Clean Development Mechanism:

Policy and Institutional Framework



R. K. Sethi Ministry of Environment & Forests Government of India

GoI and Climate Change

- Kyoto Protocol acceded in August 2002
- Hosted COP 8 (2002)
- Presidency of COP (2002-03)
- Climate Technology Bazaar & Conferences (2003)
- Establishment of DNA (December 2003)

Energy & India

- Projected GDP growth: 8 %
- Per capita total energy consumption is 20 % of global average
- Energy consumption 1992 199 mtoe

2001 - 225 mtoe

• Projected energy requirement 2006 - 07 - 412 mtoe

2011-12 - 554 mtoe

- Renewable energy installed capacity: 3700 MW
- Renewable energy capacity addition by 2007 : 3075 MW

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Facilitating CDM Implementation

Designated National Authority

- National CDM Authority
- Inter Ministerial Committee
- Single Window clearance
- Project Concept Note (PCN)
- Project Design Document (PDD)
- Four meetings since Cabinet approval

Facilitating CDM Implementation contd...

Project approval process

- Quantifiable SD indicators vs. broad conformity with developmental goals
- Interim approval criteria available at http://envfor.nic.in/cc/cdm/criteria.htm
- Diverse views regarding prioritisation of sectors
- DNA, however, would like to support all the eligible industry sectors

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Types of Projects approved

•	Biomass/ Cogeneration	15
•	Industrial Processes /	7
	Energy efficiency	
•	Municipal Solid Wastes	1
•	Fuel Switching	2
•	Renewables'	2

Institutional capacity requirements

- National DOEs to cut down transaction costs
- Consultants
- Public Sector Undertakings
- Financial institution to play a proactive role
- Bundling organisations and seller's pool to protect the interests of small project developers

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Capacity building initiatives in India

- CDM capacity building programme for Biomethanation sector, UNDP-MOEF
- National Strategy Study, World Bank TERI MOEF
- Climate Technology Bazaar & Conferences
- Ministry and State Governments through various Workshops/ seminars
- Industry Associations
- Foreign Governments

The CDM today

- Few buyers market dominated by government and multilateral buyers
- Effect of EU emissions trading scheme on CDM yet to be assessed
- Low carbon prices CER revenue will rarely be the deciding factor
- High transaction costs
- Modalities and procedures not yet finalized for LULUCF projects

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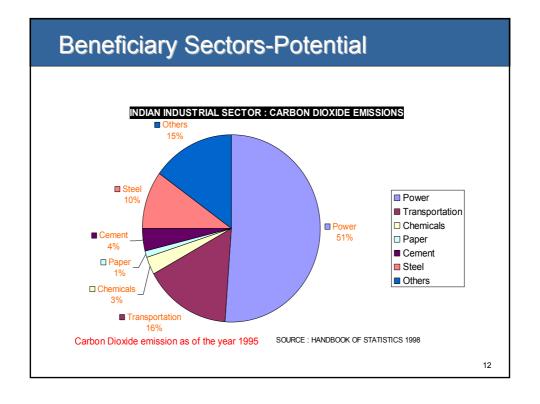
Type of projects

- Renewable energy
- ≥ Switching to Alternate Fuels
- Energy Efficiency
- Waste Management
- Oil & Gas
- Industrial Processes
- Sinks/Agriculture

Potential in Renewables

Technology	Potential	Cum. Installation upto March 31, 2003
Wind Power	45000 MW	1870 MW
Small Hydropower (< 25 MW)	15000 MW	1509 MW
Biomass	19500 MW	484 MW
Energy from Waste	1700 MW	26 MW
Solar photovoltaic		121 MWp

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Potential Areas

Average Specific Energy Consumption

Sector	1990-91	1994-1995	1999-2000 Best
Steel(G.cal/ton)	11.27	8.93	7.48
Aluminum(kWh/ ton)	16763	16606	15217
Cement(kWh/ton)	132	120.5	69
Caustic Soda(kWh/ton)	3351	3130	2196
Paper(MWh/ton)	1.255	1.003	0.985
Urea(kWh/ton)	425.6	390	-

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Thank You



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