

Carbon Trade and Clean Development Mechanism Projects - An Emerging Market in Nigeria

Background

The concentration of green house gases (including carbon dioxide, methane and hydrofluro carbon) in the atmosphere has risen dramatically over the past few years leading to an out of balance green house effect which most scientists believe will continue to cause increased warming of the earth's climatic conditions. This prognosis has been a source of concern to many governments around the globe and in response to this environmental threat; governments have started putting in place precautionary measures to curb the problem of global warming.

One of the most significant measures so far undertaken to combat the issue of global warming is the establishment of the Kyoto Protocol by the United Nations Framework Convention for Climate Change (UNFCCC). Over 150 countries (Nigeria inclusive) have become signatories to the protocol, which mandates developed signatory countries (Annex 1 countries) to reduce their level of greenhouse emissions, over the period of 2008-2012, or face penalties.

Carbon Trading Under the Kyoto Protocol

One of the aims of the Kyoto Protocol is to create economic incentives for compliance with the provisions of the Protocol. Under the terms of the Protocol, when the equivalent of one metric tone of carbon dioxide or other greenhouse gases is prevented from entering the atmosphere during a production process, carbon credits in the form of certificates are issued. These acquired carbon credit certificates may thereafter be traded at the global carbon market which is similar to the Stock Exchange.

To help signatory countries achieve emission reductions and gain carbon credits at lower costs, the Protocol established three flexible market mechanisms namely: The International Emissions Trading (IET), The Joint Implementation (JI), and The Clean Development Mechanism (CDM).

The International Emissions Trading (IET) - Under this mechanism, developed signatory countries with surplus credits sell these credits to other developed signatory countries with quantified emission reduction commitments in the international carbon credit market.

The Joint Implementation Mechanism (JI) - Here a developed signatory country with relatively high costs of domestic greenhouse reduction can set up a project in another developed signatory country that has relatively low cost such that the greenhouse emission of the project is credited to the country that has a surplus.

The Clean Development Mechanism (CDM) - This mechanism allows for the implementation of GHG emission reduction projects in developing signatory countries. Developed signatory countries with emission reduction commitments may invest in these emission reducing projects and claim some of the Certified Emission Reduction CER (Carbon Credits derived from CDM) as an alternative to what is generally considered more costly emission reductions in their own countries. Interestingly, project proponents can also trade their CERs in the global Carbon Market, using Over The Counter (OTC) brokers.

Features of CDM

As stated above, the CDM generates carbon credits from the investment in emission reducing projects. The main participants

in the CDM include:

Project Proponent (PP) - this is the company/institution developing the CDM Project.

The CDM Executive Board (CDM-EB). The CDM is registered and supervised by the CDM-EB. The CDM EB oversees the operation of the CDM process, approves baselines methodologies and issue carbon credits.

Designated Operational Entities (DOEs). The DOEs are independent consultants, accredited by the CDM EB. The DOEs validate proposed CDM projects, verify the resulting emission reductions, and certify those emission reductions as CERs.

Designated National Authority (DNA) . The host country national authority empowered to issue relevant host country approvals and to manage the local regulatory aspects of the CDM. The approval from the host country DNA is required in order to register a project with the CDM EB.

How does CDM Work?

CDM Projects are developed by the participants through the following steps:

Identification of the CDM project and execution of a preliminary feasibility study by the Project Participant; Preparation of the CDM Project Design Document (PDD) also by the project proponent, and the PDD must contain the following information:

- i). The General Description of the project activity,
- ii). The baseline methodology
- iii). Duration of the project activity
- iv). Monitoring methodology and plan
- v). Calculations of Green house gasses emissions by sources
- vi). Environmental impacts
- vii). Stakeholders' comments

Getting approval from the Host country's Designated National Authority (DNA); Validating the PDD with the DOE and registering the CDM project with the CDM EB; Monitoring the CDM project activities using the monitoring protocol included in the validated PDD;

The Clean Development Mechanism in Nigeria

Nigeria being a developing country and a signatory to the protocol has a high potential for gaining Carbon Credits through the implementation of CDM projects, as the nation has a vast reserve of fossil fuel, oil and gas and solid minerals.

In a recent World Bank study, over 750 CDM project opportunities were identified in Nigeria. It was concluded that if all these CDM projects were implemented, slightly over a 100 million tones of Carbon Emission Reductions can be generated annually in Nigeria.

Some CDM activities in Nigeria that have already been developed and registered with the CDM EB include:

- The Kwale Recovery of associated gas Project

- The Ovale Ogharefe Gas Capture and processing Project

- The Afam Project

For details on these projects, please visit www.cdm.unfccc.int/project

Other potential emission reduction opportunities in Nigeria include:

Use of gas for electricity generation; Utilization of agricultural residues for electricity generation; Generation of biogas from wastes generated from livestock and animal husbandry sub-sector; Energy Efficient Lighting; Utilization of Compressed Natural Gas (CNG) as a Transport Fuel; Utilization of Bio-fuels as Transport Fuel; More efficient passive and full utilization of solar technologies in the residential, commercial and industrial sectors; Biogas from Waste as a source of cooking fuel in homes; Use of solar and wind energy for irrigation water pumping and farm electricity supply.

Regulatory Framework for CDM in Nigeria

In compliance with the requirement of the Protocol that all signatory countries have a Designated National Authority (DNA) for CDM activities, the Presidential Implementation Committee for CDM (PICCDM) has been established under the auspices of the Federal Ministry of Environment, as the DNA for CDM activities in Nigeria. The PICCDM regulates CDM activities in Nigeria, and its functions include:

promoting CDM projects in Nigeria; providing clear and flexible procedures for review and approval of CDM projects; having in place documentation and communication portals that provide clear information to project proponents and investors (i.e., both buyers of CERs and/or financiers of the project) on the necessary steps to have an approved CDM project in Nigeria; providing clear guidance on national sustainability criteria that should be taken into consideration in developing CDM projects; keeping a

register of CDM projects in the pipeline in the country; approving and issuing letters of approval on prospective CDM projects in Nigeria in line with the national sustainable development criteria.

The PICCDM as the Nigerian DNA is active, and is working hard to put all CDM related activities in place in Nigeria.

Challenges

Despite its immense potentials, the development of CDM activities in Nigeria faces the following challenges which include:

The complex procedure for receiving CDM approvals, which make CDM project implementation, time consuming. The absence of readily usable sustainable development criteria for CDM project proponents to consider while preparing their project development documents. Non availability of DOEs' in Nigeria due in part to security issues in the Niger Delta which houses most CDM Projects. The general uncertainty as to what happens to Carbon Credits after 2012, as commitments made under the Kyoto Protocol should expire in 2012.

Conclusion

With the advent of the Carbon Credit Trade, global warming is today being gradually transformed from a threat of environmental doom to a promise of financial boom. Market analysts estimate that by the end of 2010, the global carbon market will be worth \$170 billion. The prospects are bright, and Nigeria has a lot to offer in this regard.

Toolbox



[Print](#)



[PDF](#)



[Recommend this page to a friend](#)



[RSS Feed](#)

Published

04:46:18 17.05.2010

<http://www.detailsolicitors.com/index.php?section=news&cmd=details&newsid=19&pdfview=1>