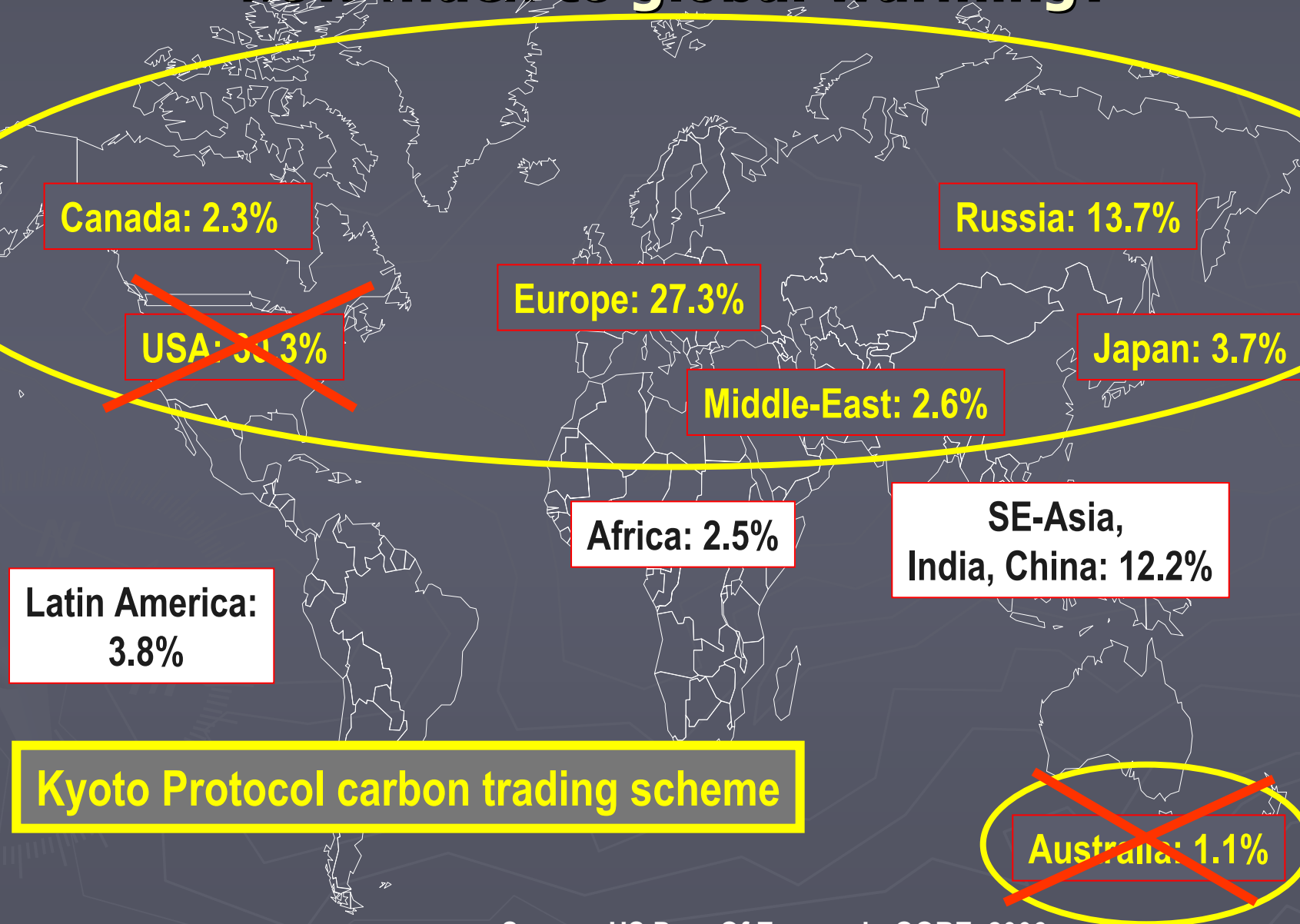
CDM Objectives

1. Assist Annex I countries (particularly industrialized countries) to **meet their commitments** of emissions reduction
2. Help non Annex I countries (developing countries) to achieve their goals of **sustainable development**



(Article 12 in Kyoto Protocol)

Who contributes and how much to global warming?



Source: US Dep. Of Energy, in GORE, 2006

CDM: basic institutional requirements

▶ Institutions created which foster CDM in a country

- Designated National Authority
- Capacity at regional and local levels

▶ Sustainable Development

- Country-specific national definition
- Sustainable development criteria
- Distribution of responsibilities



**Implement CDM needs capacity:
Regulations, methodologies, continuity,...**

CDM International Market

1992

UNFCCC

1997

Kyoto Protocol (KP)

Art. 12: Clean Development Mechanisms

2001

Dec. 17/CP7: CDM modalities and procedures

2003

Dec. 19/CP9: CDM modalities and procedures for afforestation and reforestation activities in the first commitment period of the KP

2004

Dec. 14/CP10: CDM Modalities and simplified procedures for small-scale forest projects

2005

SBSTA will re-consider deforestation

Decision 11/CP.7 (2001): Land Use, Land Use Change and Forestry

► Marrakesh Accords :

- Activities eligible under CDM: Afforestation and Reforestation
- Size of the CERs market:

$$M = 0.01 * eAI_{1990} * 5$$

M = market for CDM; factor 5: timespan of commitment period

eAI= Annex I Emissions of the country in the year of reference (1990)

- These decisions cover only the period until 2012.
After this period there will be new negotiations.

Dec. 17/CP. 7 (2001): CDM Modalities and Procedures

- ▶ Functioning and responsibility of the Executive Board (EB) of CDM
- ▶ Accreditation and designation of the Designated Operational Entities (DOE)
- ▶ Requirements for CDM, including the creation of the Designated National Authorities (DNA)
- ▶ **Eligible activities in energy and fuels of importance for natural resources management:**
 - **Bio-energy**
 - ▶ solar, wind-driven, etc.
 - ▶ wood and other fibers (e.g. agricultural by-products)
 - ▶ land fills
 - **Small energy generation plants**
 - **Bio-fuels**
 - ▶ ethanol from sugar cane, jatropha...
- ▶ Requirement for project's cycle – excluding forestry projects
- ▶ Small-scale energy projects

Decision 19/ COP 9 (2003)

Modalities and Procedures for A/R within the CDM

- ▶ Definition of forests
- ▶ Eligible activities:
 - Afforestation & reforestation
- ▶ Permanence
- ▶ Additionality and Leakage
- ▶ Liability and risk management
- ▶ Length of projects
- ▶ Environmental and socio-economic issues
- ▶ Monitoring Plan
- ▶ Small-scale projects
- ▶ PDD content



Dec. 14/CP 10 (2004): Modalities for small-scale projects (FCCC/SBSTA/L.20/Add.1)

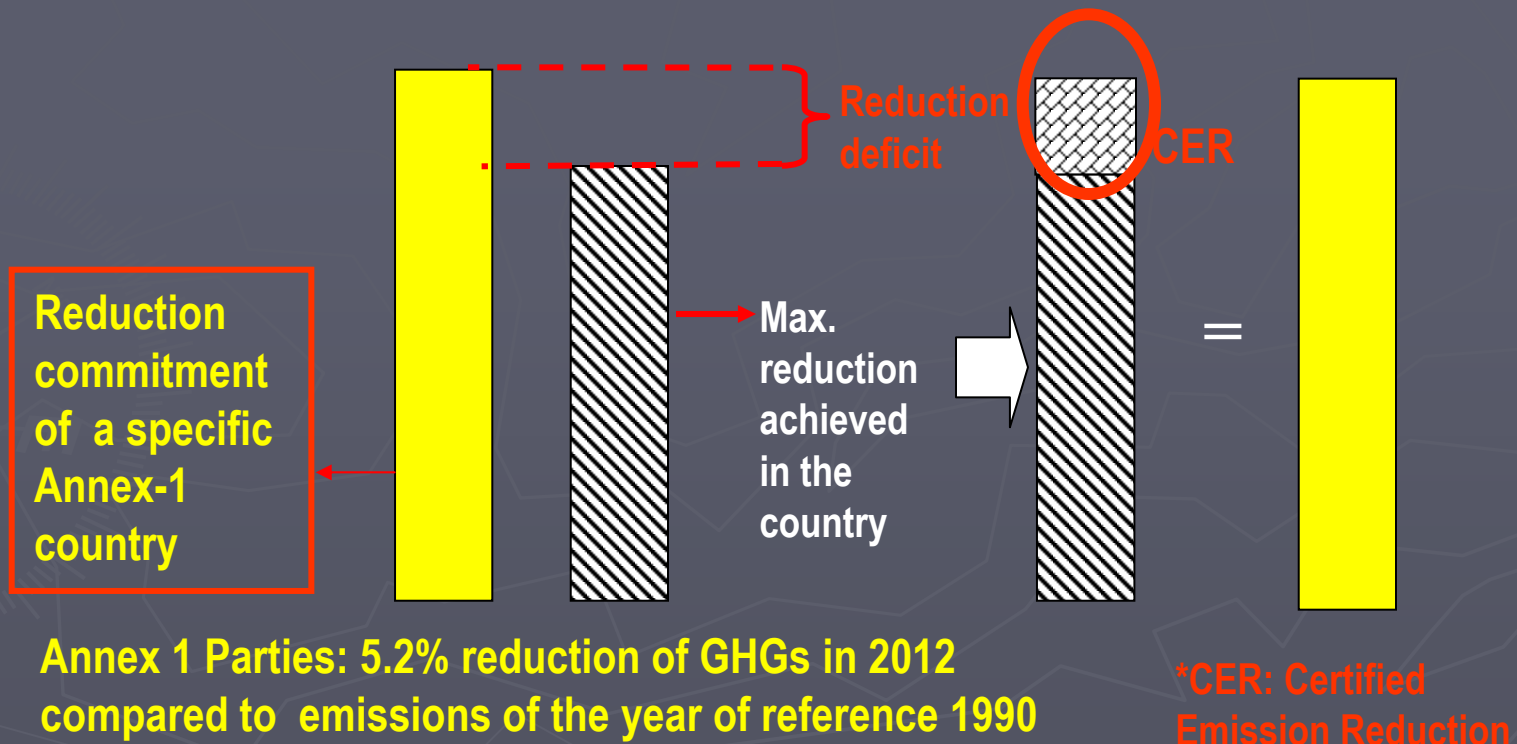
► Modalities

- Projects package up to **8,000 tons of CO₂e**
 - Reduced requirements for the PDD
 - Simplified baseline and monitoring methodologies
 - Only one Designated Operational Entity for the validation, verification and certification of bundled projects
- Average reductions between two verifications not higher than 8KT
- Exempt from the rate for adaptation
- Reduced registartion costs
- Bring parties to coordinate projects in order to reduce the costs of validation, verification and certification

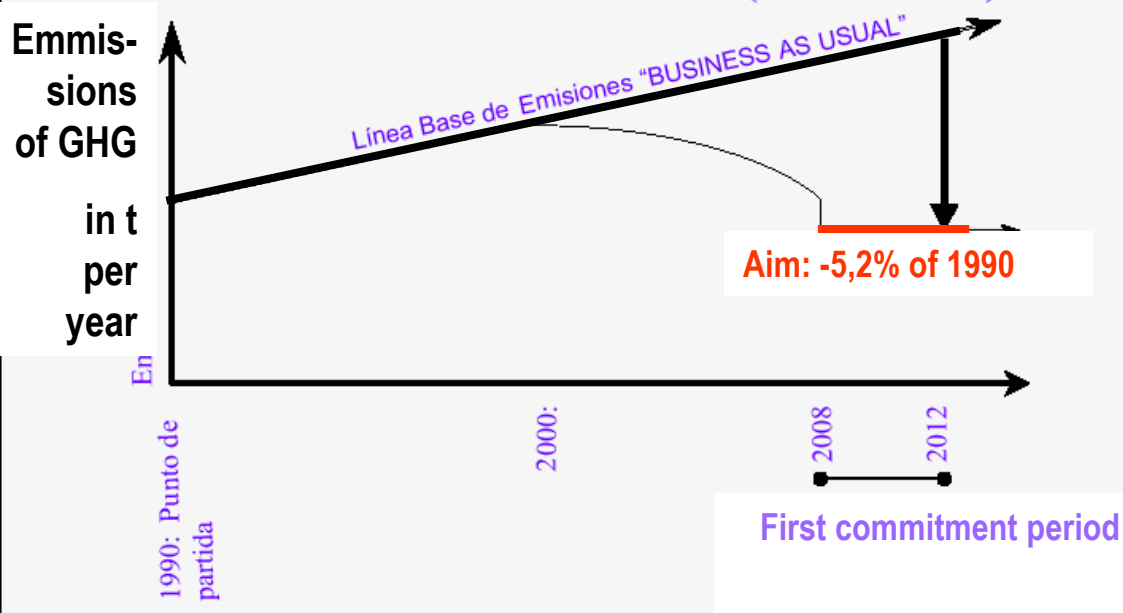
CDM Principle

Kyoto Protocol, Article 12 (ratified in November 2004):

- ▶ To support developing countries to achieve sustainable development
- ▶ To support industrialized countries (Annex 1 countries) to meet their commitments of emissions reduction
 - Real, additional, verified, certified



Real reductions for industrialized countries (Annex B countries)

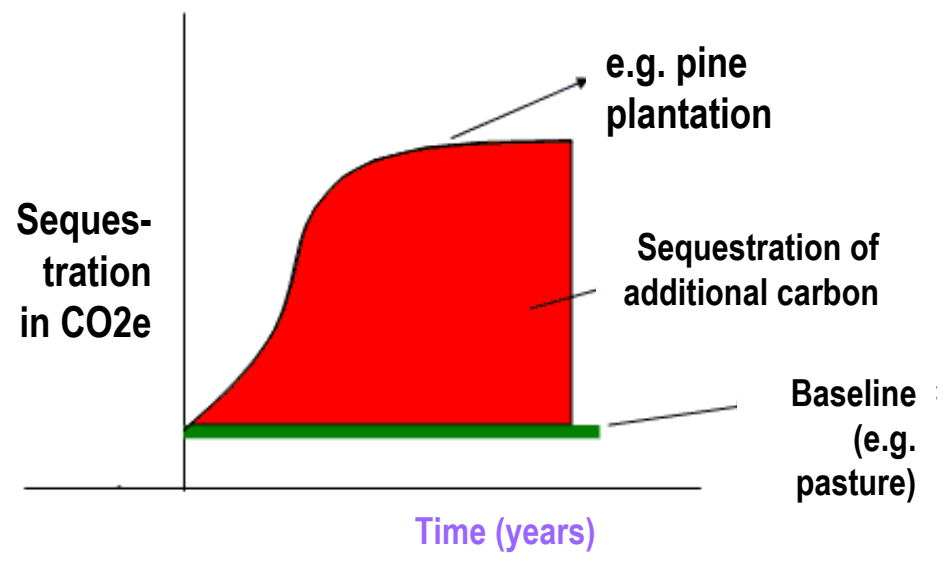


Basic Concepts of CDM

- ▶ Eligibility
 - Which are the activities accepted within CDM?
- ▶ Additionality

Energy

Forestry



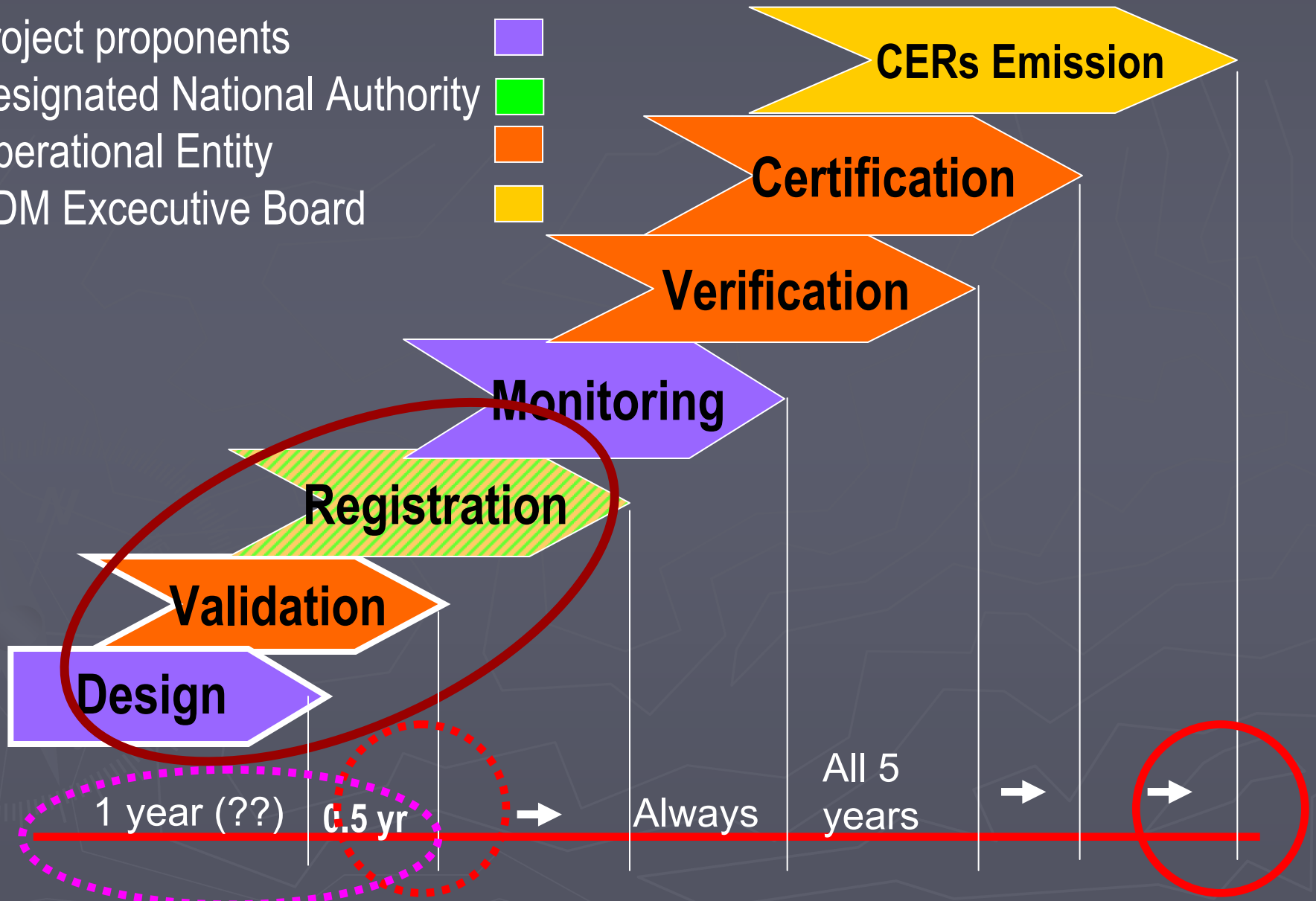
CDM project cycle

Project proponents

Designated National Authority

Operational Entity

CDM Executive Board



CERs Emission

Certification

Verification

Monitoring

Registration

Validation

Design

1 year (??)

0.5 yr

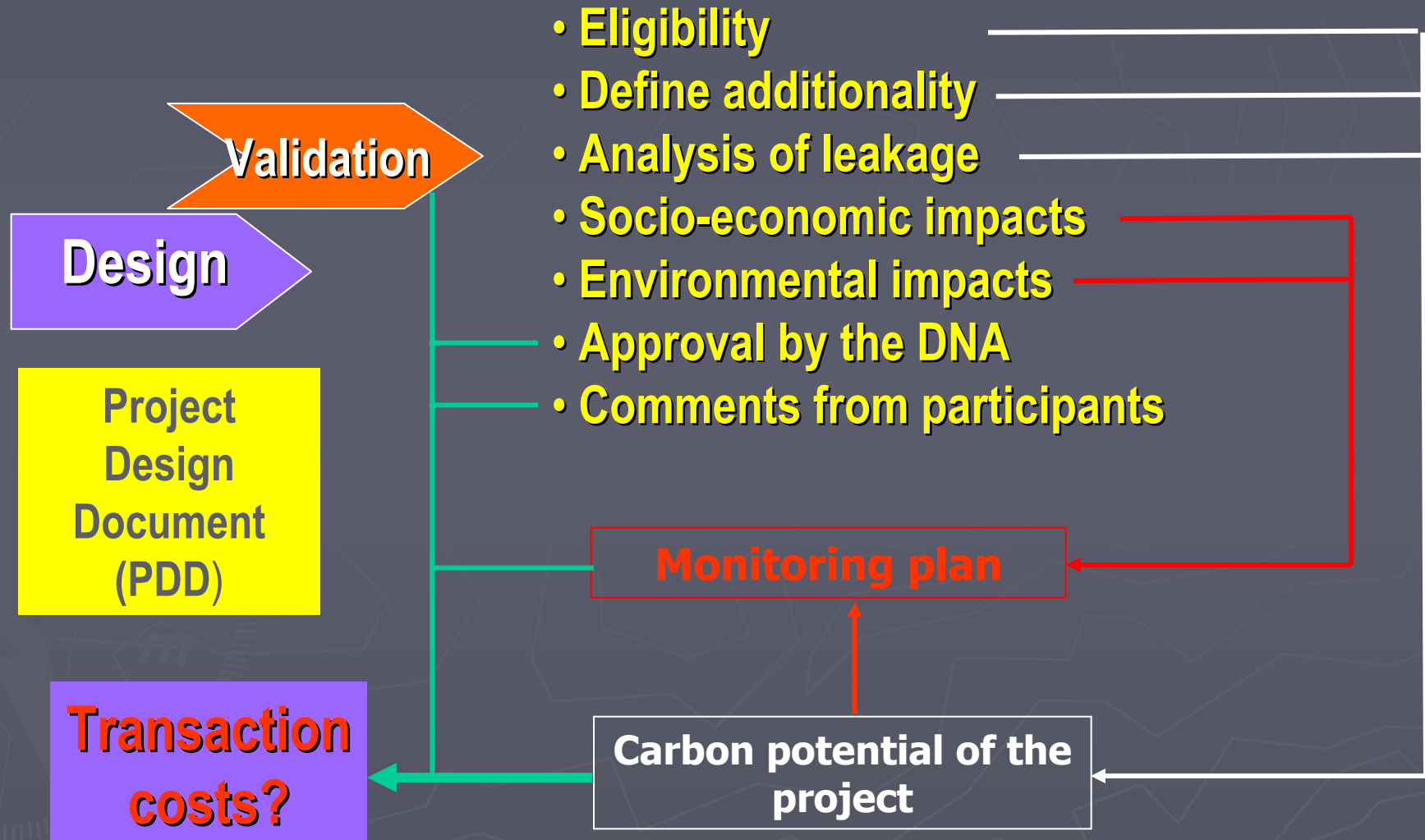
Always

All 5 years

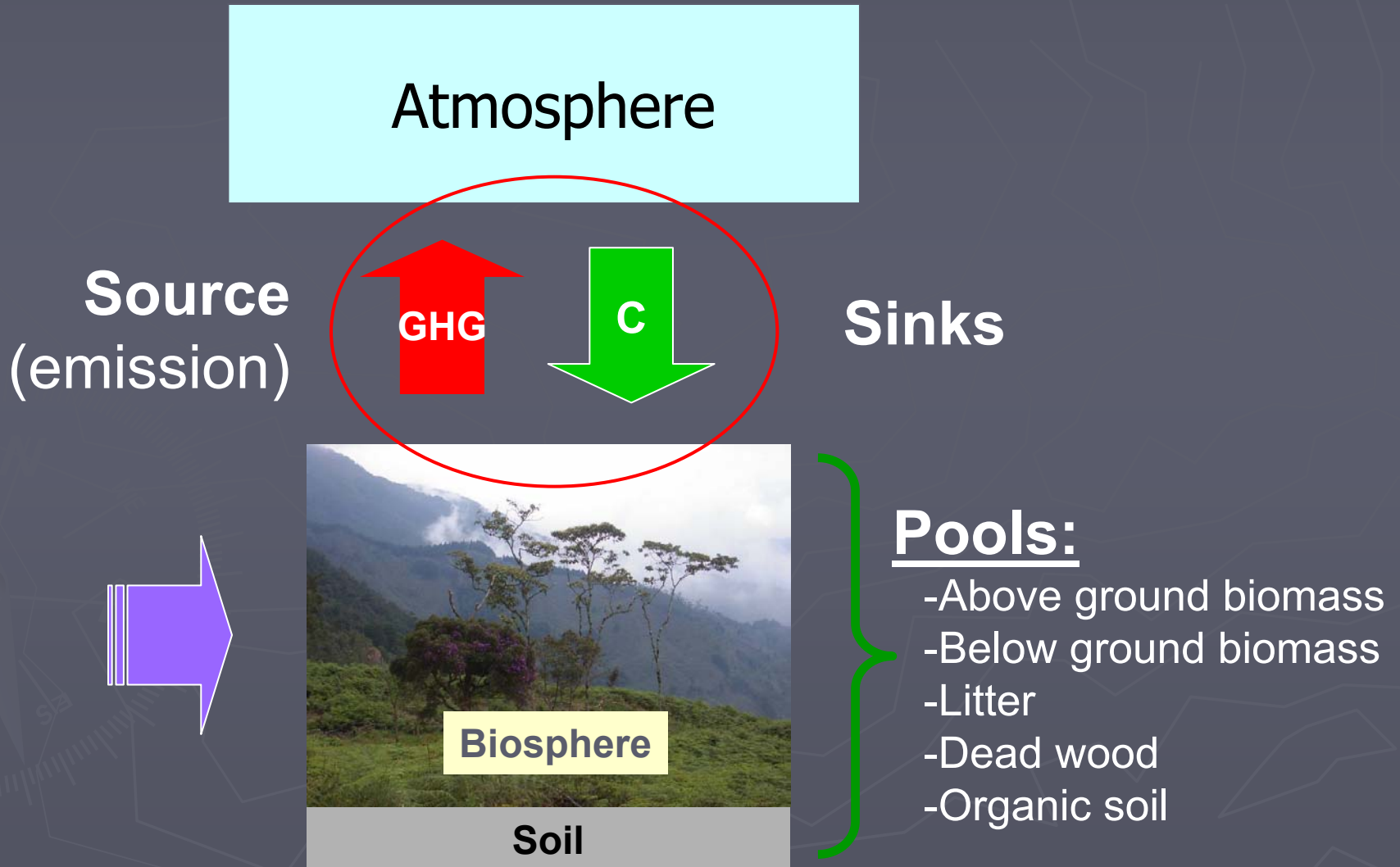


Focus of our workshop:

Dec. 17/CP7 (Marrakech) and Dec. 19/CP9 (Milano)



The role of forest



Components in a CDM project in forestry

Forest management plan

- ▶ ***Carbon accounting***

of the forestry activities, using approved methodologies for baseline and monitoring

- ▶ ***Socio-economic issues***

According to the national legislation

- ▶ ***Environmental issues***

According to the national legislation

- ▶ ***Enabling conditions***

Institutional framework that promotes the use of the CDM in the forest sector:

- Designated National Authority
- Clarification of ownership of the credits and access to carbon pools

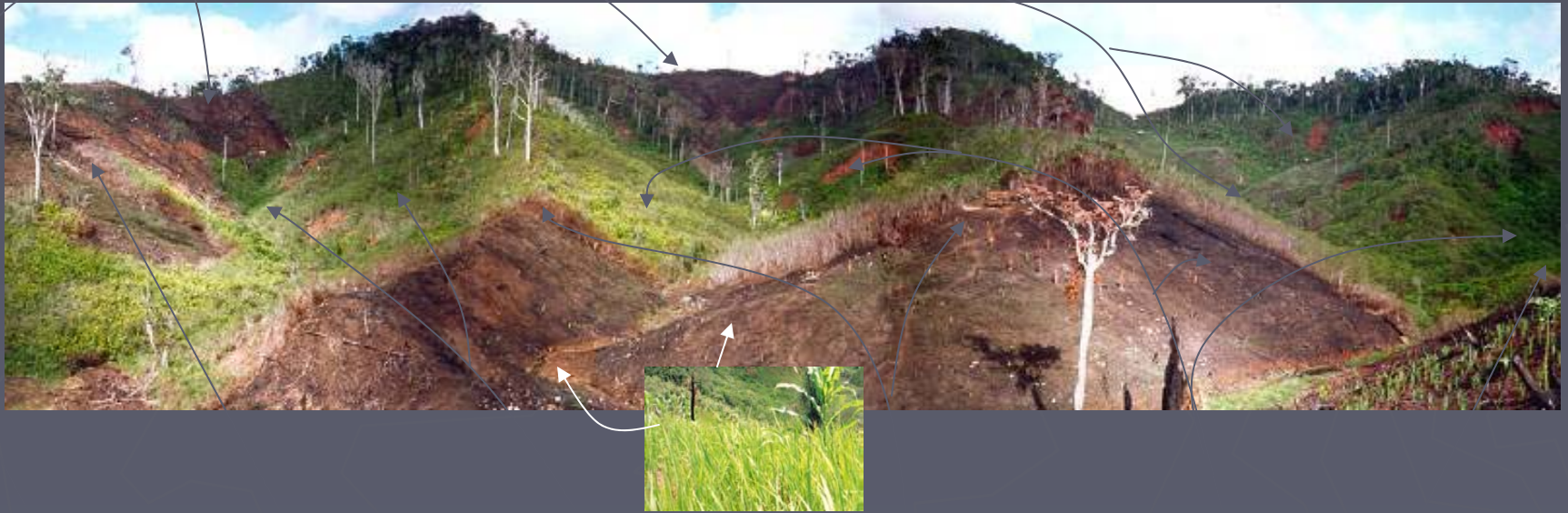
Using the modalities and procedures for the CDM in forestry

Project Design Document (PDD)

Table of contents

- A. General description of the project
- B. Baseline methodology application
- C. Monitoring methodology application
- D. Net anthropogenic GHG removals estimation
- E. Environmental impacts
- F. Socio-economic impacts
- G. Comments

Summarized...	Clean Development Mechanisms
Principle	Projects
Unit	CERs
Relevant eligible activities	Afforestation and Reforestation Renewable energy and bio-energy
Investers / Buyers	Annex I countries (public or private)
Host Countries	Non Annex I countries
From	16th of February, 2005
Relevant Decisions	<ul style="list-style-type: none"> • Dec 11/CP 7: LULUCF • Dec 17/CP.7: CDM • Dec 19/CP 9: CDM A/R Modalities • Dec 14/CP. 10: Small-scale forest projects
Entities / Involved Institutions	<ul style="list-style-type: none"> • Participants • Project developers • Designated National Authority • Designated Operational Entity • A/R-CDM Execution Board
Uncertainties	Transaction costs / Methodologies What will happen from 2012 onwards?



Restoration of natural forests



Plantation of native species



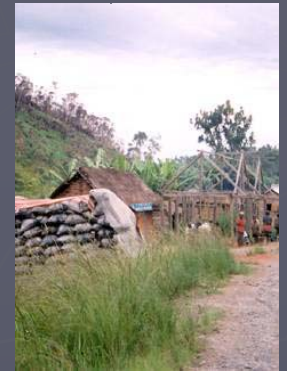
Sustainable forest gardens



Fruit trees garden



Regeneration of secondary forests



Carbon, wood

- An integrated mosaic on landscape scale
- Valuation of degraded lands
- Improvement of ecosystems and livelihoods

Developing country forests and C

Some indicative data (food for thought)

- ▶ Size of the forest area trop/subtropical (2005):
1800 million ha (860 million PFE).
- ▶ Emissions from deforestation and forest degradation (land use change) in the developing countries since 1850 (in CO₂e): **about 500 GT**
- ▶ Aforestation and Reforestation (A/R) potential:
 - 75 million ha (3 million ha/yr 1965-1990):
 - If we assumed that 50% could be done on eligible land under CDM:
 - ▶ **0.36 GTCO₂e** over the first commitment period.
- ▶ Cap of A/R CERs for the first commitment period (2008 – 2012): **0.7 GT CO₂**
- ▶ Sink potential per hectare:
 - between **4 t CO₂e/ha⁻¹** (agroforestry) and
 - **40 t CO₂e/ha⁻¹** (fast growing plantations)
- ▶ In US\$: **between 12 US\$ and 200 US\$ per ha⁻¹** additional to other forest-based income (timber, non-timber forest products and other services)

**Thorny, yes....
worth the pain?**

