GOVERNMENT OF INDIA MINISTRY OF COAL

LOK SABHA UNSTARRED QUESTION NO 2789 TO BE ANSWERED ON 06.08.2025

RESEARCH ON CLEAN COAL TECHNOLOGY

2789. SHRI VIJAYAKUMAR ALIAS VIJAY VASANTH:

Will the Minister of Coal be pleased to state:

- (a) the details of financial or technical support is provided by the Government to researchers working on advanced coal beneficiation and clean coal technologies;
- (b) whether there are any specific coal blocks allocated for research related to Underground Coal Gasification (UCG) or Carbon Capture and Storage (CCS) technologies;
- (c) the manner in which the Government ensure that research conducted on unused coal blocks contributes to sustainable mining and environmental remediation;
- (d) the steps taken by the Government to promote mine safety training and development of safety technologies using these unused coal blocks;
- (e) the details of research projects focusing on mine reclamation, groundwater impact and ecosystem restoration in unused coal blocks;
- (f) the details of data and findings from research in unused coal blocks disseminated to policymakers, industry stakeholders and the public; and
- (g) whether there are any plans to increase the number of coal blocks available specifically for research to foster innovation in the coal sector/envision for unused coal blocks in balancing India's coal demands and if so, the details thereof?

ANSWER MINISTER OF COAL AND MINES (SHRI G. KISHAN REDDY)

- (a): The Government provides financial and technical support for research in advanced coal beneficiation and clean coal technologies through the following mechanisms:
- (i) Science & Technology (S&T) scheme of Ministry of Coal Financial assistance is provided to research and academic institutions for projects in coal beneficiation, clean coal technologies, and environmental protection, etc. These projects are approved and monitored by the Standing Scientific Research Committee (SSRC).
- (ii) Research and Development (R&D) projects of Coal PSUs The R&D Boards of coal PSUs support projects aimed at developing and optimizing coal processing technologies, with emphasis on low-grade coal utilization and dry beneficiation. Key participating institutions include IITs, CSIR laboratories and CMPDI.

These initiatives are aimed at promoting sustainable coal utilization and fostering indigenous technological advancements.

Government of India has launched a scheme for promotion of Coal/Lignite Gasification projects of Government PSUs and Private sector with an outlay of Rs. 8500 crores, which also includes projects for R&D.

Government has also introduced new measures to support coal gasification projects which includes a new sub-sector under the NRS linkage auctions policy focused on "Production of Syngas leading to coal gasification". Additionally, a 50% rebate on the revenue share for coal used in gasification is available in commercial coal block auctions, provided that at least 10% of the coal is used for gasification.

- (b): A Pilot Project on Underground Coal Gasification (UCG) to establish technology in Indian Geo-mining condition" is being implemented by CMPDI, ECL and Ergo Exergy Technology Inc (EETI), Canada jointly at the Kasta coal mine (Eastern Coalfields Limited) in Jamtara District, Jharkhand.
- (c): At present, no unused coal block has been allocated for research purposes by Government. However, researches are being done by coal companies on active coal blocks. Further, CIL is conducting R&D work on underground coal gasification in abandoned coal mine of ECL.
- (d) to (f): Do not arise in view of reply to part (c) above.
- (g): At present, there is no plan to allocate coal blocks specifically for research purposes.
