

**GOVERNMENT OF INDIA
MINISTRY OF COAL
LOK SABHA
UNSTARRED QUESTION NO. 916
TO BE ANSWERED ON 07.02.2024**

Clean Coal Technology

**916. DR. SHRIKANT EKNATH SHINDE:
DR. KRISHNA PAL SINGH YADAV:
SHRI UNMESH BHAIYYASAHEB PATIL:
PROF. RITA BAHUGUNA JOSHI:
DR. SUJAY RADHAKRISHNA VIKHE PATIL:
DR. HEENA VIJAYKUMAR GAVIT:**

Will the Minister of COAL be pleased to state:

- (a) the details of key initiatives taken by the Government to boost coal production in the country;
- (b) whether India has exported coal to other countries, if so, the details thereof, till date;
- (c) the details of the main markets for Indian coal;
- (d) the steps taken by the Government to promote the use of clean coal technologies;
- (e) the estimated potential of India's clean coal reserves; and
- (f) the details of the potential of coal bed methane in the country?

ANSWER

MINISTER OF PARLIAMENTARY AFFAIRS, COAL AND MINES

(SHRI PRALHAD JOSHI)

(a): The Government has taken several steps to increase the domestic production of coal and to reduce the import of coal. The focus of the Government is on increasing the domestic production of coal and to eliminate non-essential import of coal in the country. Most of the requirement of coal in the country is met through indigenous production/supply. The steps taken by the Government to increase the domestic production of coal are as under:

- i. Regular reviews by Ministry of Coal to expedite the development of coal blocks.
- ii. Enactment of Mines and Minerals (Development and Regulation) Amendment Act, 2021 for enabling captive mines owners (other than atomic minerals) to sell up to 50% of their annual mineral (including coal) production in the open market after meeting the requirement of the end use plant linked with the mine in such manner as may be prescribed by the Central Government on payment of such additional amount.
- iii. Single Window Clearance portal for the coal sector to speed up the operationalization of coal mines.
- iv. Project Monitoring Unit for hand-holding of coal block allottees for obtaining various approvals / clearances for early operationalization of coal mines.

- v. Auction of commercial mining on revenue sharing basis launched in 2020. Under commercial mining scheme, rebate of 50 % on final offer would be allowed for the quantity of coal produced earlier than scheduled date of production. Also, incentives on coal gasification or liquefaction (rebate of 50 % on final offer) have been granted.
- vi. Terms and conditions of commercial coal mining are very liberal with no restriction on utilization of coal, allowing new companies to participate in the bidding process, reduced upfront amount, adjustment of upfront amount against monthly payment, liberal efficiency parameters to encourage flexibility to operationalize the coal mines, transparent bidding process, 100% Foreign Direct Investment (FDI) through automatic route and revenue sharing model based on the National Coal Index.

In addition to above, coal companies have also taken following steps to increase the domestic coal production.

- i. Coal India Limited (CIL) has identified and initiated actions for fulfilling all the resources required like Environment Clearance / Forest Clearance, land acquisition, evacuation infrastructures such as mechanized loading through Coal Handling Plant (CHP) / SILO, Rail Projects etc. CIL is in constant endeavour to enhance its coal production through expansion of mines (brownfield projects), opening of new mines (greenfield projects), mechanization and modernization of its mines, both Underground (UG) & Opencast (OC). In its UG mines, CIL is adopting Mass Production Technologies (MPT), mainly with Continuous Miners (CMs), wherever feasible. CIL has also planned Highwalls (HW) mines. In its OC mines, CIL already has State-of-the- Art technology in its high capacity Excavators, Dumpers and Surface Miners.
- ii. Regular liaison is being undertaken by Singareni Collieries Company Limited (SCCL) for grounding of new projects and operation of existing projects. SCCL has initiated action for developing infrastructure for evacuation of coal like CHPs, Crushers, Mobile Crushers, Pre-weigh- bins etc.

(b): Coal exports by the country during the last three years and the current year (upto November, 2023) is as under:

[Figures in Million Tonne (MT)]

Year	2020-21	2021-22	2022-23	2023-24 (Upto November, 2023)
Exports	2.945	1.316	1.166	0.78

(c): Most of the coal produced in the country is consumed domestically. The major coal consuming sectors in the country are Power (including captive power production), Steel, Cement, Sponge-Iron and Fertilizer.

(d): The Government has taken the following steps to promote the use of clean coal technologies:

- i. For promoting Surface Coal Gasification (SCG) in the country, a provision has been made for 50% rebate in revenue share for all future commercial coal block auctions for the coal used in gasification purpose provided the coal quantity used for gasification is at least 10% of total coal production. Further, separate auction window under Non- Regulated Sector linkage auction has been created for making coal available for new coal gasification

plants. Several coal gasification projects have been taken up. Talcher Fertilizer Limited is setting up an integrated coal gasification-based urea plant to produce 1.27 Million Metric Tonnes Per Annum (MMTPA) neem-coated Urea. Currently, the project is under construction stage. Pre-feasibility reports have been prepared to set up Coal Gasification projects in Eastern Coalfields Limited (ECL), Mahanadi Coalfields Limited (MCL) and NLC India Limited (NLCIL). For NLCIL project, tenders have been floated for selection of agency for construction and operation of plant.

- ii. Government of India has notified Under Ground Gasification (UCG) Policy in September, 2016 to enable the development of UCG so as to maximize the utilization of difficult to mine coal and lignite resources and promote Clean Coal Technologies.
- iii. Government of India had formulated a Coal Bed Methane (CBM) policy in 1997 for the development of CBM. As per the policy, the Ministry of Petroleum & Natural Gas (MoPNG) became the Administrative Ministry and Directorate General of Hydrocarbons (DGH) was made the nodal agency for the development of CBM in the country. MoPNG in consultation with the Ministry of Coal has identified and offered CBM Blocks from coal-bearing areas. In partial modification of Coal Bed Methane (CBM) policy 1997, in 2018 Government of India granted the exploration and exploitation rights of CBM to Coal India Limited (CIL) and its subsidiaries from coal bearing areas for which they possess mining lease for coal.
- iv. Government is also promoting for beneficiation of coking coal in the country by setting up of coal washeries.

(e): There is no specific concept to estimate Clean Coal Reserve. However, as on 01.04.2023, the total coal resource in the county is 3,78,207.28 MT.

(f): Ministry of Petroleum & Natural Gas (MoPNG) launched Coal Bed Methane (CBM) bidding rounds I to IV (2001, 2003, 2005 & 2008), out of which 8 blocks are under operation and in the Production/Development phase. Total area of these 8 blocks is 2430 sq. km. In 2021, Government of India launched Special CBM Bid Round (SCBM-21) and awarded 4 CBM Blocks covering an area of around 3860 sq. km. At present, 12 CBM Blocks are active, 5 of which are in the production phase, 3 in the development phase and 4 blocks (awarded during SCBM-21) are under the exploration phase. The total prognosticated CBM resource of these 12 active CBM blocks is about 480 Billion cubic Metre (BCM) of which 6.13 BCM CBM has been produced up to October, 2023. The projection of CBM production from 12 active CBM blocks in the year 2023-24 and 2024-25 is 844 and 1133 Million metric standard cubic metre (MMSCM) respectively.
