

Content & Objectives



- Understand procedures to develop CDM project
- Explain & highlight purposes of each steps
- Understand roles and responsibilities of parties involved in CDM processes and how to deal with these parties

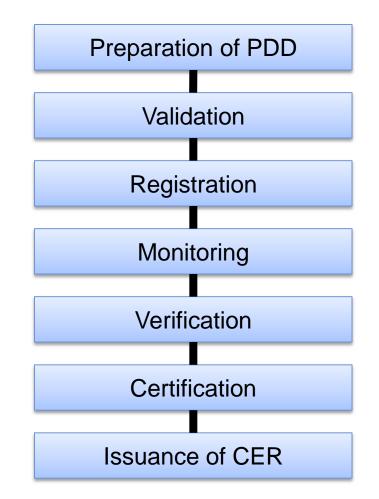
References

- UNFCCC Modalities and Procedures (Annex to Decision 17/CP.7)
- UNFCCC's: <u>http://unfccc.int/2860.php/</u>
- CD4CDM (UNEP/ReSo Center):
- IGES:

http://cd4cdm.org (Contains CDM/JI Database) http://www.iges.or.jp/ (Contains CDM/JI in Chart)



1.1 CDM Project Cycle





1.2 Parties Involved in the Process

<u>CDM EB</u>

Supervise the CDM, under the authority and guidance of signatory counties.

UNFCCC Secretariat

Communication channel and practical administrative body for UNFCCC

DOE Conduct validation/verification accredited by CDM-EB

<u>DNA</u>

Central authority to communicate with PP and other parties related to CDM work. Issue written approval to projects.

Credit Buyer

Some projects sell or commit to sell credits at the point of inception of the project

Financial Sources Some projects

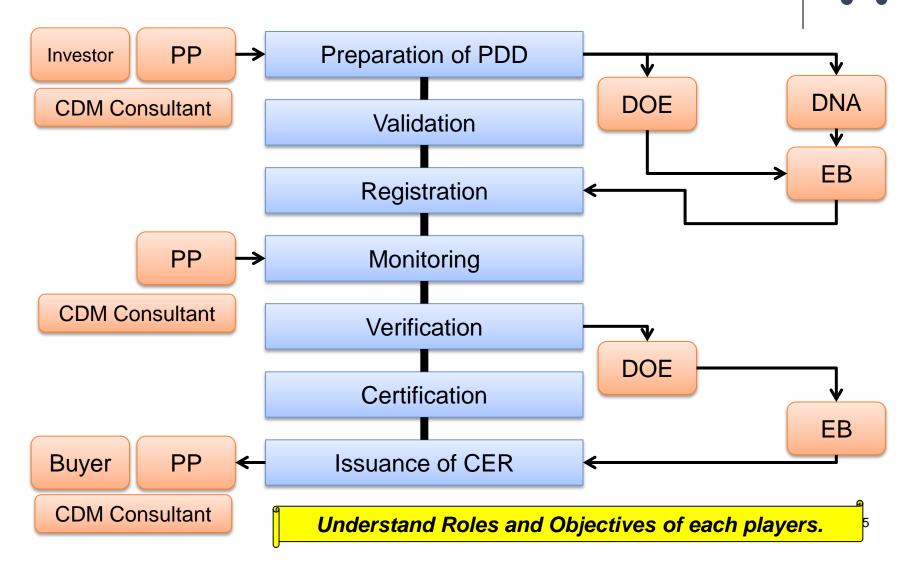
requires external finance sources to realize projects CDM Consultants Assist PP where needed and engaged in consultancy services. Some directly or indirectly

hands on CERs.

Project Participants

Public or private entity who wishes to have a distribution of CERs.Parties

1.3 CDM Project Cycle



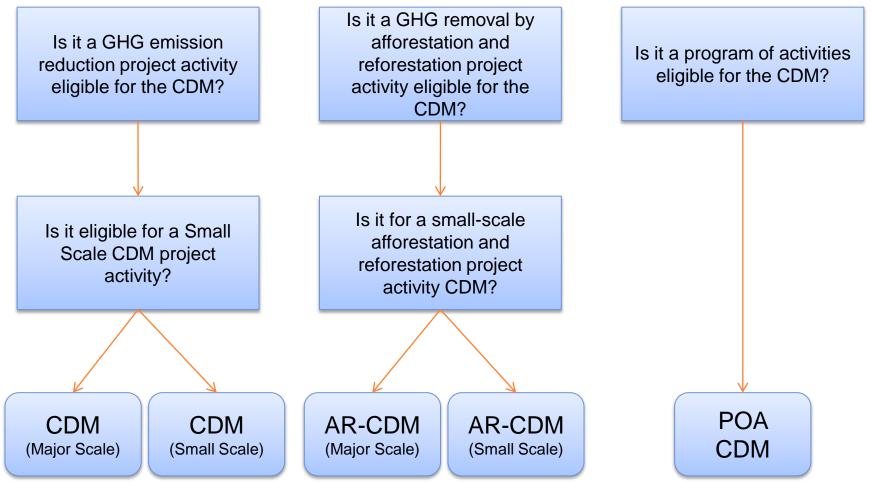
2. Project Inception

- 1. Appraise CDM Eligibility
 - a. Typology of CDM
 - b. Methodology applicability
 - c. Project's Additionality
- 2. Assess Project's Feasibility
- 3. Assure CDM Consideration Record



2.1 Project Inception





2.2 Project Inception

- 1. Applicability of Methodology
- Look up database and see if there are any precedent project you should refer.
- Examine Applicability Section of employed methodology.
- New Methodology Development is not recommended.
- Make sure the methodology is the latest.
- 2. Project Feasibility

No CER 5%

 Regardless project's CER revenue, the project should be financially attractive for the sake of project participants. Look up Databases →UNFCCC →CD4CDM

| Cash In | Cash Out |
|--|---|
| Energy Saving Sales of Electricity Sales of Steam Tipping Fee CER Revenue | Procurement Cost O&M Fuel Cost Labor Cost Consulting Fee Validation Cost Registration Cost Verification Cost Commission |

With CER 10%

2.3 Project Inception



Project Starting Date

The project's starting date should be recorded to prove project's additionality. The start date of a CDM project activity is "the earliest date at which either the implementation or construction or real action of a project activity begins"

- ()contracts for equipment of construction/operation services required for the project activity
- () contracts of services/ payment of fees for FS

PDD should describe above date and explain how that date has been determined.

Reference: EB41 Report Para.57, EB49 Annex 22



2.4 Project Inception



- 1. Examine applicability of methodology and modify project rather than try to develop new methodology.
- 2. A project has been in place? No chance for CDM....
- 3. Make it financially viable, regardless CER revenue.

3.1 PDD Development

- 1. Use Latest Version of Templates
- 2. Focus Important Sections
- 3. Source, Source and Source





3.2 PDD Development

• Use Latest Version of PDD Templates and Methodology.

| Normal-sca | | Normal-sc | cale CDM project activity Small-scale CDM project activity | | DM project activity |
|-------------------------|-----------------|-------------------------------|---|--|--|
| Emission Reduction | PDD | CDM-PDD ver.3.2 (Att.1-1) | CDM Project Design Document | CDM-SSC-PDD ver.3 (Att.1-2) | CDM Project Design Document for Small-Scale project activities |
| | | | | CDM-SSC-Bundle ver.2 (Att.1-3) | Form for submission of bundled Small Scale project activities form |
| | | CDM-PoA-DD ver.1 (Att.1-4) | Programme of Activities Design Document | CDM-SSC-PoA-DD ver.1 | Small-Scale CDM Programme of Activities Design Document |
| | | CDM-CPA-DD ver.1 (Att.1-5) | CDM Programme Activitiy Design Document | CDM-SSC-CPA-DD ver.1 | Small-Scale CDM Programme Activity Design Document |
| | Metho dology | F-CDM-AM-Subm ver.1 | Form for submission of queries from DOEs to the MP regarding the application of approved methodologies | F-CDM-SSC-Subm ver.3 | Form for Submissions on Small Scale Methodologies and Procedures |
| | | F-CDM-AM-Rev ver.1 | Form for submission of requests for revisions of approved methodologies to the MP | | |
| | | CDM-NM ver.3.1 | CDM Proposed New Methodology: Baseline and Monitoring | F-CDM-SSC-NM ver.1 | Form for proposed New Small- Scale Methodologies |
| A/R (chap.18) | PDD | CDM-AR-PDD ver.4 | CDM Project Design Document for A/R project activities | CDM-SSC-AR-PDD ver.2 | Project Design Document Form for Small-Scale A/R project activities |
| | | CDM-PoA-DD-AR ver.1 | Programme of Activities Design Document Form for A/R project activities | CDM-PoA-DD-SSC-AR ver.1 | Programme of Activities Design Document Form for SSC-AR project activities |
| | | CDM-CPA-DD-AR ver.1 | CDM Programme Activity Design Document Form for A/R project activities | CDM-CPA-DD-SSC-AR ver.1 | CDM Programme Activitiy Design Document form for SSC-AR project activities |
| | Metho | F-CDM-AR-AM-Subm ver.1 | Form for submission of queries from DOEs to the AR WG regarding the application of Approved A/R Methodologies | Source: CDM-JI In Chart Ver.9.0 www.iges.or.jp/en/cdm/report01.html 12 | |
| | | F-CDM-AR-AM-Rev ver.1 | Form for submission of requests for revisions of Approved Methodologies to the AR WG | | |
| | | CDM-AR-NM ver.3 | CDM Proposed New Methodology: Baseline and Monitoring for A/R | | 12 |

3.3 PDD Development

- Focus Important Sections
- Distinguish descriptive section and fact oriented sections
- Make sure your explanation is substantiate and supported by evidence.

Number

➔ Source or original data Proportion

➔ Source and ensure the subject is appropriately treated Census, Statistics

➔ Source and check date Mechanical Specification

→ Prepare an evidence

| А | Gen. Description of Project Activity | | | |
|-----|--|--|--|--|
| В | Application of a baseline and monitoring methodology | | | |
| B.1 | Title of employed methodology | | | |
| B.2 | Justification of methodology application | | | |
| B.3 | Description of project boundary | | | |
| B.4 | Description of baseline scenario identification | | | |
| B.5 | Assessment and Demonstration of Additionality | | | |
| B.6 | Emission Reductions | | | |
| B.7 | Application of the monitoring methodology & Description of the monitoring plan | | | |
| B.8 | Date of Completion of baseline study | | | |
| С | Duration of the project activity /crediting period | | | |
| D | Environmental Impacts | | | |
| E | Stakeholders' Comments | | | |
| | | | | |

3.4 PDD Development



- Information critical for baseline development and additionality analysis needs to be set up by DNA or relevant government agencies
- In case the data is not available, the project participants has to perform its own calculation of parameters e.g.
 - Emission factors (to calculate emission reductions)
 - National target of introducing energy saving technologies (to prove an additionality)
 - Financial benchmarks (to prove financial additionality of project)
- Absence of key parameters ends up with inconsistent project approval by DNA and further questioned Sri Lanka projects' integrity

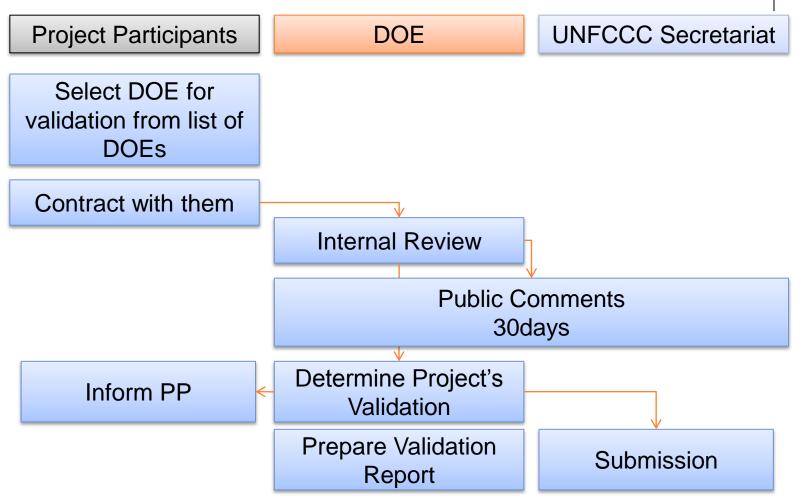
4.1 Validation

- 1. Process
- 2. Dialogues with DOE Why DOEs Asking Qs?



4.2 Validation Process





4.4 Validation

Baseline Analysis

- Based on approved/new methodology
- In a transparent and conservative manner
- On a project specific basis
- Taking into account national and/or sectoral policies and circumstances

- <u>Additionality</u> = Emission reduction would not have been achieved without CDM
- Investment Barrier
- Technological Barrier
- Barrier due to prevailing practice
- Other Barrier



Validator needs to establish his/her confidence over the descriptions of PDD



6. GHG Accounting Principles

| Principles | |
|--------------|--|
| Relevance | Use data, methods, criteria, and assumptions that are appropriate for the intended use of reported information |
| Completeness | Consider all relevant information that may affect the accounting and quantification of GHG reductions, and complete all requirements |
| Consistency | Use data, methods, criteria, and assumptions that allow meaningful and valid comparisons |
| Transparency | Provide clear and sufficient information for reviewers to assess the credibility and reliability of GHG reduction claims |
| Accuracy | Reduce uncertainties as much as is practical |
| | Source: The GHG Protocol. Chapter 4. GHG Accounting Principles |

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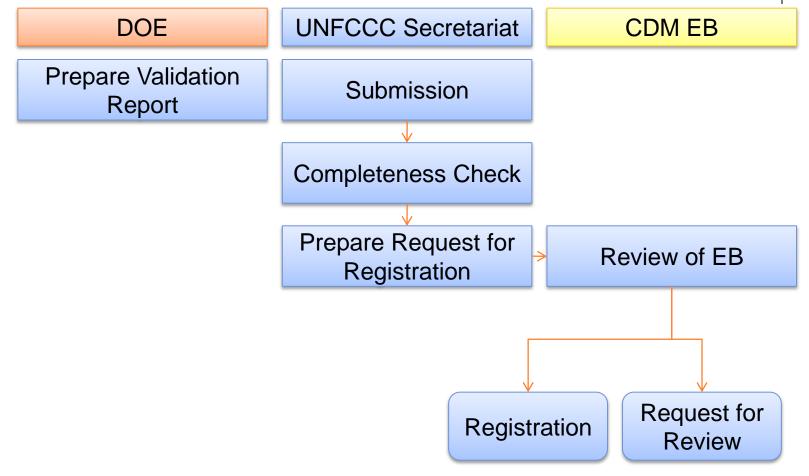
5.1 Registration



- 1. Most projects need 2 EBs to register.
- 2. Review Request is tricky request.



5.2 Registration Process



5.3 Registration

Completeness check

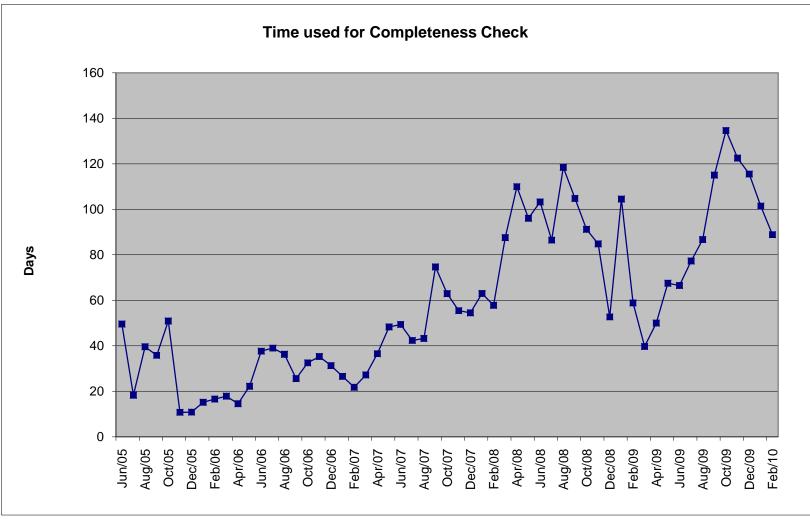
a. CDM PDD

- b. A validation report
- c. A valid letter of approval from each party involved
- d. A registration request form
- e. A letter of authorization for each PP
- f. A modalities of communication

SOP-Admin Fee

- SOP Admin is charged for the share of proceeds to cover administrative expenses applied to the expected average annual emission reductions
- SOP Admin is USD 0.1/CER and USD 0.2/CER issued for any amount in excess of 15,000tCO2
- The maximum registration fee is no more than USD 350,000.

5.4 Registration





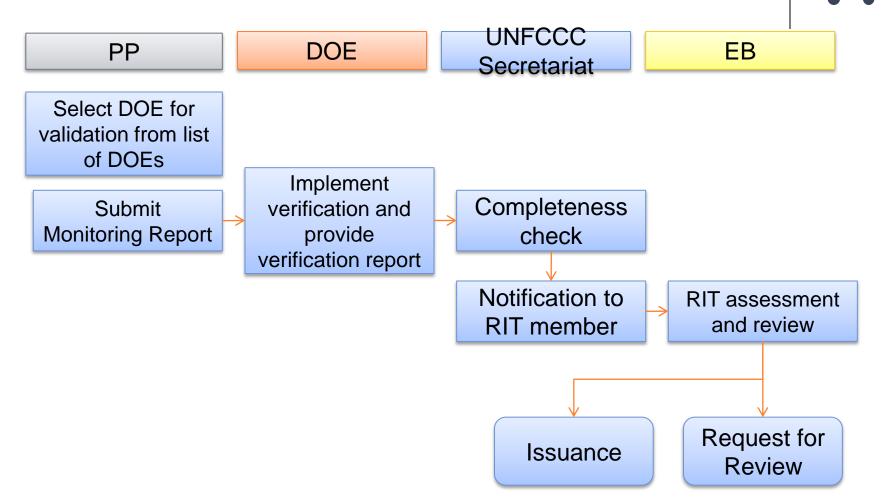
Source: CDM Database, CD4CDM

6.1 Verification

- 1. Monitoring is QC/QM process
- 2. Conduct 1st Verification Sooner







6.3 Verification



"Verification" is a process (PP choose 1st verification timing and following every 5 years) to decide emission reduction amounts by DOE.

1) Compliance

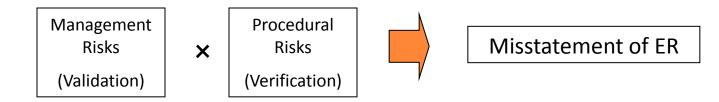
Does the project comply with KP and other host countries' regulations throughout the verified periods? It is hardly recognizable to issue CER when non-compliance occurred.

2) Technical Aspects

Does the project operate without significant engineering failure to achieve designed emission reductions?

3) Project Management

Does the project management system design in the monitoring plan effectively monitor the project performance?



6.4 Verification



Conduct 1st Verification sooner

- Earlier verification enables PP to deliver CERs sooner
 → earlier cash-in.
- Make necessary amendment before project in trouble
 Jusually there are unintended changes undermined in the project from original PDD.
 - \rightarrow you may need to claim changes after operation.

7.1 Changes after the operation

- Requests for deviation prior to the submitting request for issuance
- Changes from the project activity as described in the registered PDD (EB48 Annex 67)
 - Changes impact the additionality of the project activity
 - Changes in the effective output capacity due to increased installed capacity or number of units, or installation of units with lower capacity or units with a technology which is less advanced than that described in the PDD.
 - Addition of components or extension of technology
 - Removal or addition of one or more sites of a project activity registered with multiple-sites
 - Different values of those actual operational parameters relevant to determination of emission reduction which are within the control of project participant and which result in the IRR passing the benchmark as described in the registered PDD



7.2 Changes in the operation

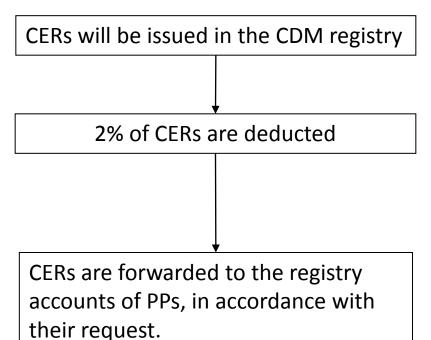
- Changes in the scale of CDM activity
 - Project, originally designed for small scale expands and no longer satisfies the conditions
- Changes which impacts applicability/application of baseline methodology
 - The original methodology is no longer applicable
 - Another methodology would have been applicable
 - Another baseline scenario would be more appropriate

Including changes in the monitoring plan, the DOE notify to EB to assess reported changes before the verification. Unless DOE receives guidelines from EB, DOE cannot proceed further processes including verification. (EB49 Annex 28)

8.1 Issuance



Credit Issuance Procedure



Upon instruction of CDM EB, the CDM registry administrator in UNFCCC issues the specified quantity of CERs.

Among issued CERs, 2% of those will be deducted for share of proceeds to assist developing parties those are particularly vulnerable to the adverse effects of climate change to meet the cost of adaptation. (SOP-Adaptation)

Projects in LDCs shall be exempt from SOP.

The proportion of CERs distribution among project participants are exclusively decided by project participants.



Recap of CDM Project Cycle

