

The EVI Newsletter

Volume 2, Issue 1

January 15

Carbon Advisory Business

CDM Snapshot 2008

A snapshot of the Clean Development Mechanism (CDM) shows that around 4500 projects are in various phases of the pipeline. Leading sector undoubtedly is the renewable with largest percentage of hydro projects followed by biomass and wind power. However, the CDM is also now triggering interest other forms such as solar, geothermal and tidal. But sectors such as forestry, transportation, carbon capture etc. still needs to overcome hurdles and streamline the registration process.

Another new development has been on the programmatic front with a total of 14 programmes in the validation stage. In a programme a large number of small projects can be taken up in different geographies and time such that they are more attractive to investors and bet-

ter in terms of economies of scale.

Host countries with largest share of registered CDM projects are India (29%), China (28%), Brazil (11%), Mexico (8%) followed by others. In India Maharashtra followed by Tamil Nadu and Karnataka have the largest share of projects in the pipeline. If we see the projects in the pipeline china would soon overcome India in terms of the number of projects given China is already the leader in terms of the volumes of CERs.

On the execution of CDM many changes took place especially developing validation and verification manual to add clarity to project design and vetting. Also, further guidance are to be prepared on Investment analysis and IRR calculations in determining additionality, Project starting date and evidence

required to support claims that the CDM was considered in the decision to proceed with projects. By the year end there are now 85 approved large scale methodologies (AM, AR-AM), 46 approved small scale methodologies (AMS, AR-AMS) and 19 approved consolidate methodologies (ACM).

The suspension of a major DOE surprised everybody and put the message straight that EB has now become very stringent. However, a pleasing for project developers was that they may now have the right to appeal to the CDM Executive Board (CDM EB) for project activity being refused registration or a requested quantity of certified emission reductions not being issued. Hope the coming year bring lot many pleasing surprises !

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Indian DNA gives Sustainable Development a Priority

The National CDM Authority (Ministry of Environment and Forests, GOI) has in its circular issued this December stated that for large scale CDM projects, the project proponent must ensure that a certain percentage of the CERs revenue every year is committed for sustainable development including society and community development.

All projects that have an output capacity of more than 15 MW or have reduced energy consumption of more than 60 GWh per year or result in emission reductions of more than 60 Kt CO₂ equivalents annually are treated as large scale projects. While no percentage has been fixed, the share is subject to a

minimum of 2%.

The project proponent and developers are accordingly supposed to make a Sustainability Action Plan for the same to be included in the PCN & PDD. The DNA would soon come out with detailed guidelines for sustainability action plan. However, the guidelines would definitely encourage development in the local region which is real, measurable and verifiable.

It is seen as a positive step to strengthen India's international stand of common but differentiated responsibility. Countries like China already had provisions for the sharing of CERs sales revenue which can be further utilized for sustainable de-

velopment however, the Indian efforts are first of its kind and aim to mobilize localized development. But its too early to predict the reaction of project proponents and to establish how the projects would be feasible if they have to share such percentage. And how the Indian government actually implements this is also yet to be seen.

Tidal Energy– The new Wave

India has great potential to generate power from renewable energy sources. Out of the overall target of around 93,000 mw power generation installed capacity addition during the 11th Plan, 14,500 mw (15%) is proposed from renewable. To achieve this goal India is determined to harness the potential of tidal energy. The country's first tidal power generation project is coming up in the state of West Bengal. It is a 3.75 MW capacity technology demonstration project and will span over an area of 4.5 km. The cost of the project is Rs 48 Crore with support for GOI and Government of West Bengal spanning a time period of 36 months. A similar project in South Korea is the first tidal energy project to be registered under the CDM. Given India is surrounded by sea on three sides it has huge potential to harness tidal energy. But the concern is availability of established technology and confidence of the project developers. Hope the Demonstration project and other policies would be able to achieve that.

EVI News



The FE-EVI Green Business Survey 2008 was released on December 19 by Dr. R.K Pachauri. Releasing the first ever survey of corporate India's environment consciousness he said "If we want to succeed economically, we have to move towards low carbon emitting technologies" and acknowledged the pioneering survey. These comments were followed by an exciting panel discussion among the CEOs of some of India's leading companies across sectors. The discussion was centered around whether there was a need for creation of more regulations for industry and take a top down approach or to make it a bottom up approach where pressure from investor community on the industries will drive green technology. Also, the panel appreciated the present report and suggested more such studies to encourage corporate India.

Sector Check– Urban Transportation

The transport sector accounts for a large share of global greenhouse gas emissions and this share is expected to grow over the coming decades. Few interventions that are being considered by the policy makers within the transportation sector which can reduce emissions in general are:

a) Behavioral shift encouraging change in mode of transportation from inefficient private or public transportation systems to more efficient mass or public transportation systems. However, for such a behavioral change world class infrastructure is indispensable. This is one of biggest challenges in front of the governments of the developing country. Many approaches like imposing congestion tax, tax on the vehicle owner etc. exist but the best way would be to encourage private investments in this sector. Given the political set up in India this becomes a challenge in itself because it can give rise to monopoly in this sector which may affect day to day activities of the common man. So a middle path has to be adopted where the government has full control over the situation. A similar mode switching project has also been registered under the CDM which attracts private vehicle users to switch to public transport consisting of new and larger buses and better fuel efficiency per passenger per km.

b) Introducing fuel efficient technology that replaces the existing inefficient technology. This shift would be very encouraging given that it would have larger impact on the fuel economy and related regulations. At the same time it would require immense research & development and incentive for the users to shift easily. A possible policy option can be to remove taxes related to import of efficient vehicles and tax benefits to the first movers. Also, other approach can be to incentives the manufacturers for better R&D on hybrid vehicles within India. Also on the consumer's end setting up a cap on number of vehicle can be a possible scenario which is not very likely in India. Few methodologies exist under the CDM for emissions reduction in low emission vehicles and commercial vehicle fleets. One such project has been registered in India.

c) Using alternate fuels such as ethanol, bio-diesel, CNG, LPG, etc. also has the potential to reduce emissions as they are low carbon insensitive. This has been the most lucrative option that has been considered so far as lot of work is being done on biofuels in India. A pilot to replace 10% of its transport fuels with environment friendly biofuels in the next 10 years to cut carbon emissions was started in 2007 and already 5% is being used currently from sugarcane ethanol and non edible jatropha is being considered. The issue of sacrificing cultivable area for crops like jatropha impacting the food security has also risen in recent times. Possibility of using second generation biofuels which are produced from agriculture residue and household garbage should be a possible area of research. A methodology under the CDM exists for plant oil production and its use for transport applications but no such project have been registered.

Though various challenges exist, a lot have to be done to avoid not only environmental problems from this sector but also visible pollution caused due to congestion on roads.

*Indian DNA changed its Forest Definition this year . New Definition of Forest used for A/R projects being -
“A single minimum tree crown cover value of 15 %, minimum land area 0.05 hectare and minimum tree height value of 2 meters.”*

Sustainable Solutions for Environment



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Emergent Ventures India is a global Consulting firm providing Climate Change Mitigation solutions. our solutions entail emissions reduction & management advisory, clean technology implementation, development of renewable energy projects and carbon finance. At EVI, we pride ourselves on a potent mix of rigorous analytical skills, boundless creativity, and a roving eye for "*Sustainable Solutions for the Environment.*" We work with more than 150 clients and are managing more than 75 million Carbon Credits for our clients. We provide services to clients in Pakistan, Thailand, Indonesia, Malaysia, Bangladesh, Sri Lanka, Africa and Europe. Recognizing that clients must adapt to the low-carbon society of the future, EVI helps companies understand potential risks & opportunities arising from climate change and provides solutions in the area of risk mitigation and clean technology adoption. Our insights into clean technologies for greater Energy Efficiency are drawn from a deep well of knowledge resulting from tireless, meticulous research. In collaboration with our clients, we strive to turn those insights into on-the-ground sustainable development by using innovative financial solutions like Carbon-backed financing and debt-equity sharing, making otherwise expensive technological changes possible by attracting greater investment

Carbon Market Updates

Compliance Market

EUAs continued to fall over the last two months, falling below €15 in November for the first time since March 2007 and then to a 21-month low of below €14 in the first week of December. This came about due to a fall in energy prices, and plummeting crude oil prices with oil coming to below US\$ 40/bbl. The continued economic recession drove the market down, with trading volumes rising a little in December as companies scrambled to cover their targets with EUA and CER purchases. Deutsche Bank predicts that EUA may be heading for a low of under €10 if crude continues to fall. This is a temporary effect however, and DB has stuck to their medium-term analysis of €25-30 for

EUAs.

CER Prices also fell in line with the EUAs, and the effect was worsened due to weaker gas prices and mild winters. Bearish sentiments continue to prevail for the next 2-3 months, as nations try and combat the recession. Demand is expected to pick up over the second half of

Commodity	13/11/08 Close	15/01/09 Close
EUA Dec08 (ECX)	€17.95	€13.25
CER Dec08 (ECX)	€15.87	€11.80
CCX CFI 2008	US\$ 1.15	US\$ 1.95

the year as Australian companies begin to purchase CERs in anticipation of the cap-n-trade due to start in 2010. There is also much expectation from the USA as the new administration will reveal its climate change mitigation program in May 2009.

Voluntary Market

CCX prices rose a little over the past two months. The end of 2008 saw an increase in trading backed by US pre-compliance buyers, with volumes in January 2009 first week being close to 700,000 tonnes.

VER trading was up at the end of the year, but prices took a hit by 20-40% across all project types and vintages. Demand is now virtually non-existent for pre-2007 vintages, and recent vintage issued VERs are currently trading at US\$5-7. Gold Standard projects too saw a decrease in price, with forward strips being traded at €6-8 at the present time. Maximum demand is now for issued VERs.