

**GOVERNMENT OF INDIA
COAL
LOK SABHA**

STARRED QUESTION NO:102
ANSWERED ON:05.03.2013
QUALITY OF COAL
Bajwa Shri Partap Singh

Will the Minister of COAL be pleased to state:

- (a) whether the Government has evaluated the quality of domestic coal vis-a-vis imported coal for usage in power generation in the country;
- (b) if so, the outcome thereof;
- (c) whether the Government has made any assessment/perspective plan regarding the expected share of coal as a fuel for power generation in the country during the next two to three decades;
- (d) if so, the details and the outcome thereof and the manner in which the demand of the power utilities for high quality coal will be met; and
- (e) the steps taken/proposed to be taken by the Government to lessen the dependence on high quality imported coal?

Answer

MINISTER OF COAL (SHRI SRI PRAKASH JAISWAL)

(a) to (e) :A statement is laid on the table of the House.

STATEMENT AS MENTIONED IN ANSWER TO STARRED QUESTION NO. 102 FOR ANSWER ON 05.03.2013 ASKED BY SHRI PARTAP SINGH BAJWAR REGARDING QUALITY OF COAL

(a) & (b): Indian coals are typically high in ash content and low in calorific value when compared to imported coals. The average gross calorific value (GCV) of domestic thermal coal ranges from 3500-4000 kcal/kg when compared to imported thermal coals of + 6000 kcal/kg of GCV. Also the average ash content of Indian coals is more than 40% when compared to imported coals of less than 10% ash content. Keeping this in view and also in view of the mismatch between the pace of thermal capacity additions and growth in domestic coal production and the need for import of coal for power generation, a Committee of Central Electricity Authority (CEA) in their Report for Studying Range of Blending of Imported Coal with Domestic Coal (April 2012) broadly recommended that about 10-15% blending of imported coal by weight (15-22% on heat value basis) can generally be carried out in typical existing Indian power boilers designed for low quality Indian coals without envisaging any major problems; and they recommended that the maximum blending limits for Indian coal and typical imported coal with gross calorific value of around 5,000 Kilo Calories per Kg. would be in the range of 30% by weight. Accordingly, CEA has issued a letter in 2011 to all the State Power Secretaries, Thermal Power Generating Companies, Project Developers and Manufacturers of large power boilers mentioning that boilers shall be designed for blend ratio by weight of 30:70 (or higher) imported/high GCV coal: indigenous coal with the matching infrastructure for unloading, handling and blending.

(c) & (d): As per the high efficiency and high renewable scenario mentioned in the Integrated Energy Policy (IEP) Document of Planning Commission (August, 2006), by 2031-32, around 7 lakh megawatt (MW) of installed capacity with the following likely break up of capacities may be required:

Mode Capacity (MW)

Coal 269997

Gas 119815

Nuclear 63060

Hydro 150153

Renewable 104541

Total 707566

As per physical scenario assessed in Central Electricity Authority (CEA), considering 9% GDP growth rate, total energy requirement and peak demand (including captive demand) by 2031-32 is 4432 billion units (BU) or billion kilowatt hours (BKwh) and 722769 MW respectively. To meet this demand, the capacity required in the most feasible/likely scenario is expected to be as under:

Mode Capacity (MW)

Coal 388000

Gas 50000

Nuclear 50000

Hydro 80000

Renewable 170000

Total 763000

Share of coal based capacity is likely to be about 50% of the installed capacity in the country by the end of XV Five Year Plan i.e. 2031-32. The likely coal requirement for the above mentioned coal based capacity is of the order of 2400 millions tonnes. The projected overall import dependence for coal in 2031-32 ranges from 35-57%.

(e):Efforts are being made to enhance domestic coal production through taking up new projects in the public sector coal companies and development of coal blocks allocated to various Companies in public and private sectors. Also, efforts are being made to quickly develop the available reserves in the PSU coal companies through engaging mine developer operator mode. Further, emphasis is laid on enhancing coal washing for improving the quality of coal being supplied to power sector. However, in view of high growth as in economy and gap in demand and domestic supply of coal, dependence on imported coal will remain.