

Government is also exploring opportunities of announcing Nationally Appropriate Mitigation Activities (NAMAs). In CoP17 held in Bali (2007), the NAMA concept was evolved, wherein it was decided to fund the government programs of developing countries through carbon financing. In 2012, the concept was ratified by the nations. Funding options have been established for NAMA Support and NAMA Implementation programs. UK-German NAMA Facility (this year budget is US \$ 83 million) and Green Climate Fund (this year budget is US \$ 10.2 billion) are the two main funding facilities. Proposals are sought on competitive basis. AEDB has so far drafted 4 projects of worth US \$ 65 million and got registered with NAMA facility. These projects are shared with respective technical organizations (CCAP, GIZ, UNESCAP/UNHABITAT, UNDP) for further development.

Status of NAMA Support Projects				
Sr. No.	Name & Description	Grant Sought (Euro Million)	Implementation Period (Years)	Status
1	Strategizing for Grid Strengthening / Improvement for evacuation of power from Wind Power Projects	14.27	3	Submitted to UK-German NAMA Facility to consider for financing. Uploaded on UNFCCC Registry
2	Strategizing for Grid Strengthening / Improvement for evacuation of power from Solar Power Projects	14.27	3	Submitted to UK-German NAMA Facility to consider for financing. Uploaded on UNFCCC Registry
3	Supporting Mechanisms for Promoting Distributed Generation	14.56	3	Submitted to UK-German NAMA Facility

	(Net Metering, Wheeling, Banking etc.) in Pakistan to put 3 GW Alternative and Renewable Energy (ARE) Projects in next 7 years			to consider for financing. Uploaded on UNFCCC Registry
4	Harnessing Municipal Waste of big Cities of Pakistan to Generate Electricity	20.00	3	Submitted to UK-German NAMA Facility to consider for financing. Uploaded on UNFCCC Registry

Three more NAMA support projects and three NAMA implementation projects are in process of development.

1. Promotion, Dissemination and Deployment of Solar Water Pumps in Pakistan through effective financing mechanisms to reduce dependency on diesel operated water pumps
2. Social Uplift of dwellers of remote / far flung areas by giving access to alternative and renewable energy lighting solutions
3. Develop effective mechanisms for harnessing micro and mini hydro potential to meet energy needs of SMEs and Communities

Matter is taken up with Climate Change Division (DNA/NDA) for streamlining the process, and engaging the Accredited National Implementing Entity (ANIE). Preliminary discussions under way to consider RE programs/projects of Pakistan as Intended Nationally Determined Contributions (INDCs) in emission reductions

Who is Who in a Carbon Offset Project

Several institutions are charged with the design of the mechanism, since the legal regulations of Kyoto Protocol and Climate Convention alone cannot define a complex carbon offsetting mechanisms. Each institution executes its functions at different steps of the project cycle.

COP/MOP

Conferences of the Parties (CoP) to UNFCCC along with Meetings of the Parties (MoP) to the Kyoto Protocol have authority over the CDM and interpret its principles in their annual meetings. Entrusted with the selection and approval process, they make further decisions on rules, define details and formulate technical explanations, whereas the Executive Board is responsible for

supervision of the CDM. CoPs/MoPs provide approval to the guidance of EB by deciding on:

- a. Recommendations made by the EB on its rules and procedures
- b. Recommendations made by the EB in accordance with provisions of decision 17/CP.7, annex and relevant decisions of the CoP/MoP
- c. The designation of Operational Entities accredited by the EB

CoPs and MoPs further review the regional and sub- regional distribution of DOEs, take decisions to promote accreditation of DOEs from developing countries, review the regional and sub- regional distribution of CDM projects with a view to identify systematic or systemic barriers to their equitable distribution and takes decisions, based on a report by EB.

CDM Executive Board

CDM Executive Board is the supervisory body of the mechanism as set out in Article 12(4) of the Kyoto Protocol. EB develops the CDM rules and procedures. However, outcome of EB meetings should be regarded merely as guidance.

EB is mainly responsible for developing guidelines that provide project participants with necessary information for preparing project documents. These guidelines

- elaborate the CDM's rules
- promote consistency, transparency and predictability
- ensure that reductions in emissions are real and measurable
- ensure that reductions are an accurate reflection of reality
- ensure applicability of baselines in different geographical regions and to different eligible project categories
- address additionality requirements
- Executive Board also gives specific guidance in the following areas:
 - definition of project categories that show common methodological characteristics for baseline setting
 - setting accurate baseline methodologies
 - methodological tools to ensure that the most appropriate methodologies are selected
 - standardization of methodologies to allow a reasonable estimation of what would have occurred in absence of the project activity
 - determination of project boundaries
 - consideration of national policies circumstances
 - the scope of the baseline

EB further accredits DOEs- the entities who actually validate eligibility of and verify the emission reduction performance of CDM projects- reviews their validation,

verification and certification reports, registers CDM projects and issues CERs. Once a DOE submits validation report to EB for registration, the latter registers the project against an administrative fee in case no objections arise within eight weeks.

Designated National Authorities (DNA)

According to CDM national eligibility criteria a developing country can function as location for CDM projects if it fulfils three requirements:

1. System for estimation of anthropogenic emissions by sources and removals by sinks of all GHGs is established and GHG inventory is submitted to UNFCCC
2. Government has ratified the Kyoto Protocol
3. Government has designated a national authority (DNA) for the CDM

Pakistan has prepared its national GHG inventory by using IPCC-recommended methodologies and submitted it to UNFCCC as part of its National Communication on Climate Change. The 2nd GHG inventory was to cover the year 2008. Pakistan has further ratified the Kyoto Protocol in 2005, declared its Designated National Authority (DNA) and consequently became eligible to benefit from the CDM. Pakistan initially established DNA under Ministry of Environment in 2005 and however, due to 18th Amendment in the Constitution of Pakistan, the DNA was shifted to Climate Change Division in 2011. The DNA is designated to manage the CDM process in Pakistan in line with national sustainable development goals. The Pakistani DNA is guided by the Prime Minister's Committee on Climate Change and consists of the National CDM Steering Committee, Technical Committees and the CDM Secretariat. A CDM facilitation office (CDM cell) was established and is directly attached to a CDM Secretariat. Director General (Climate Change) & DNA (Focal Person - Pakistan) of CCD issues letter of Host Country Approval, considering PDD together with evaluation matrix form along with a covering letter by requesting grant of host country approval, public consultation report and environmental impact assessment report, or if not required, letter of no objection/endorsement from the concerned authorities.

Third Party Auditors Validators and Verifiers

The CDM and many of the voluntary offset standards require a third-party auditor to validate and verify a project's climate saving potential and achieved emission reductions. Under CDM the auditors are called Designated Operational Entities (DOEs). To minimize conflict of interest, the validating DOE cannot also conduct project verification.

After its submission and approval through DNA of Pakistan, PDDs are validated by the DOE. If the DOE considers the PDD to meet the requirements, it makes the validation report available on the UNFCCC website for public review and comments within 30 days. The DOE then submits the documents to the EB for registration. Monitored emission reduction will also be registered and later

verified by the DOE. On the basis of its verification report, the entity finally certifies the amount of emission reductions achieved through the CDM project activity. Strong institutional structures ought to provide stringent concepts to smoothly realize the three goals of the carbon offsetting mechanisms: local sustainable development of the host country, emission reduction to contribute to the overall objective of the Climate Convention and assistance to Annex- I countries in achieving their emission reduction targets in a cost- effective manner. Designing, implementing and operating a carbon offset project requires the involvement of a large number of parties, stakeholders and authorities. The parties involved differ from project to project.

Joint Management Committee

This is a legalized institutional arrangement established in pursuant to the Section 8.3.3. of the RE Policy comprising of power producers (Project Proponents), power purchasers (CPPA/NTDC) and AEDB to jointly manage and sell the CERs thus obtained in the international carbon market at an optimum price. The CPPA has allowed the Project proponents to hire requisite consultancy services for registering the projects with respective standards and engaging the purchasers of the carbon credits. The Project proponents are required to take the JMC members in loop while making transaction and take consent of CPPA (being beneficiary of carbon credits proceeds) in selling the carbon credits in the international carbon market.

Road to Host County Approval: Factsheet Pakistan

STEP AT CDM PROJECT-CYCLE	RESPONSIBLE ENTITY	FUNCTION IN DETAIL	REMARKS	CONTACT PERSON
Methodologies and initial assessment	Project Proponent	Project development	Relevant methodologies can be downloaded from www.unfccc.int	
Project Idea Note	Project Proponent	Marketing document		Irfan Yousuf Director (CDM) AEDB
Project Design Documents	Project Proponent	Project Proponent together	List of CDM consultants is	Irfan Yousuf Director (CDM)

as technical document		with consultant fills CDM methodology of the UNFCCC	available at www.aedb.org	AEDB
EIA/IEE	EPA	Environmental Approvals prior to Host county Approval	Each province has its own Environmental Protection Departments responsible for issuing approvals for EIA/IEE	Director Generals of respective provincial Environmental Protection Departments.
Host County Approval	DNA	Issuance of letter of Host County Approval		Mr.Sajjad Ahmed DG (CC) & DNA, Climate Change Division
Consent / Approval for Carbon Credits selling and managing	JMC	Sale carbon credits and revenues earned and manages the proceeds as per RE Policy.		Mr.Mansoor A. Khan, Chief Engineer-II (Procurement), CPPA, Mr.Amjad AliAwab, CEO, AEDB Irfan Yousuf Director (CDM) AEDB

