

Clean Development Mechanism (CDM) - Basics

United Nations Framework Convention on Climate Change (UNFCCC)

- 165 nations signed the 1992 United Nations Framework Convention on Climate Change (UN-FCCC) at Rio de Janeiro
- The Convention divides countries into two main groups Annex I (developed) & non-Annex I (developing)

UNFCCC

- Annex I (Developed Countries) agreed to reduce their GHGs by 5.2 % below 1990 levels in 1st commitment period 2008 – 2012
- Convention hinges on three principles:
 - Common but differentiated responsibility
 - Precautionary approach
 - Sustainable Economic Growth and Development

UNFCCC

- Kyoto Protocol defines how to bring down emissions during COP 3 in 1997
- The Kyoto Protocol was adopted in Kyoto, Japan, on 11 December 1997 and entered into force on 16 February 2005.
- 184 Parties of the Convention have ratified its Protocol to date.

Flexibility Mechanisms

Project Based Mechanisms

Clean
Development
Mechanism
(CDM)

Between
developing and
developed
countries

Joint
Implementation
(JI)

Between
developed
countries

International
Emission Trading

- (IET)

Between
developed
countries

CDM Concept

Industrialized Country
(Annex 1)

Developing Country
(non-Annex 1)

Carbon Credits

(=GHG Emission rights)

Entity A

✓GHG Emissions

Entity B

✓Project Activity

✓Emission Reduction

Finance

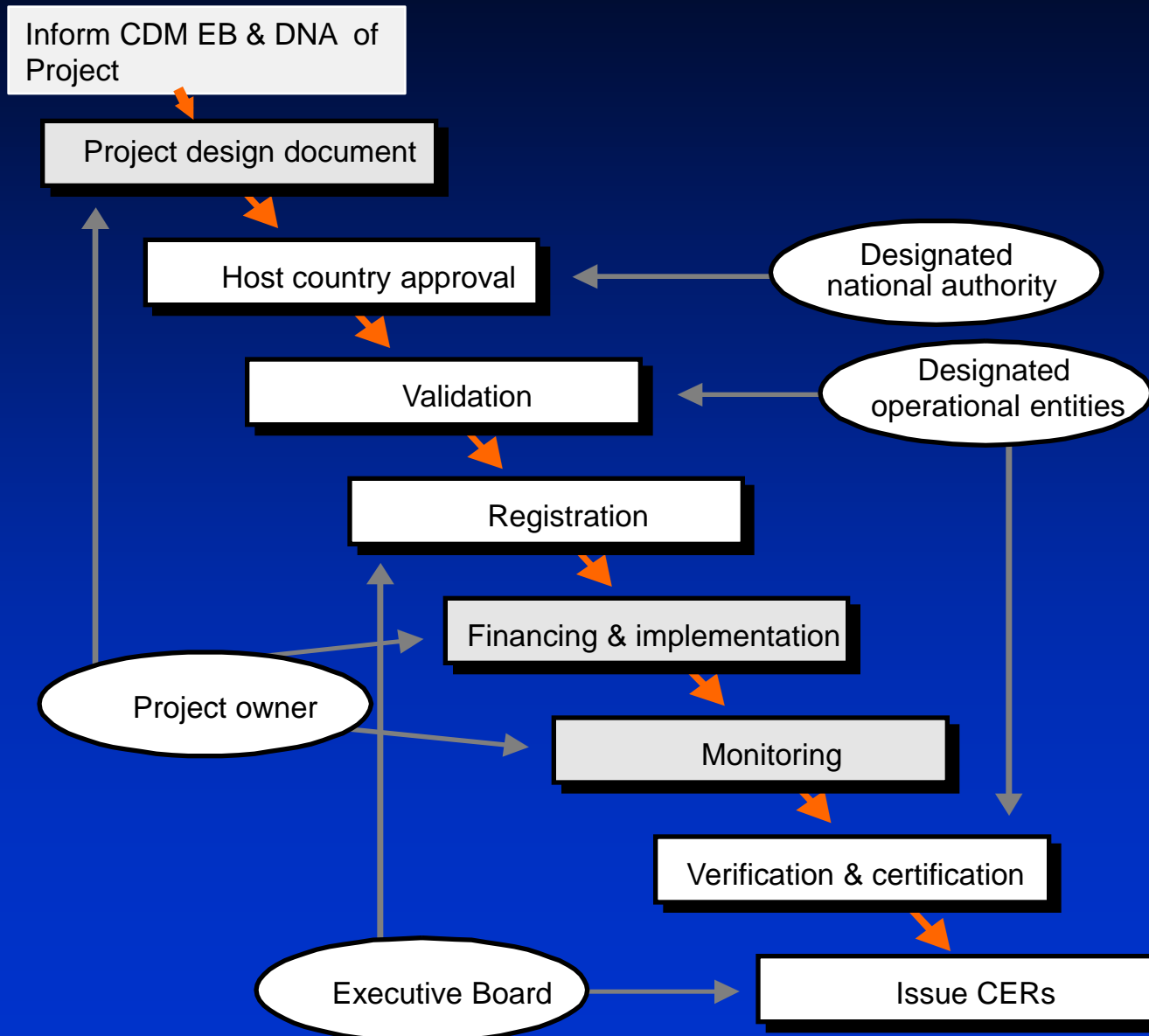
Technology

(Capacity Building)

Institutional Framework for CDM

- Developing country- Project Developer
- Annex-1 country- Buyer, Investor
- Approval of project – Designated National Authority
- An institution which verifies the essential prerequisites for CDM projects- Designated Operational Entity (DOE)
- An Institution which certifies the emission reduction- Designated Operational Entity (DOE)
- An institution which issue CERs- CDM Executive Board (CDM EB)

CDM Project Cycle



Prerequisites for a project to be considered under CDM

- Contributes to the sustainable development of the host country
- Results in GHG emission reductions that would not have happened otherwise
- Generates real, measurable and long-term climate change mitigation benefits
- Approved by parties (host and purchasing) involved

Critical Issues for CDM

- Availability of Methodology
- Baseline Scenario
- Additionality – why and how?

Availability of CDM Methodology

- Ideally there would be an existing methodology approved by Executive Board applicable directly to the proposed project
- CDM EB has provision for suggesting a new methodology or modification in an existing methodology
- As far as possible, use existing methodology to avoid complexity and time overrun

Additionality

- Project has to be “additional” above and beyond business as usual
- Good rule of thumb for “Common Practice Test”
 - Has technology/type of project been implemented over past five years in that country?
 - If yes, to what extent? What is the rate of penetration of this technology?

Additionality

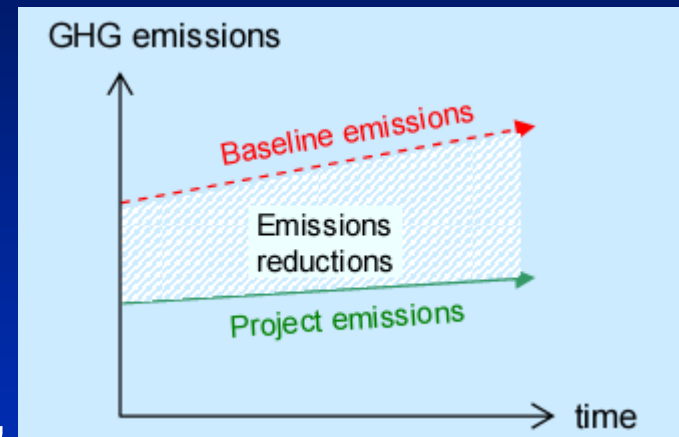
- Additionality demonstrated through Barrier Analysis: barriers to implementation?
 - Investment Barriers (barriers to finance, etc)
 - Technological (labour, infrastructure, etc)
 - Prevailing practice (first of kind)
- Must be documented with demonstrable evidence (legislation, data, statistics, etc)
- Investment analysis: project is economically or financially less attractive than other alternatives or no other economic benefits other than CER revenues.

No additionaly check

- Normally all CDM projects have to show that they are additional, e.g. that they would not exist without CDM
- At COP 15 it was decided to establish simplified modalities for demonstration additionality for all SIDS/LDC countries.
- At the 54th meeting of the Executive Boards (EB) it was decided the following projects ALWAYS are additional in these countries:
 - Projects activities up to 5 MW that employ renewable energy as their primary technology. All technologies included in Type I small scale CDM are included.
 - Energy efficiency projects activities that achieve energy savings of <20GWh. All technologies included in Type II small scale CDM are included
 - At COP16 it was decided that EB should also include Type III small scale project < 20ktCO₂e in this category before COP17

CDM Baseline

- Baseline: the difference between the actual project emissions and the emission baseline constitute the volume of CERs
- Determining the Baseline:
 - Must use complete methodology
 - Purpose of Baseline methodology/additionality tool:
 - ✓ To determine the baseline scenario, based on rationale and complete justification
 - ✓ To determine the basis for and demonstrate additionality



Project Cycle – Time Frame

Preparation and review of the Project

Issuance of the first CERs

Project Design Document

- Identification of appropriate methodology to use
- Identification of baseline
- Monitoring Plan

Host Country Approval

- HC DNA to review the project and issue a HC Letter of Approval

Validation process

- Public review and stakeholder Commenting period.
- Site visit
- Completion of Validation report

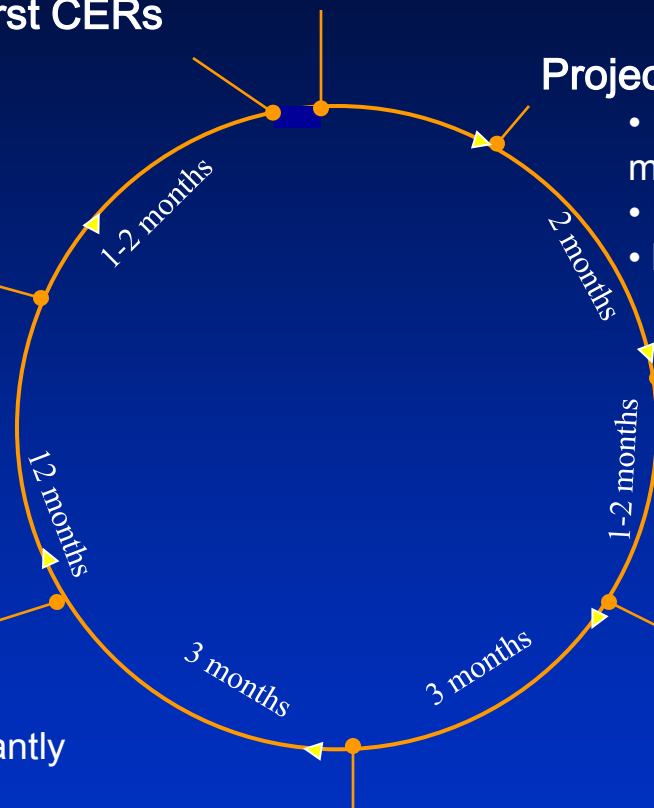
Registration

Implementation and monitoring

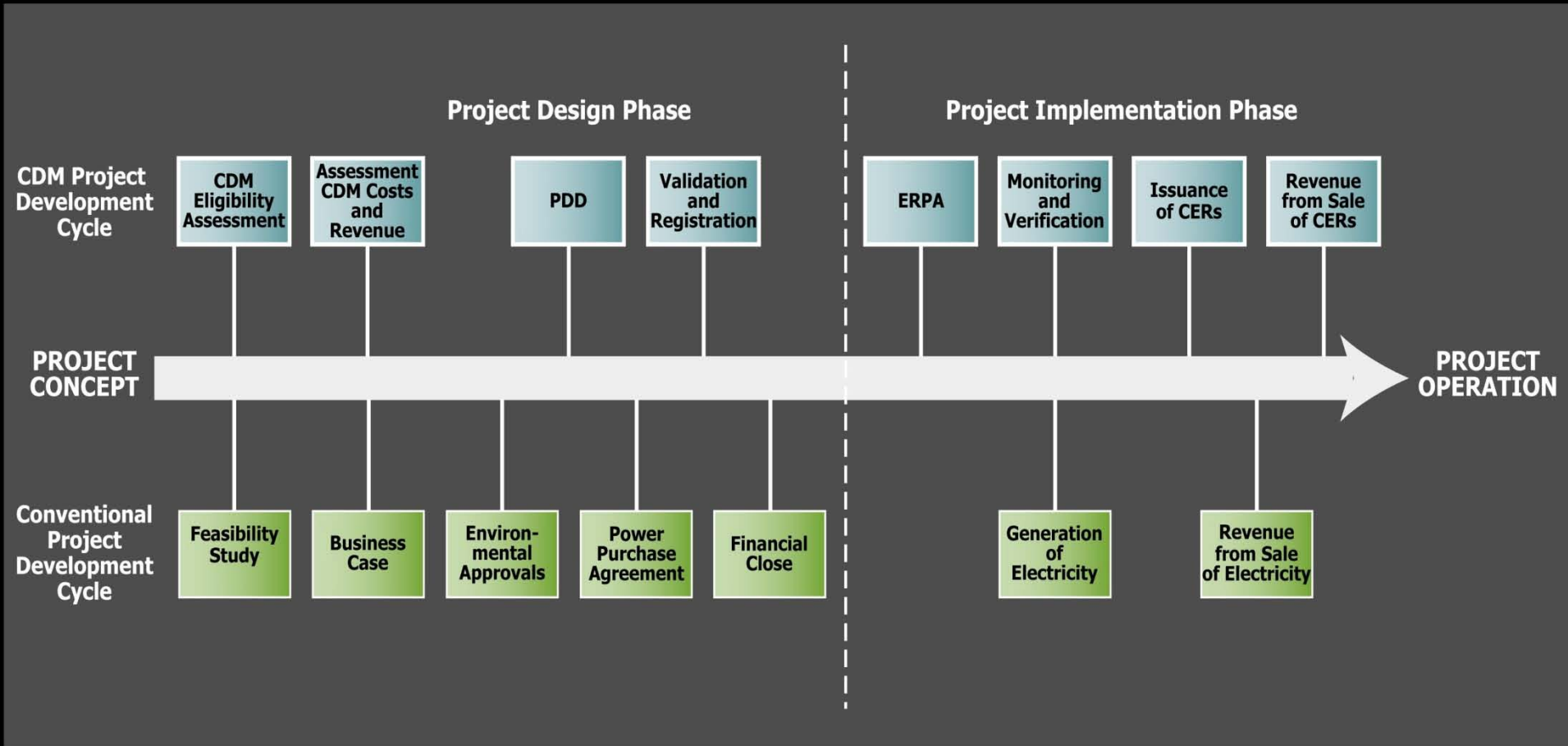
- The project needs to constantly monitor the project and the emission reductions.

Verification and certification

- Review of the monitoring Report.
- Completion of verification
- Report
- Completion of the certification
- report



CDM & Conventional Project Development



Benefits of CDM

- Additional revenue stream through carbon credits
- Opportunity to achieve improved energy efficiency
- Energy Security from renewable Energy
- Improved environmental quality
- Access to climate-friendly technology
- Investment in priority sectors
- Reduced dependence on imported fuel
- Encourages private sector involvement in global GHG reductions
- Stimulates technology transfer and capacity building

THANK YOU