Structuring a CDM project

What is CDM?

The Clear Development Mechanism (CDM) is one of the three flexible mechanisms defined in the Kyoto Protocol which aims to reduce emissions of greenhouse gases (GHGs). Article 12 of the Kyoto Protocol establishes the CDM, and defines its purpose as being:

\textit{to assist Parties not included in Annex I [to the UNFCCC] in achieving sustainable development and in contributing to the ultimate objective of the Convention, and to assist Parties included in Annex I in achieving compliance with their quantified emission limitation and reduction commitments under Article 3 [of the Kyoto Protocol].} ("Annex I" parties are those countries that are listed in Annex I of the treaty, and are the industrialized countries. Non-Annex I parties are developing countries.)

The CDM is supervised by the Executive Board and mutually beneficial to developing countries and also developed countries. As the cost of manpower resources and materials and other fees is much lower than in their own country, developed countries can invest in CDM projects in developing countries to earn certified emission reduction (CER) credits much cheaper. These CERs can be used by developed countries to meet a part of their emission reduction commitments under the Kyoto Protocol. For developing countries, the CDM can attract capital for projects to get through some barriers and also provide a tool for technology transfer.

CDM Project Activity Cycle

Most of the activities in the CDM Project Cycle are the same as those for any other investment project. However, there are unique steps to generate emission credits such as baseline setting, validation, registration, monitoring and verification/certification of emissions reduction. This section will explain the entities/organizations involved with these steps and also timeline of a CDM Project Cycle.

Entities/organizations involved:

\textbf{Project Participants (PP)}: are Parties to the Kyoto Protocol or a private and/or public entity authorized by a Party to participate in CDM projects under the Party’s responsibility. The decision on the distribution of CERs from a CDM project activity shall exclusively be taken by project participants. To be brief, Project Participants include: the Project Owner and the CER Buyer.
CDM Consultancy: Mainly assist Project Owner to conduct the CDM related services. Their work may include: identifying potential CDM projects, preparing the Project Idea Notes (PIN), screening CERs buyers and analyzing quotations, assist in negotiation with CERs buyer and facilitating ERPA (Emissions Reduction Purchase Agreement) signing, developing PDD or new methodology if necessary, Applying LoAs from the DNA, coordinating with DOE for validation, assisting registration procedure, preparing Monitoring Report and coordinating with verification/certification to secure CERs and carbon income.

DNA: Designated National Authorities: To participate in CDM, a host country must establish a Designated National Authority, which will have the responsibility to decide whether the project activity makes a contribution to achieving the country’s sustainable development goal and whether the country agrees to participate in the project. The DNA issues the Letter of Approval (LoA) needed for registration of a project. A project will need both a host country approval and an approval from Anne-I country DNA that the Buyer has selected.

DOE: Designated Operational Entities: A domestic legal entity or an international organization accredited and designated by the CDM EB. The DOE validates and requests registration of a proposed CDM projects activity as well as verifies emission reductions of a registered CDM project activity. These operational entities will typically be private companies such as auditing and accounting firms, consulting companies and law firms capable of conducting credible and independent assessment of emission reductions. If validated, the operational entities will forward it to the Executive Board for formal registration.

EB: the Executive Board: The EB accredits independent organizations-known as operational entities-that validate proposed CDM projects, verify the resulting emission reductions, and certify those emission reductions as CERs. The EB approves new CDM methodologies submitted by stakeholders. Another key task of the EB is the maintenance of a CDM registry, which will issue new CERs, manage an account for CERs levied for adaptation and administration expenses, and maintain a CER account for each non-Annex I Party hosting a CDM project.

CDM Project Cycle includes:

The Clean Development Mechanism defines a series of steps necessary to develop certified emissions reductions (CERs), which has been illustrated on below chart. Each step is presented in detail on Steps of Implementation.
Timeline of a CDM Project

Usually, it may take several months to nearly two years to complete the CDM project cycle (as described on the table below). The process of making project feasibility assessment, developing project note idea (PIN) and project design document (PDD), obtaining LoA from DNA and validation by DOE will take six to twelve months. The process of project registration will take about four months. If every step goes well before, we go into the last step of project verification and CER issuance.
Steps of Implementation

To be specific, we divide the CDM project cycle into nine steps:

Step 1: Identification of project and Commercial Negotiation-PPs.

i) CDM projects must result in real and measurable climate change benefits and should be additional to any that occur in the absence of the project activity;

ii) Developing Project Idea Note: a short project description on the basic details of the project. There exist no official PIN format but several different PIN templates exist;

iii) Screening potential CERs buyers.

In order to get a CDM project approved and registered by the Executive Board, the Project Participants must prepare a PDD following the detailed outline shown on the CDM website of the UNFCCC Secretariat. The standard PDD format is available at www.unfccc.int/cdm. The PDD will have a critical influence on all the steps. A careful and complete compilation and formulation of the PDD will give a higher chance of the eventual success of the whole project.

Step 3: Letter of Approvals (LoAs)-DNA.
One purpose of the CDM is to assist developing countries in achieving sustainable development. The developing countries are responsible for screening the projects and deciding whether a project meets that requirement. The host country should therefore develop national criteria and requirements to ensure a coherent, justifiable and transparent assessment. It is important that these criteria are in agreement with national development priorities. The DNA issues the Letter of Approval (LoA) needed for registration of a project. A project will need both a host country approval as well as investor country approval.

Step 4: Validation-DOE (Designed Operational Entity).

- Parties in the project have ratified the Kyoto Protocol
- The PDD has been publicly available, comments have been invited from local stakeholders for a period of 30 days, a summary of the comments provided with a report on how due account was taken of any comments
- Project owners have submitted to the DOE the analysis of the environmental impact of the project and, if the impacts are considered significant, have undertaken an environmental impact assessment following the procedures of the host country.
- The project activity is expected to result in a GHG emission reduction which is additional
The baseline and monitoring methodologies are among those already approved by the EB, or a new methodology that has followed the Modalities and Procedures for establishing a new methodology.

After a series of process of validation, if the project is in conformity with the principles of Kyoto Protocol, the DOE will submit the project activity to EB for registration.

Step 5: Registration-CDM EB.

There also contains several procedures in step of registration. After submitting a request for registration by DOE, the involved documents will be posted on the EB website to receive the public comments. After posting period is over, when Project Owner responds all comments raised by EB and the project is also satisfied for registration, this project will be registered as a CDM project with EB successfully. If the request for registration is rejected, this process would have been going all over again.

Step 6: Implementation and Monitoring.
The Project Owner cannot acquire emission value in the international carbon market unless submitted to a verification process designed specifically to measure and audit the carbon credits. Therefore, once the project is operational, Project Participants should prepare a transparent, reliable and relevant monitoring report, including an estimate of CERs generated and submit it for verification to a DOE.

Step 7: Verification and Certification.
Verification is the periodic independent review and ex-post determination by the DOE of the monitored reductions in anthropogenic emissions by sources of GHGs that have occurred as a result of a registered CDM projects activity during the verification period. It will include the periodic auditing of monitoring results, the assessment of achieved emission reductions and the assessment of the project’s continued conformance with monitoring plan. The DOE must make sure that the CERs have resulted according to the guidelines and conditions agreed upon in the initial validation of the project. Following a detailed review, DOE will produce a verification report and then certify the amount of CERs generated by the CDM project.

Step 8: Issuance of CERs.

First of all, DOE shall submit the request for issuance of CERs only after it verifies the monitoring report and certifies the quantity CERs claimed in the monitoring report, by following and meeting the requirements prescribed in the latest version of the Clean Development Mechanism Validation and Verification Manual and other CDM requirements. Then DOE shall submit the required documents listed in latest applicable version of the completeness checklist for requests for issuance, which the secretariat will make publicly available by publishing it on the UNFCCC CDM website. The DOE shall submit the required documents using the electronic, internet-based, submission tool provided by the secretariat to the DOE.

After DOE submits all the required documents, the secretariat shall maintain a publicly available list of all submitted requests for issuance. Upon commencement of the processing of the request for issuance the secretariat will conduct within 7 calendar days a completeness check and 23 calendar
days an information and reporting check to determine whether the request for issuance is complete in accordance with latest applicable version of the completeness checklist for requests for issuance.

After the request for issuance has been received by the Executive Board for consideration of issuance; the secretariat has published the request for issuance; and, the last date by which members of the Executive Board or a Party involved may request a review of request for issuance, which shall be 28 calendar days after the date of publication of the request for issuance.

Step 9: Distribution of CERs.

The main account in the CDM registry is known as the “Pending account”. This is the account where CERs issued upon instruction by the EB and therefore contains all those units that have been issued and not yet forwarded to the holding accounts of project participants.

Decision 3 CMP/2005/8/Add.1 (paragraph 66) states that upon being instructed by the Executive Board to issue CERs for a CDM project activity, the CDM registry administrator, working under the authority of the Executive Board, shall, promptly, issue the specified quantity of CERs into the pending account of the Executive Board in the CDM registry, in accordance with Appendix D.

There is no specific time limit for CERs to remain in the Pending Account of the CDM registry and they are forwarded to the holding account of project participants in accordance with the modalities of communication in place at
the time of the request. (See section How to forward CERs to a holding account of a project participant). Project participants should ensure the Share of Proceeds for administrative expenses (SOP Admin) has been paid in full in order to be able to request the forwarding of CERs.