



NITI Aayog

(National Institution for Transforming India)
Government of India

Coal Bed Methane in India
Potential, Challenges & Issues

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Presented at
5th Unconventional Gas Forum
Brisbane, Australia
Dated 24th February, 2017

CBM Scenario in India – Overview

- **Global Presence :**
 - 4th largest proven coal reserves and 3rd largest coal producer
- **Total Estimated Resource:**
 - Coal - 308 Billion Tonne and CBM - 4.6 TCM or 92 TCF (2.6 TCM)
- **Government Policy Framework:**
 - CBM Policy in 1997 & award of 1st CBM Blocks in 2001
 - Contract term for 38 and 40 years for blocks in normal and frontier areas. Contract divided into 4 phases for different activities
- **Experience:**
 - Production - 2 centuries old coal mining industry and newcomer to the CBM industry
 - CBM ‘R&D’ – 2 decade old with Indian and overseas players like ONGC, BP, Arrow Energy, Commercial production since year 2007

CBM Policy - Main Features

- Allotment of blocks through ICB with no mandatory Government PI
- No Cost recovery & No Signature bonus
- Biddable Production Level Payment (PLP)
- Royalty and Taxes as per prescribed rate
- Freedom to sell gas to domestic market on arms' length transaction

CBM in India: Current Status

CBM policy formulated in:	1997
No. of CBM Blocks awarded in 4 rounds	33
Coal bearing Area identified for CBM	26,000 Sq. Km.
Area covered under 33 blocks	16, 613 Sq. Km. (64%)
CBM Resources in the 26,000 sq km area	2599 BCM (91.8TCF)
CBM Resources (from 33 Blocks)	1767.06 BCM (62.4 TCF) ~68% opened up
Established CBM Reserves (GIIP)	280.4 BCM (9.9 TCF)
Total Recoverable Reserves	112.6 BCM (3.978 TCF)
Present Gas Production (October 2016)	1.637 MMSCMD from 4 CBM blocks
No. of CBM Blocks in Development/ Production Phase	8 (4 Dev. & 4 Prod.)

Challenges in Developing CBM Blocks

Technical

- Complex and heterogeneous geological structure, long stratigraphic columns and depth
- Multi seam drilling and wide variety of dewatering requirement
- Lack of infrastructure facilities near CBM Blocks:
 - High volume exploration and production in short time span
 - Gas pipeline grid and Ready market
 - Availability of equipment

Socio Economic Challenges

- Land Acquisition
- Requirement of large amount of water for drilling and hydro fracturing,

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Policy

- Overlapping of CBM blocks with coal mining blocks, even some infrastructural projects also overlaps.
- Statute of India do not permit simultaneous exploration & development of various hydrocarbon from multiple layer in vertical column.
- Issues related to single/multi operators and safety factors
- Licenses and clearances from Central and Government and State Government.
- No Single –window for approval or redressal is currently available

Initiatives taken

- Periodic review of CBM activities by Committee of Secretaries and MOP&NG
- A high level Committee has been constituted to finalize Co-development of CBM operations and coal mining in the same area
- Government in November, 2015 allowed CIL and its subsidiaries to explore and produce CBM from the coal mining lease areas held by them
- To provide existing CBM contractors freedom from CBM Pricing and Allocation policy of Govt. of India
- Future award of CBM areas through Unified License under the recently approved Hydrocarbon Exploration Licensing Policy (HELP).

THANK YOU

In case of any further questions, please write to kumar.harendra@nic.in