

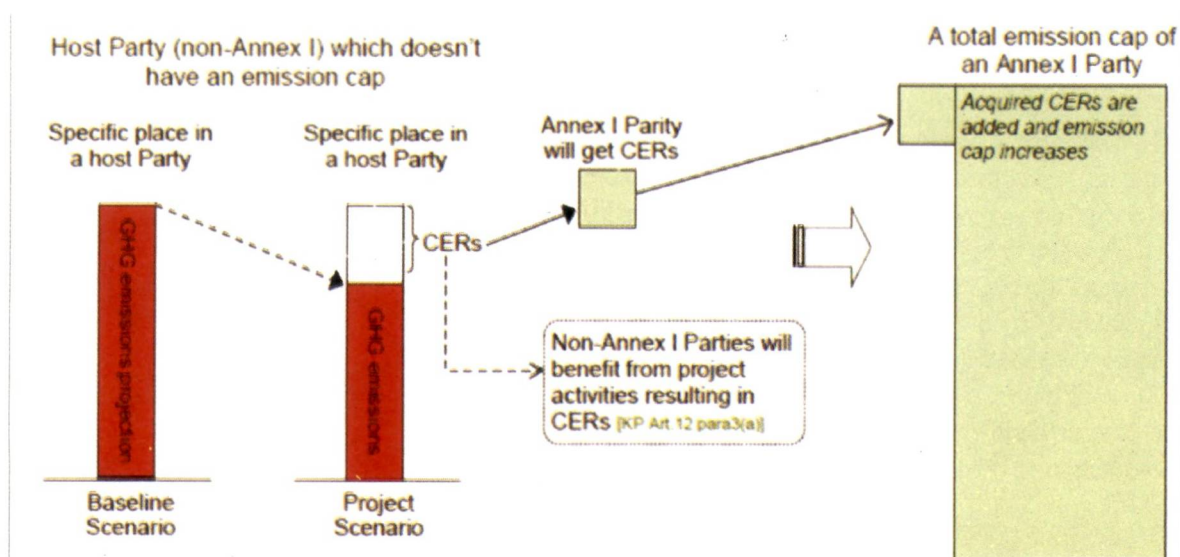
Clean Development Mechanism (CDM)

What is the CDM

The Clean Development Mechanism (CDM) was introduced as a market mechanism under the provisions of Article 12 of the **Kyoto Protocol (KP)** which is linked to the **United Nations Framework Convention on Climate Change (UNFCCC)**. It is a mean of providing flexibility for the developed countries in meeting their Green House Gas (GHG) reduction commitments set under the Kyoto Protocol. Developed countries may earn credits known as **Certified Emissions Reductions (CER)** from CDM projects implemented in developing countries which do not have any commitments to reduce green house gases. One CER is equal to 1 metric tons of carbon dioxide (CO₂) equivalent. Since the Green House potential of other green house gases are measured as a proportion of the green house gas potential of carbon dioxide, the unit of CER is used as tons of carbon dioxide equivalent (CO_{2eq}).

According to the provisions of the Kyoto Protocol, the purpose of the CDM is to assist developed countries (Annex 1 parties) to accomplish their emission reduction targets (see figure 1) and to achieve sustainable development in developing countries (Non annex 1 parties). Accordingly the non annex 1 parties can implement projects which may reduce green house gas emissions within the territory of Non annex 1 parties. However the Emission reductions from CDM projects must result in “real, measurable and long-term benefits” and should be implement with the approval of the host country. In order to qualify for CER under CDM, such projects must reduce GHG emissions below those that would have occurred in the absence of the CDM project activity. This is called as additionality of the CDM project.

Figure 1: Outline of CDM



Administration of CDM

The **Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (CMP)** is the ultimate decision-making body for any activity related to CDM. CMP has the authority to provide guidance over the **Executive Board (EB)** which supervises the matters relating to CDM through the adoption of decisions and resolutions. They set directions and establish precedents which serve as reference for future decision making and basis for operating procedures. CMP decisions are treated as directives – mandatory requirements or rules intended to ensure the successful implementation of the Kyoto Protocol (KP). All decisions taken by the EB are consistent with the decisions and guidance of the CMP which is the ultimate decision maker. Decisions of an operational nature and decisions of a regulatory nature are generally taken by the EB and rulings relating to the observance of the modalities and procedures of projects are also dealt with the EB.

The process of CDM

Those Project participants who wish to start a CDM project has to obtain the consent of the host country submitting the **Project Identification Note (PIN)** to the **Designated National Authority (DNA)** of the country. UNFCCC has already approved DNAs in most of its member countries. The project proponents who have planned to start their projects after December 2008 has to submit the prior consideration form to the EB and to the DNA of the country as well. The most important and mandatory document that has to be made for any CDM project is **Project Designed Document (PDD)** which reflect the entire cross cuttings in the project duration. Probably the project proponents have to seek assistance of the CDM consultants to develop a PDD. The set of documents including the PDD has to be submitted to an agency called **Designated Operational Entity (DOE)** which is also appointed by the EB considering the reliability and the technical capacity of the DOE. The main role of the DOE is to validate the projects received by it and to ensure the completeness of the documentation before submission the documents to the EB. At the same time the project proponent has to obtain the host country approval from the relevant DNA. The EB consider the documents received from the DOE and take decisions to register, provide guidance, and publish for public comments or to reject them. Once a project is registered the EB appointed another DOE for verification of the implementation while the project proponent undertakes the monitoring as per the agreed monitoring plan. At the end of monitoring period, the project proponent would be entitled to receive the benefits of CER subject to the deviations identified during the monitoring period.

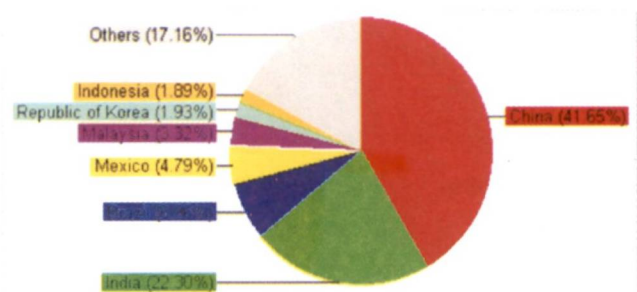
CDM Statistics

2588 projects have been registered around the world as at 09.12.2010 from the date of introduction of CDM, (table 1). China is the leading host party for CDM activities registered claiming 41.65% CERs and India is behind China claiming 22.30% CERs among the projects registered up to 09.12.2010 (Chart 1).

Table 1 : Status of CDM projects as at 09.12.2010

| Status of CDM projects | Number |
|---|-------------|
| At validation | 2828 |
| Request for registration | 158 |
| Request for review | 88 |
| Correction requested | 29 |
| Under review | 0 |
| Total in the process of registration | 275 |
| Withdrawn | 52 |
| Rejected by EB | 180 |
| Validation negative by DOE | 165 |
| Validation terminated by DOE | 799 |
| Registered, no issuance of CERs | 1771 |
| Registered. CER issued | 817 |
| Total registered | 2588 |
| Total number of projects (incl. rejected & withdrawn) | 6857 |

Chart 1: Registered project activities by host party. Total 2588 as at 09.12.2010



CDM in the context of Sri Lanka

The potential for CDM projects mostly depends on the geographical resources available in the country. For an instance the potential for renewable energy which may have direct relationship with CDM mostly depend on the extent of geographical area of the country. Therefore the countries like China, India and Brazil have become leading countries to obtain the benefits of CDM. On the other hand the eligible countries (Non annex I countries) which are more polluted have also more potential for CDM since they may have more opportunities to reduce GHGs below the limit of baseline emission. Countries like Sri Lanka emit very little amount of GHGs compared to the global emissions and thereby the potential for reducing of GHGs obviously become a less. However we burn considerable amount of fossil fuel for energy requirements of the country and we may have

opportunities to reduce our emissions by avoiding the use of fossil fuel. The only alternative for fossil fuel is the renewable energy which may have not yet been harnessed for the consumption. CDM is the solution for filling the gap between the initial cost and the profit margins of the prospective projects. Up to now Sri Lanka have been able to register only 7 CDM projects and another 14 projects are waiting at the validation stage. Energy efficiency projects are also viable in Sri Lanka as the energy utilized in industries seems to have potential for CDM via technology transfer or fuel switch programs. Forestry is another option for Sri Lanka to sequester CO₂ since more possible bare lands could be found in the remote areas of the country.

Issues associated with CDM

Within the present regulatory framework, nobody can guarantee whether a CDM project submitted for the approval of the EB will be registered on submission or whether CERs would be issued as estimated. This may lead project proponents and investors to prevent undertaking some projects that are not financially viable without the CDM. However the EB and CMP have taken some measures to standardize the registration process as far as possible so that the confidence of the project proponents are increased.

Most CDM stakeholders, communities, companies and farmers that could benefit from CDM are not knowledgeable on CDM program including its demand, market trends, prices, and rules for project formulation, project development process and mode of operation. Therefore the Ministry of environment as the DNA has a prominent role to raise the awareness and promotion among the CDM stakeholders to maximize the benefits of CDM.

Lack of financing mechanism for CDM project development, feasibility studies and the provision of equity capital are seen as barriers for CDM project development in Sri Lanka. However the recent CMP has adopted to introduce a long scheme for the countries which has registered less than 10 CDM projects so far.

Except few, the Technical capacity among the stakeholders in Sri Lanka for CDM project development is still behind the level of other non annex 1 parties. Though the technology transfer is one major objective of CDM, still Sri Lanka has not benefited with appropriate technologies from the developed countries.

Other than all above, the first commitment period of the Kyoto protocol will expire from 2012. All CDM projects that may have the possibility of extending its registration associate with the risk of uncertainty in receiving its benefits for emission reduction.

Future of CDM

The first commitment period of the Kyoto protocol will expire from 2012. Accordingly the market mechanisms like CDM and Joint Implementation (JI) introduced under the Kyoto protocol will also no longer exist from 2012. Therefore the CDM projects started now cannot be guaranteed to be registered at the EB particularly due to the time taken for the registration process. However certain buyers like European Union for Emission Trading Scheme (EUETS), Asian Development Bank (ADB) and Japanese government has committed to purchase CER generated through CDM would be bought even after the first commitment period of the Kyoto Protocol. Further the emission caps imposed for the annex 1 countries by the Kyoto protocol could be expected to continue even without the KP. Until the emission caps for developed countries will remain in the world, the market mechanism for emission trading will also exist. CMP gathered in Cancun from 1st to 10th December 2010 too has decided to strengthen the regional distribution of CDM and also has introduced a loan scheme for the countries which has registered less than 10 CDM projects so far. Accordingly the countries like Sri Lanka may make more efforts to harness the CDM potentials accumulated around the country supporting the global community to mitigate the adverse effects of climate change in future.

