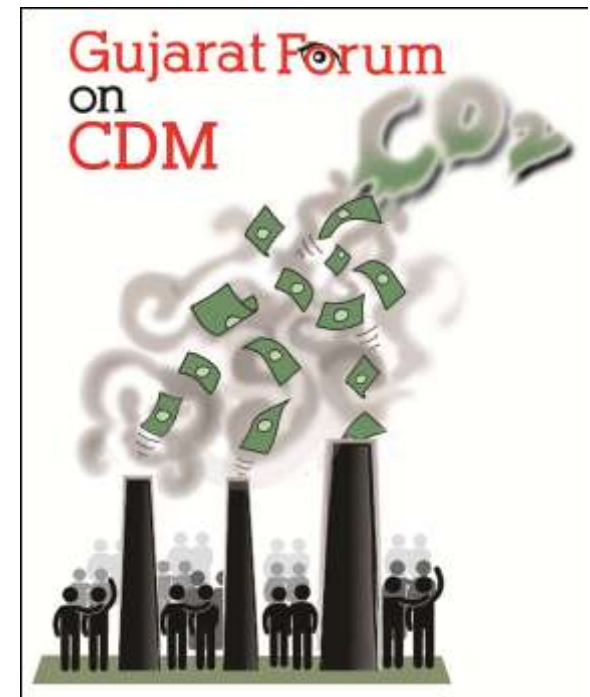


The CDM – How it works?

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Legal background of CDM

- The United Nations Framework Convention on Climate Change (UNFCCC)—adopted in 1992 and brought into force in 1994—established an international framework to address global climate change through stabilization of greenhouse gas concentrations in the earth's atmosphere.
- In 1997, at Kyoto, the world's industrialized countries agreed, in principle, to cut their emissions of GHG by about 5% from 1990 levels, by implementing any of these three mechanisms—joint implementation, CDM and emission trading.

Clean Development Mechanism

- The Clean Development Mechanism (CDM) is a mechanism in the Kyoto protocol to ensure deployment of greenhouse gas (GHG) emission reducing projects in developing countries.
- The objective of CDM is to contribute to a sustainable development in developing countries and ensure that GHG emission reductions take place at the lowest possible cost.

Article 12 of Kyoto Protocol

- The mechanism provided by Article 12 of the Kyoto Protocol, designed to assist developing countries (Annex-II countries) in achieving sustainable development by permitting industrialised countries (Annex-I countries) to finance projects for reducing greenhouse gas emission in developing countries and receive credit for doing so.

CDM projects

- The Kyoto Protocol entered into force in February 2005 . It has been ratified by all Annex I countries except the USA.
- The first CDM project was registered on 18 November 2004
- 2000th project was registered on 6 January 2010.
- As on 16th April 2012,
Registered projects: 4005
Issued CERs: 908,678,320
- Each CER corresponds to 1 tonne of CO₂ reduction.

Under C.D.M. Project,

- Before implementation of C.D.M project, the green house gases emission can be taken as baseline values and after implementation of technology the green house gases reduction can be calculated by internationally recognized methods.
- The reduction of green house gases can be converted in Certified Emission Reduction – C.E.R. and can be described as in tones of reduction of green house gases. Industrialized country will get C.E.R. or Carbon Credit by investing in the project.

How CDM works?

- CDM consists of a bilateral agreement between two entities to complete a GHG mitigation project.
- In theory, the CDM works like this : an investor from an industrialized country, or an industrialized country government, can invest in, or provide finance for, a project in a developing country that reduces greenhouse gas emissions
- The investor then gets credits – carbon credits - for the reductions and can use those credits to meet their Kyoto target.

CDM : Glossary of Terms

- **CDM Executive Board (CDM EB):** The CDM Executive Board approves CDM projects, certifies operational entities and will issue carbon credits for CDM projects.
- **Conference of Parties (COP):** The meeting of parties to the United Nations Framework Convention on Climate Change.
- **Designated National Authority (DNA):** The DNA is the official body representing the Government which takes part in the arrangement of CDM/JI projects.

CDM : Glossary of Terms

- **Host Country:** The country where an emission reduction project is physically located.
- **Designated Operational Entity (DOE):** A Designated Operational Entity is an independent body accredited by the CDM Executive Board (CDM EB) that either validates a project proposal and recommends it for registration by the CDM EB, or verifies the monitoring data and recommends to the CDM EB the amount of carbon credits that should be issued.

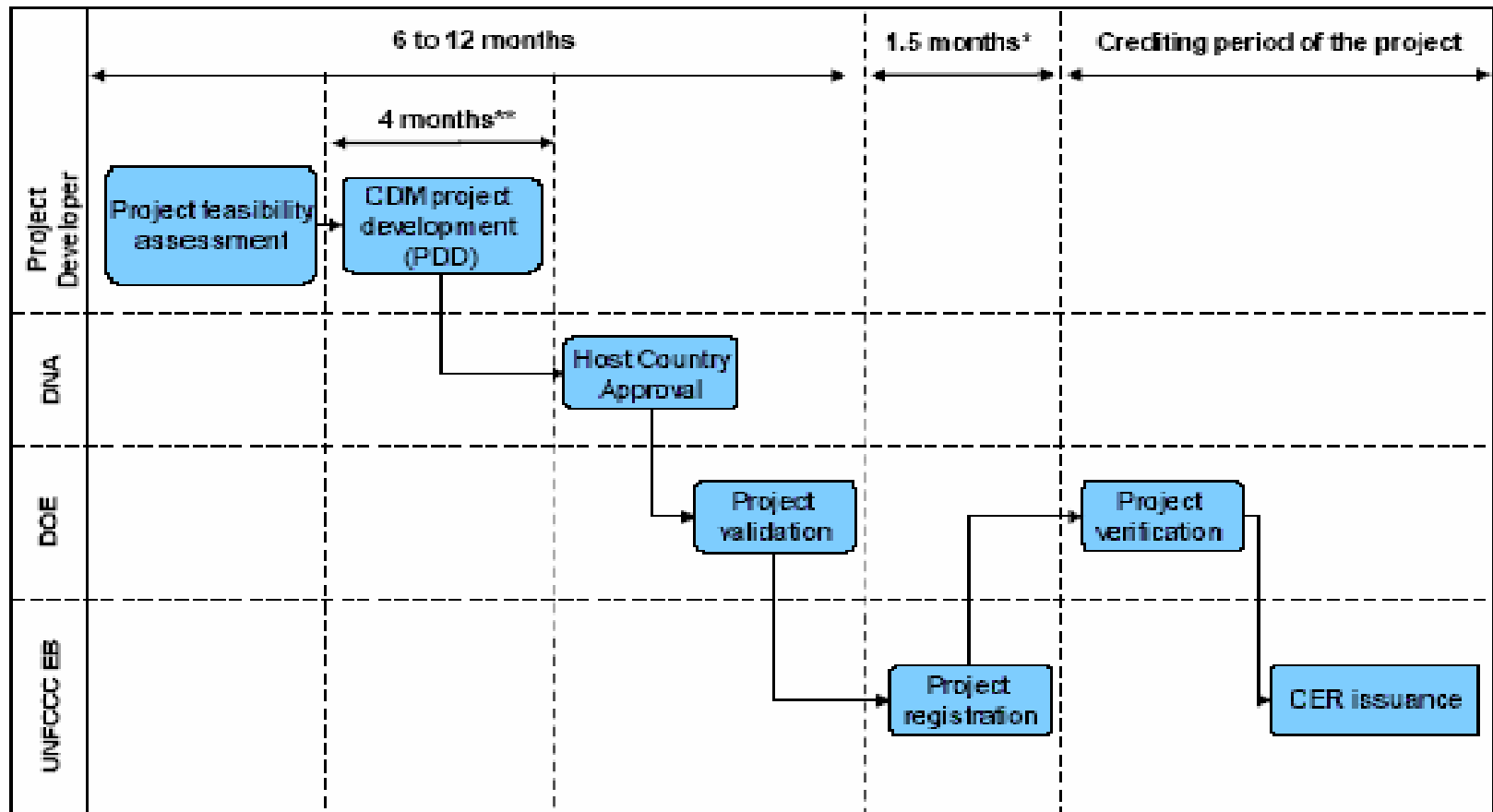
CDM : Glossary of Terms

- **Project Concept Note (PCN):** A brief description of a project prepared by the project proponent entity or intermediary that is to be presented for DNA approval.
- **Project Design Document (PDD):** A project specific document required under the CDM rules which will enable the Operational Entity to determine whether the project (i) has been approved by the parties involved in a project (ii) would result in reductions of greenhouse gas emissions that are additional, (iii) has an appropriate baseline and monitoring plan.

CDM process

1. Preparing the Project Design Document (PDD)
2. Getting approval from each country involved
3. Validation
4. Registration by the CDM Executive Board
5. Monitoring emission reductions
6. Verification, certification and issuance of emission reduction credits
7. Renewal of the crediting period

Typical CDM project :Timeline



I. Preparing the Project Design Document (PDD)

- Before a developer can submit a project for validation, they need to prepare a PDD.
- The PDD is a sort of pre-formatted checklist that the project developer must complete, showing the design of the project and how it meets the validation requirements of the CDM.
- Project participant prepares project design document, making use of approved emissions baseline and monitoring methodology.
- Most important things must be done when designing a CDM project and preparing the PDD
 - a. Local stakeholder consultation
 - b. Environmental impact assessment (EIA)
 - c. Methodologies to estimate the baseline
 - d. Demonstrating additionality

2. National Approval (The Designated National Authority)

- Project participant secures letter of approval from Party(country).
- The Designated National Authority (DNA) of a Party involved in a proposed CDM project activity shall submit a letter indicating the following:
 1. That the country has ratified the Kyoto Protocol.
 2. That participation is voluntary.
 3. And, from host parties, a statement that the proposed CDM project activity contributes to sustainable development.

3. Validation

- Project design document is validated by accredited designated operational entity(DOE),private third-party certifier.
- Validation is the process of independent evaluation of a project activity by a DOE against the requirements of the CDM on the basis of the project design document.

30 day Public comment period

- Notification of the beginning of a 30-day public comment period is only made public on the UNFCCC website <http://cdm.unfccc.int/Projects/Validation/index.html>.
- Unfortunately, the UNFCCC does not provide a notification service for the start of the public commenting periods of CDM projects.

4. Registration by the CDM Executive Board

- Registration is the formal acceptance by the Executive Board of a validated project as a CDM project activity.
- Registration is the prerequisite for the verification, certification and issuance of CERs related to that project activity.
- If a Party or three members of Executive Board request review, project undergoes review, otherwise proceeds to registration.

5. Monitoring emission reductions

- Project participant responsible for monitoring actual emissions according to approved methodology.
- Once a project is registered, the developer begins to monitor the reduction of emissions in accordance with the monitoring plan written in the PDD.
- The project operators must collect and archive all relevant data necessary for calculating the emission reductions and write a monitoring report.

6. Verification, certification and issuance of emission reduction credits

- DOE verifies that emission reductions took place, in the amount claimed, according to approved monitoring plan.
- *Verification* is the independent review and ex post determination by the DOE of the monitored reductions in anthropogenic emissions by sources of greenhouse gases that have occurred as a result of a registered CDM project activity during the verification period.
- *Certification* is the written assurance by the DOE that, during the specified period, the project activity achieved the emission reductions as verified.

Verification

- Before the project can claim credits, a Designated Operational Entity (which has to be different from the one that did the validation) has to verify that the reductions claimed in the monitoring report are taking place and compile a verification report.
- This verification is undertaken periodically ex-post, i.e. every two months for the crediting period.
- The verification report and the monitoring report must be made public.
- The verification can involve on-site visits and interviews with local stakeholders, although this is not mandatory.

Certification

- Certification leads to credits being issued. The certification takes the form of a request to the Executive Board to issue carbon credits - CERs - equal to the amount of emissions that they verify have been reduced..
- The issuing of these credits will occur 15 days after the Board receives the certification.
- The process for issuance also foresees that a project participant, one of the governments involved or three members of the Executive Board can request a review.
- The verification and issuance process also allows for an opportunity to influence a CDM project after registration.
- The process of verification, certification and issuance will continue for the entire period during which the project is claiming Credits.

7. Renewal of the crediting period

- The project operator can choose between two different approaches to decide upon the length of the crediting period:
- A maximum of 7 years which may be renewed at most 2 times.
- A maximum of 10 years with no option of renewal.

Rules for CDM Project

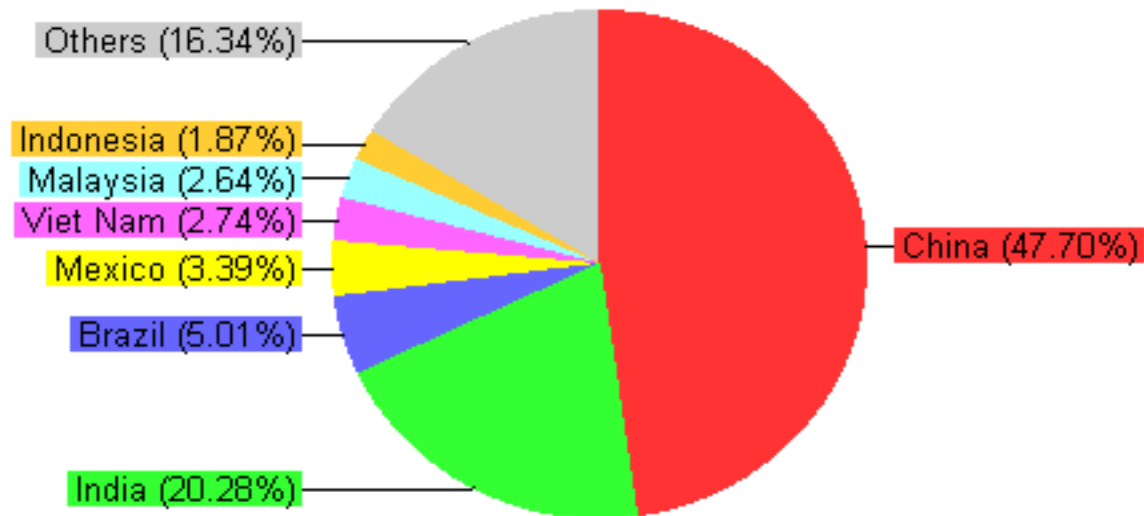
- Projects must result in real, measurable and long-term emission reductions
- ‘Additionally’ - Emission reductions or sequestration must be additional to any that would occur without the project.
- In line with sustainable development objectives
- contribute to biodiversity conservation and sustainable use of natural resources.

Major Players in CDM

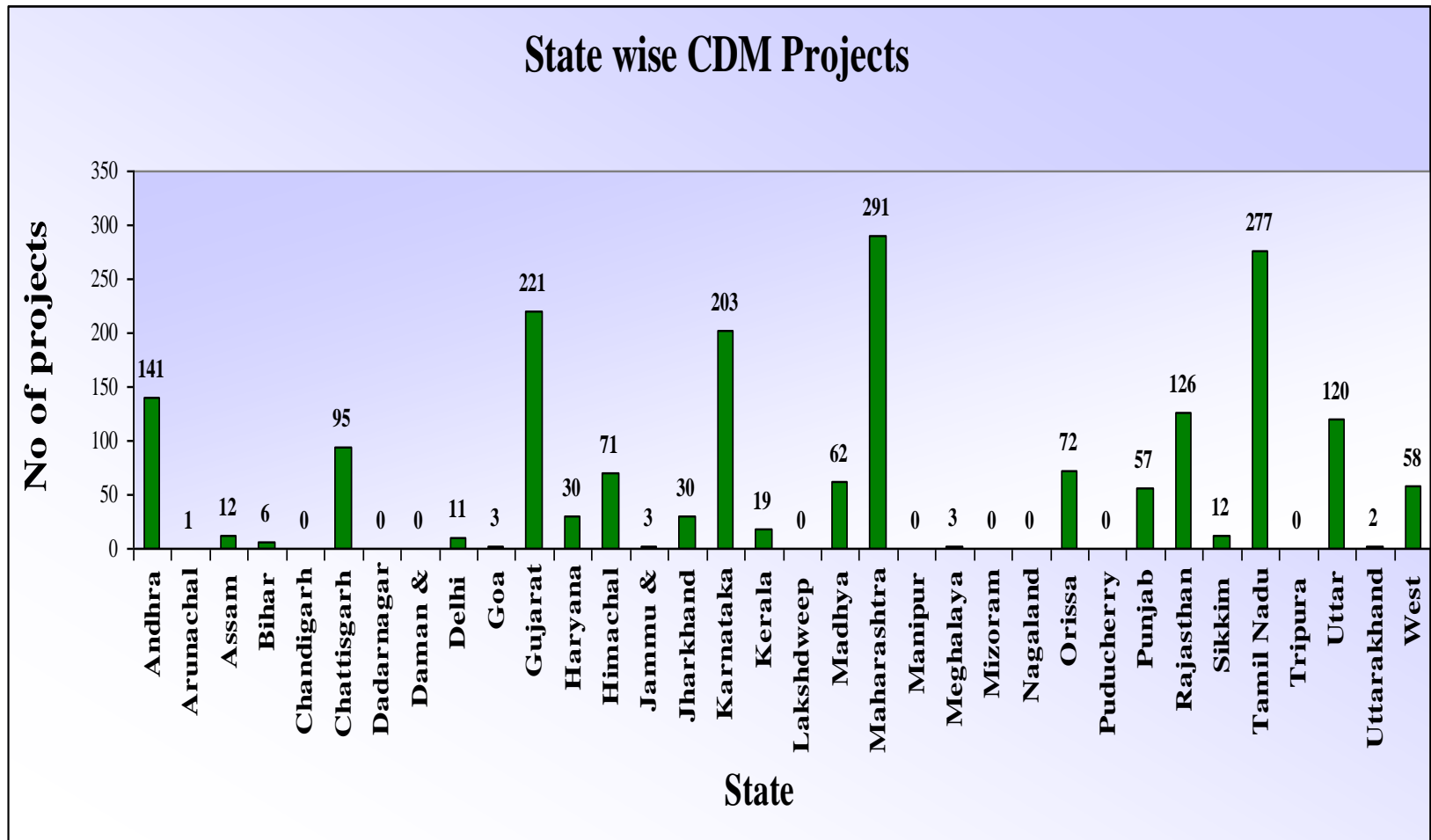
- Project developers
- PDD consultant (sometimes in-house)
- Validators (Designated Operational Entity - DOE)
- Designated National Authorities (DNA)
- CDM Executive Board (EB)
- CDM Methodology Panel
- Other consultants
- NGOs and interested public (local, international)
- CDM credit buyers
- Annex I and Non-Annex I Countries

Registered projects by host party

Registered project activities by host party. Total: 4,008



State wise CDM projects of India





Thank You