

Development of CBM in India: An Overview



S R Pump at Moonidih



CBM Lab of CMPDI

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Presentation outline

- ❖ India's energy scenario
- ❖ Coal: Reliable source for energy security in India
- ❖ Development of CBM: India's accomplishments
- ❖ Development of CBM/CMM: CIL/CMPDI's initiatives
- ❖ Development of CMM: Opportunities and challenges
- ❖ India CBM/CMM Clearinghouse



India's Energy Scenario

- ❖ Coal is the main source of energy supply in India, meets about 53% needs of commercial energy. Studies suggest that this position is to remain unchanged in foreseeable future,
- ❖ *Coal plays a dominant role in sustaining economic growth of India which could be evident from the following:*
 - 70 % share in power generation
- ❖ Reserve: 293 BT as on 01.04.2012, proved reserve 118 BT.
- ❖ India's coal reserve is 7.1% of world total, which stands reasonably good compared to 0.8% for oil / natural gas
- ❖ Compared to other sources of energy, coal has better availability, affordability, quality & price predictability



India's Energy Scenario

- ❖ India is the 3rd largest coal producing country after China and USA with coal production of about 500 MT.
- ❖ About 87% of the coal production is coming from opencast mines and 13% is coming from underground mines having limited mechanization.
- ❖ With increasing depth of opencast mines, now the focus and stress is on development of mechanized underground mines.
- ❖ Coal sector contributed about 388.14 MT CO₂e (1 BCM annually) of methane emissions in 2005, which is expected to rise to 449.48MT CO₂e by 2020 (USEPA estimate).
- ❖ There is focus to mitigate emissions from coal mining sector. For the purpose capture and gainful utilisation is a priority area at govt and industry level.
- ❖ In addition, efforts are on to utilize all possible energy resource-renewable, non-renewable, coal based additional resource viz CBM, CMM, VAM, UCG etc to augment energy supply required for sustaining envisaged GDP growth. Development of shale gas is also on the priority list.



Development of CBM: India's Accomplishments

- ❖ To facilitate development of CBM, Govt. of India formulated CBM Policy in 1997 having liberal fiscal provisions.
- ❖ As a result, commercial development of CBM took a fast pace
 - CBM resource in allotted 33 CBM blocks in 4 rounds : 1.8 TCM, Area- 17700 sq km
 - Production potential in allotted blocks : 45 Million Cubic Meter per day, which can support power generation of 8200 MW.
 - CBM well drilled: 280, Total investment: Rs 256 Crores (USD 47 million)
 - Reserve established by different operators in 5 blocks: 8.4 TCF
 - 3 blocks (Raniganj South-GEECL, Sohagpur West and Sohagpur East- Reliance Industries Ltd) has entered in development stage.
 - Commercial production of CBM started and during 2008-09 it was 0.25 MMSCMD (million std cubic meter per day).
 - The CBM production is expected to increase to 7.14 MMSCMD shortly



Development of CBM: CMPDI's Endeavor

- ❖ **Generating CBM specific data to augment CBM resource in India (CBM resource: 3.4 TCM, CMPDI estimate)**
- ❖ **Carving out prospective blocks and preparation of Data Dossiers for allotment through global bidding**
- ❖ **Implementation of commercial CBM Project on behalf of CIL in Jharia and Raniganj CBM Blocks allotted to CIL-ONGC consortium.**
 - **Development Plan of Jharia CBM Block with budgetary estimate of Rs 1137 Crores (USD 211 Million) has been submitted to the Govt. for approval.**
 - **Further, Development Plan of Raniganj CBM Block with budgetary estimate of Rs 957 Crores (USD 178 Million) has been submitted to the Govt. for approval.**
 - **Full commercial production will start after approval of the Development Plan and its implementation**



Development of CMM: CMPDI's Endeavor

- ❖ Development of CMM is on high agenda of Indian coal mining industry and steps are being taken up for its commercialization.
- ❖ India CBM/CMM Clearinghouse, established under the aegis of USEPA and Ministry of Coal, Govt of India, is providing international platform for the opportunities existing for development of CMM in India..
- ❖ In addition, need to expedite development of CMM has been discussed at the Indian Planning Commission level wherein several ministries officials in addition to officials of DGMS, CIL and CBM operators participated.
- ❖ A mine related demonstration project for harnessing and utilization of CMM has been successfully implemented in Moonidih Mine of BCCL under UNDP/GEF/Govt. of India funding.
- ❖ This has proved the efficacy of the process in Indian geo-mining condition and paved way for taking up commercial development in other suitable areas.



Development of CMM: CMPDI's Endeavor

- ❖ Ministry of Coal has made CMPDI as Nodal Agency for development of CMM in India.
- ❖ CMPDI took up exercises for identification of suitable CMM blocks within CIL mining lease hold areas and prepared data dossiers on 5 such areas
- ❖ in addition, CMPDI also made assessment of CMM resource in the projectised areas of few operating opencast mines.
- ❖ CMPDI floated tender for identification of suitable developer for commercial development of CMM in the 5 identified areas within CIL mining leasehold areas.
- ❖ Certain issues emerged regarding operationalization of CMM and this matter was under deliberation between different ministries.
- ❖ The matter has been sorted out in a meeting held in August 2012 and this will facilitate commercial development in the identified blocks.



India CBM/CMM Clearinghouse

- India CBM/CMM Clearinghouse has been established at CMPDI, Ranchi in Nov'08 under the aegis of MoC and USEPA.
- This will help promotion of development of CMM/CBM in country.
- Web Site uploaded highlighting the opportunities of CMM development in India with templates relating to database on CBM/CMM.
- Technical papers related with CBM/CMM development uploaded on web site.
- A News Letter highlighting the accomplishment made during the first year was also posted on the website.
- The Clearinghouse is facilitating training programs and also sponsoring visits for attending seminars and on-site training.



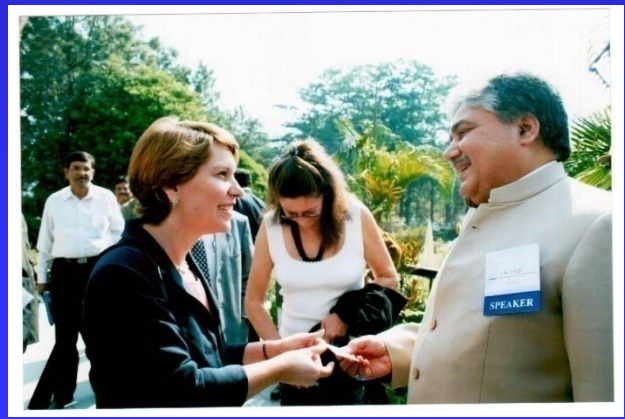
India CBM/CMM Clearinghouse

- The Clearinghouse was established initially for a period of 3 years, which was completed in Nov.2011.
- It is great pleasure to inform this house the term of the clearinghouse has been extended to a further period of three years consequent to the approval of Ministry of Coal, Govt of India and USEPA.
- We would like to assure that as in past; the clearinghouse will continue to work relentlessly for the commercial development of CMM.



India CBM/CMM Clearinghouse...

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Thank You