

CDM Benefits for Wind Projects – Sellers Perspectives

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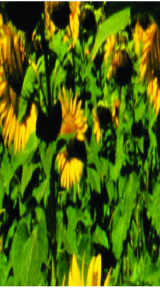
CDM – An Introduction

- Kyoto Protocol to United Nations Framework Convention on Climate Change (UNFCCC)
- Signed in 1997; In force since 16th Feb' 2005
- Ratified by >175 countries
 - Only Non-participants: USA
- Industrialised (Annex 1) countries are to reduce their Greenhouse Gas (GHG) emissions by 5% below 1990 levels in 2008-12
 - Individual, quantified emission targets for each industrialized country
 - 6 Greenhouse Gases (GHG) covered: CO₂, CH₄, N₂O, HFC, PFC, SF₆
- “Flexible Mechanisms” for financing emission reductions abroad:
 - Clean Development Mechanism (CDM)
 - Joint Implementation (JI)
 - International Emissions Trading



Wind @ India – A Glance

State	Potential (MW)	Installed Capacity (MW)	PLF (%)	Existing Policy
Tamilnadu	3,050	3,698.9	24-26	Tariff : Rs. 2.90 /kWh without escalation; RoE: 16% pre-tax;
Maharashtra	3,650	1,622.2	18-22	Tariff: Rs. 3.50/kWh with Rs.0.15 per Kwh escalation; RoE: 16% post-tax;
Karnataka	6,620	853.2	23-28	Tariff: Rs. 3.40/kWh without escalation; RoE: 16% post-tax;
Gujarat	9,675	806	23-25	Tariff: Rs. 3.37 /kWh without escalation; RoE: 14% post-tax;
Rajasthan	5,400	493.3	22-25	Tariff: Rs. 3.59 /kWh with escalation of Rs.0.02 per Kwh for first 12 years, Rs.0.01 per Kwh for next 8 years; RoE: 14% post-tax;
India	45,000	7,230	18-22	



CDM Methodologies - Wind

Sectoral Scope	Methodology	Scale	Title
1 - Energy Industries (Renewable - / Non-renewable Sources)	AMS I.D.	Small	Grid Connected Renewable Electricity generation
1	ACM0002	Large	Consolidated Methodology for Grid Connected Electricity Generation from Renewable Sources



CDM Statistics – Global Scenario

CDM Status	No. of Projects	Wind Projects	Percentage (%)
Registered	909	127	14
Request for Registration	45	2	4
Corrections Requested	48	15	31
Request for Review	47	4	8
Under Review	10	0	---
Validation	1915	219	11
Withdrawn	9	0	---
Rejected	52	2	4

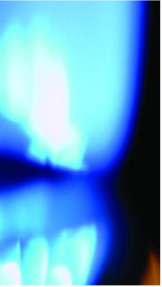
Source: UNEP Riso Centre, 1st February 2008



CDM Statistics – Indian Scenario

CDM Status	No. of Projects	Wind Projects	Percentage (%)
Registered	304	46	15
Request for Registration	52	1	2
Corrections Requested	23	12	52
Request for Review	15	3	20
Under Review	8	-	--
Validation	483	98	20
Withdrawn	4	-	--
Rejected	19	2	10

Source: UNEP Riso Centre, 1st February 2008



Sellers Perspective

- Additionality Tool – A real barrier
 - Early Consideration of CDM – Not considered for many 2000, 2001, 2002 commissioned projects
 - Identification of Alternatives
 - Investment Analysis – Difficult in bundled projects, Benchmark for both captive & sale to EB
 - Barrier Analysis
 - Common Practice Analysis – Difficult in TN
- Expecting Forward Price
- Unaware of carbon market happenings, price risk, Price Dynamics
- Poor capacity building in CER Trading & Transaction
- No transparency in market mechanism



Sellers Perspectives (contd.)

- Lengthy CDM Process, Various stages to be crossed
 - Long time for Regn. after submission
- Frequent changes in Methodologies, Guidelines, Templates, Tools etc.
- CDM benefit sharing with Institutes / Organizations
 - Gujarat – 25%
 - Maharashtra – Anytime in future – mentioned in PPA.
- High Transaction Cost in CDM
- Proving Non-business as usual scenario



Sellers Perspectives (contd.)

- Accounting Govt. Incentives available for projects
 - TUF Scheme
- Buyers inclination towards high CER volume projects
- Uncertainty about Post-2012 Scenario
- Fluctuation in CER prices
- Uncertainty over taxation of CER revenue



CDM in Wind : Case Study

- **Project Title:** 11.35 MW Grid Connected Wind Electricity Project at Pohra (Rajasthan) in India
- **Project Description:** 11 * 0.35 MW, 6* 1.25 MW wind based electricity generation for both captive purpose and northern regional grid
- **Project Location:** Pohra Village, Jaisalmer District, Rajasthan, India.
- **CERs Volume:** ~ 13,800 tCO₂ per annum.
- **Methodology:** AMS I.D
- **Additionality:** Regulatory barriers, Investment & Technological Risk etc.





CDM in Wind : Case Study (contd.)

- **No. of Project Promoters:** 12
- **CDM Consultant & Bundling Agency:**
Senenergy Global Private Ltd, New Delhi
- **CDM Status:** Registered with CDM EB, CER for 1st Monitoring Period Issued.



Senergy Global's Credentials

Total Turnkey Solutions in CDM

- ❖ Commitment of Service and Delivery
- ❖ Reputed Clientele
- ❖ Ensured Transparency in Client dealings.
- ❖ Providing end-to-end solutions in the CDM space
- ❖ Diversified Portfolios (Ren. Energy, Energy Efficiency, Fuel Switch etc.)
- ❖ Registered Projects : 14, Pipeline : 100
- ❖ Successful trading & transaction of more than 2 million CERs/VERs/Off-Sets till date
- ❖ Providing Renewable Energy related Policy & Regulatory Advisory services.
- ❖ Good Network with Govt., Private, Corporate bodies



Thank You !

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