



CLEAN DEVELOPMENT MECHANISM

Coal India Initiatives



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- CIL Initiatives

- Realising the need of CDM, development of coal based non-conventional environment friendly energy resource is high on the agenda of CIL.
 - CIL is pursuing the development of CBM, CMM, VAM, UCG & other Clean Technologies.
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Underground Coal Gasification:

- CIL intends to develop UCG in the identified blocks under the collaborative regime preparatory to which EOI is invited.
- EoI for development of UCG was put on the website of CIL/CMPDI and India CBM/CMM Clearinghouse on 28.11.2009.
- CIL will provide available geological information, infrastructure facilities, but will not create any infrastructure for this purpose.

Kaitha Block (Ramgarh CF):	Approx Area (Sq Km)	:	4
	No. of Coal Seams	:	12
	Average thickness	:	3-16 m
	Depth of topmost seam	:	>300 m
	Coal Reserves of the Block	:	166 Mt
Thesgora 'C' blocks (Pench)	Approx Area (Sq Km)	:	7.5
	No. of Coal Seams	:	5
	Average thickness	:	2.5-6.5m
	Depth of topmost seam	:	>300 m
	Coal Reserves of the Block	:	187 Mt

Coal Bed Methane:

- CIL/CMPDIL have been associated with development of CBM since early 90s.
- Till date 26 virgin CBM block have been allotted. 8 are under allotment by MOP&NG.
- CIL is involved in development of CBM / CMM through:
 - ❑ Generating CBM specific data for enhancing the existing resource of 3.4 TCM, in the country.
 - ❑ Implementation of DEMO project namely 'CBM Recovery and Commercial Utilisation' in collaboration with UNDP / GEF at Moonidih / Sudamdih mines of BCCL under the S&T projects of MOC.
 - ❑ Commercial development namely 'Collaborative Development of CBM' of 2 blocks, namely: Raniganj & Jharia CBM Blocks awarded to consortium of CIL-ONGC.

HYDROFRACTURING UNITS ARE UNDER OPERATION AT MOONIDIH



GAS BASED GENETRATORS OPERATING AT MOONIDIH



UG Drill Unit at Sudamdih



CMM / AMM – A priority area of CIL

- Development of CMM is high on the agenda of CIL, to generate additional revenue and accrual of **Carbon Credits**.
- A CIL R&D project titled '**Development of capacity for delineation of viable CMM/AMM**' is under progress. The prospective CMM areas in ECL, BCCL and CCL have been identified.
- **EoI has been put on website of CIL/CMPDI and India CBM/CMM Clearinghouse on 22.01.10.** 5 blocks identified (3 in BCCL and 2 in CCL):
 - ❑ **Jharia Coalfield under leasehold of BCCL** - Moonidih, Pootkee Balihari, Mahuda Sub Basin
 - ❑ **East Bokaro Coalfield under leasehold of CCL** - Asnapani-Jarangdih Shaft & North Kathara Phase-I-III, Uchitdih

Ventilation Air Methane

- Coal sector contributed about 388.14 MT of CO₂e of methane emissions in 2005 globally. Expected to rise to 449.48MT CO₂e by 2020 (USEPA estimate).
 - In India, there are 18 Degree-III mines & 102 Degree-II mines. As per an estimate, the total annual methane emissions from UG mines is about 213.8 million m³.
 - CIL intends to commercially develop VAM project(s) at the identified gassy UG mines with accrual of **Carbon Credit** benefits and for this purpose.
 - **An EoI for development of VAM has been put on the website of CIL/CMPDI and India CBM/CMM Clearinghouse on 29.01.10.**
 - Broad Scope of Work for collaborator:
 - To get the area examined for suitability of the identified UG mines.
 - To generate additional data for taking up VAM
 - Feasibility study to be carried out and if found potential, further commercialization may be taken up.
 - To examine the possibility of getting carbon credits from VAM project
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Surface Coal Gasification (SCG):

CIL and GAIL are jointly setting up of a SCG project for production of synthesis gas, to be used

Coal Liquefaction:

CIL and OIL is scouting for possible sources of coal to the tune of 3.5 MTY in order to meet the requirement of a commercial liquefaction unit. The North Eastern Region coal is conducive for this process.

Thank You
