

GOVERNMENT OF INDIA
MINISTRY OF COAL

LOK SABHA
STARRED QUESTION NO. 187
ANSWERED ON 02.08.2023

Coal Gasification

***187. SHRI BIDYUT BARAN MAHATO :**
SHRI DHAIRYASHEEL SAMBHAJIRAO MANE:

Will the Minister of Coal be pleased to state:

- (a) whether the Government has set any target to increase coal gasification by 2030 to fulfil the future energy needs of the country;
- (b) if so, the details thereof along with the steps taken/being taken by the Government to achieve the said target;
- (c) whether the Government has studied the financial and technical feasibility of coal gasification in the country and if so, the details thereof;
- (d) the manner in which coal gasification will help in reducing imports by 2030, generating employment opportunities for the youth, reducing carbon emissions to fulfil our global commitments towards greener future;
- (e) whether the Government is considering to promote coal gasification projects for both Public Sector Undertakings (PSUs) and Private Sector and if so, the details thereof; and
- (f) whether the Government has finalized the process/criteria for selection of entities for coal gasification scheme and if so, the details thereof?

ANSWER

MINISTER OF PARLIAMENTARY AFFAIRS, COAL AND MINES
(SHRI PRALHAD JOSHI)

(a) to (f): A statement is laid on the Table of the House.

Statement referred to in reply to parts (a) to (f) in respect of Lok Sabha Starred Question No. *187 for reply on 02.08.2023 regarding Coal Gasification asked by Shri Bidyut Baran Mahato and Shri Dhairyasheel Sambhajirao Mane.

(a) & (b): Government has prepared National Mission document to achieve coal gasification and liquefaction of 100 MT of coal by 2030. Steps taken/being taken by the Government to achieve the said target:

- (i) Policy initiatives - To ensure availability of coal at reasonable price for coal gasification plants, 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 NRS sector has been created for making coal available for new coal gasification plants.
- (ii) Identification of projects - It was felt to establish financial and technical viability of gasification projects. Accordingly few gasification projects were planned to be set up and based on their operational success, subsequent stages of expansion in this sector would be planned. In line with this strategy, implementation of several coal gasification projects have been taken up. The status is given below:

- I. Coal gasification based fertilizer plant at Talcher (Odisha):** Talcher Fertilizer Ltd (joint venture of CIL, GAIL, RCF and FCIL), is engaged in setting up of an integrated coal gasification based urea plant wherein high ash coal from nearby Talcher coalfields blended with Pet-coke shall be utilized to produce 1.27 Million Metric Tonnes Per Annum (MMTPA) neem-coated Urea. Currently, the project is under construction stage.
- II. Other initiatives:** Pre-feasibility reports have been prepared to set up Coal Gasification projects at the pit head of coal mines in Eastern Coalfields Limited (ECL), Mahanadi Coalfields Limited (MCL), Western Coalfields Limited (WCL) and NLC India Limited (NLCIL). For WCL and NLCIL project, tenders have been floated for selection of agency for construction and operation of plant.

(c): Financial and technical feasibility studies are carried out for any project before taking up for implementation. Feasibility studies were done for Talcher Fertilizer Ltd., which is currently under construction stage, and for Coal-to- Ammonium Nitrate Project at WCL & Lignite to Methanol Project at NLCIL, which are in tendering stage. Further, two pre-feasibility studies have been carried out for Coal Gasification based Coal-to-SNG Project at ECL & Coal-to-Ammonium Nitrate Project at MCL.

(d): The coal gasification will help in the following manner:

- (i) The commencement of commercial operation by TFL is expected to reduce import of urea in the country. Similar reduction in imports of natural gas based chemicals, are also expected through production of coal gasification based Synthetic Natural Gas and Ammonium Nitrate.

- (ii) On the issue of employment generation in the coal gasification projects, it is expected that by setting up of such plants, huge direct and indirect employments would be generated. Preliminary estimate suggests generation of 4000 – 5000 manpower, at each site on average daily basis during the construction and commissioning. Further, a total of 800-1000 number of manpower will be engaged directly and indirectly respectively during operation.
- (iii) The carbon footprint is expected to reduce due to alternate use as chemical feedstock in surface coal gasification plants in comparison to burning of coal in thermal power plants. The CO₂ generated in the gasifier is easier to trap and sequester or utilise in production of downstream products or chemicals.

(e): Yes, Sir. To incentivize companies for upscaling coal-gasification projects, Ministry of Coal has formulated a policy wherein, 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 has been created for making coal available for new coal gasification plants.

(f): The scheme to promote Coal gasification is yet to be finalized by the Government.
