

# Capacity Building for Carbon Market Development in India

**Pamposh Bhat**

**Head, GTZ CDM - India**

**Indo German Energy Programme**

**Bureau of Energy Efficiency**

# Introduction

- India Signed Kyoto Protocol in December, 1997 & ratified in August, 2002 & established DNA in December 2003
- German Technical Co-operation (GTZ), and Bureau of Energy Efficiency (BEE) are jointly working under Indo - German Energy Programme to institutionalize CDM in India, through a Capacity Building program which also links to CB initiatives of NCDMA
- Effective institutional framework is established with proactive DNA which issues Host Country Approval in 60 days of the project submission

# GTZ, CDM Capacity Building Program in India

- To Create awareness about CDM opportunities among highly energy intensive Industrial sectors like:  
(Cement, Iron and Steel ,Aluminium, Transport, Petrochemicals, Fibre, Pulp and Paper, Chemical and Fugitive gases abatement), with special emphasis on Power Sector
- Build capacity of project consultants, and developers & other stakeholders
- Provide Technical support to consultants for development of international Quality PDD`s
- Development of baseline data base for Indian power sector & methodologies for important project categories.

# GTZ, CDM Capacity Building Program in India

- Evaluate PIN`s for project proponents at no cost & prepare and disseminate information tools on CDM
- Development of market initiatives to motivate new project ideas in India & Advise Indian CER sellers on carbon market strategy and obtaining optimum prices
- Legal initiative: Development of standard ERPA / ERSA to be put on website as reference material for project developers
- Information management through websites (<http://envfor.nic.in/cdm> & [www.cdmindia.com](http://www.cdmindia.com)) and other tools
- Organizing Training & Awareness workshops focusing various sectors through 1st, 2nd, 3rd missions

# GTZ, CDM Capacity Building Program in India

Establishment of Technical cell in ***National CDM Authority, Ministry of Environment and Forest***, Govt of India to help reduce transaction costs in early market development process (three-year technical cooperation)

## Key work elements

- Support in developing and maintaining of designated web page of NCDMA
- Collect and process information on Indian pipeline of CDM projects and methodologies
- Promote Indian CDM projects internationally, at trade fairs etc.

# GTZ CDM Capacity Building Program in India- 1<sup>st</sup> Mission

Organized 4 training workshops (September 30, 2004 to October 8, 2004) co-operation with Reliance India Limited, Indian Oil Company, Cement Manufacturing Association, National Thermal Power Corporation

## Mission Focus

- Co-generation of Steam and Power, Fuel Switch , Methane Capturing, Energy Efficiency and new technologies - Reliance Industries
- Bio-diesel in transport sector CDM potential - Indian Oil Company
- Energy efficiency and Fly Ash blending options - Cement Manufacturing Association
- Renovation and Modernization, Coal Ash Utilization, New Technologies, Coal bed methane and use of Biodiesel - NTPC Power Plants

# GTZ CDM Capacity Building Program in India- 2<sup>nd</sup> Mission

Organized 4 training workshops (February 3 to 8 2005) in NewDelhi, Kolkata and New Delhi

## Mission Focus

- Discussion on **CDM oppourtunities & Potential for Industries**, with IICC`s, Assocham ,CII, FICCI,PHD etc
- **CDM Potential in Rural Electrification** in association with Rural Electrification Corporation Ltd
- **Iron and Steel Sector** organised by SREI International
- **Power Sector** Organized by BEE

# GTZ CDM Capacity Building Program in India- 3<sup>rd</sup> Mission

7 workshops (October 3 - 10, 2005), Tentative schedule

<i>Industry/ Sector</i>	<i>Date</i>	<i>Location</i>
Methane capture	03-10-05	Mumbai
Petrochemical/ Reliance	04-10-05	Mumbai
<i>Chemical</i>	<i>05-10-05</i>	<i>Ahemdabad</i>
Pulp & Paper	06 -10-05	New Delhi
Iron and steel	07-10-05	Kolkatta / Orissa
Cement	08-10-05	New Delhi
Power	10-10-05	NewDelhi

# EU Emission Trading Scheme

- An open scheme linking to combat the raising GHG emission by the innovative mechanisms framed in Kyoto Protocol
- EU is committed to reduce their combined emissions of GHG by 8% from 1990 levels until the end of 2012
- The scheme allows to achieve EU Kyoto Target at a cost between 2.9 to 2.7 billion euros annually
- As of October 2004, Member states had provisionally indicated their NAP, intended to procure 500-600 MtCO<sub>2</sub> credits for the period 2008 – 12
- 1<sup>st</sup> Scheme that recognize credits as equivalent to emission allowances (1 EUA = 1 CER = 1 ERU)
- Credits from LULUCF & nuclear Facilities are not accepted

# EU Emission Trading Scheme - Principles

- Cap & Trade System
- Initial focus is on CO<sub>2</sub> from big Industries
- Implementation in phases, Sector Scope & GHG gas will be expanded
  - Compliance Period (2005 - 2008)
  - Commitment Period (2008 - 2012)
- Allocation plans for Emission allowances are decided periodically
- It includes strong compliance frame work, Member states will have pay PENALTY in absence of achieving the target
  - 40 Euros/ ton in the Compliance period
  - 100 Euros/ ton in the 1st commitment period
- Market is EU but also aimed to target CDM & JI projects from rest of world through

# EU ETS price and volume



# Output

- Evaluated more than 75 CDM Project Idea Notes (PINs)
- Contract signed for development of Power sector baseline database.
- Market development initiatives to motivate new project ideas in India  
GTZ awards Rs.10,000 every month for the best PIN submitted through its BEST PIN OF THE MONTH contest on [www.cdmindia.com](http://www.cdmindia.com)
- 50 PDD consultants trained & 10 international quality PDDs developed, 6 projects received host country approval and 3 have signed validators contracts
- Development of standard ERSA underway, to be put on website as reference material for project developers.

# Output

- Two websites (<http://envfor.nic.in/cdm> & [www.cdmindia.com](http://www.cdmindia.com)) and other information tools are developed/ maintained and being disseminated
- GTZ CDM-India has been assigned by German Environment Ministry to develop a Gold Standard CDM project on solar-powered community kitchens in India, to claim for the CO<sub>2</sub> emissions reductions generated by the "Renewables 2004" conference in Bonn
- CDM Advisory services available at A-33, Gulmohar Park ,New Delhi Office

# Way Ahead

- To build capacity of project consultants and National Operational Entities
- To setup a databank in support of baselines in selected sectors
- Development of high quality PDD`s from India which get registered at EB,UNFCCC
- To facilitate sales of 20 million Euros worth CER`s from India
- To cooperate and expand its scope of work in consultations with DNA, Ministry of Environment and Forest, Government of India.

# Way Ahead

- Promotion of investment opportunities for German private sector equity in CDM projects in India
- Marketing of Indian CDM projects in the European market
- Overall objective is to Link to United Nation's Millennium Development Goal -7 “Ensure Environmental Sustainability”  
Integrate the principles of sustainable development into country policies and programmes:

Target : Reverse loss of environmental resources

# Thank you for your attention

*Pamposh Bhat (Ms.)*

*Head*

*CDM-India*

*A-33, Gulmohar Park*

*New Delhi - 110049. India*

*Ph: 0091-11-26611021, 26528840*

*Fax: 0091-11-26537673*

*E-mail: [pbhat@cdmindia.com](mailto:pbhat@cdmindia.com)*

*Website: [www.cdmindia.com](http://www.cdmindia.com)*

# GTZ Sponsored PDDs

SNo.	Project Details
01.	<b><i>Gubbi Energy Efficiency Project, Karnataka by Deloitte Touché and Tohmatsu India Pvt. Ltd, Bangalore.</i></b>
02.	<b><i>Small Hydro Power Plant (6 MW), Sommanamarandi, Andhra Pradesh by Zenith Corporates Services, Hyderabad.</i></b>
03.	Replacement of coke through coal tar and coal dust in Blast furnace at Bhilai Steel Plant, Chattisgarh by Infrastructure Development Finance Company Ltd. (IDFC), Chennai
04.	<b><i>Energy Efficiency In Lotus Suits At The Orchid's Hotel Project of Kamat's Hotel, Mumbai, Maharashtra by Development Alternatives, New Delhi.</i></b>
05.	300 MW Wind Farm In Tamil Nadu by The Energy Resources Institute (Teri), New Delhi.
06.	<b><i>Fozal Small Hydro Power Plant (9mw) Kullu District, Himachal Pradesh by Cosmos Carbon Credits, New Delhi.</i></b>
07.	<b><i>Small And Medium Enterprise Stell Forging Industry In Mandi Gobindgarh, Punjab by Deloitte Touché and Tohmatsu India Pvt. Ltd, New Delhi.</i></b>
08.	<b><i>Bio Diesel Project, Andhra Pradesh by Zenith Corporate Services, Hyderabad.</i></b>
09.	Energy Efficiency & Fuel Switching in boiler at M/s Cadbury India Ltd, Thane, Maharashtra by SEE-Tech Solutions Pvt. Ltd., Nagpur, Maharashtra.
10.	R&M of 4 coal based power generating units of Indraprastha power station, by New Delhi Mecon Ltd., Ranchi, Jharkhand.

# Best PIN Competition

- Any project type which is eligible for CDM is also eligible for this contest
- Projects must be located in India
- Projects edibility operation date not before 1 January 2005
- Project ideas must be submitted in the standard PIN format of CDM- GTZ India
- Projects must be submitted electronically to [contest@cdmindia.com](mailto:contest@cdmindia.com). Hardcopy submissions will not be considered.