GOVERNMENT OF INDIA MINISTRY OF COAL LOK SABHA UNSTARRED QUESTION NO.1791 TO BE ANSWERED ON 13.12.2023

Underground and Opencast Mines

†1791. SHRI PASHUPATI NATH SINGH:

Will the Minister of Coal be pleased to state:

- (a) the details of the average coal production each year from both the underground and open-cast mines of the country, subsidiary / quality / quantity-wise;
- (b) whether there is any proposal to increase coal production from underground mines;
- (c) if so, the details thereof along with outline of the scheme in this regard; and
- (d) the steps being taken to increase coal production by adopting low cost technology?

ANSWER

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

- **(a):** The details of Subsidiary-wise, Quality and Quantity wise coal production from underground (UG) and open-cast (OC) mines in the country during last three years is enclosed as **Annexure.**
- **(b) & (c):** In order to increase coal production from underground mines, Coal India Limited (CIL) has prepared a roadmap wherein it has envisaged production from underground mines to reach about 100 MT by 2027-28 and beyond.

To achieve this quantum jump in UG production, CIL has formulated strategies that include use of more and more Mass Production Technology (MPT) like Continuous Miners (CM) wherever feasible, implementing large number of Highwall Mines to improve percentage of extraction and exploit idle coal which otherwise would be lost forever in the old / discontinued / running OC mines, planning high capacity UG mines with higher degree of digitization, revival of loss making mines where ever possible through introduction of MPT. Improvement in productivity of the current mines through reengineering and amalgamation etc.

- **(d):** The following steps being taken to increase coal production by adopting low cost technology:-
 - Utilizing indigenous machine technologies for mining operations and adoption of mechanisation of mines.

- To reduce the cost for sand stowing, coal companies utilizing bottom ash in some mines and also established processed over burden plants to replace the sand in some mines for stowing operation.
- Implementing better resource management practices to minimize waste and maximize resource utilization, thereby reducing overall production costs.
- Implementing energy-efficient technologies and practices to minimize energy consumption during the extraction and processing of coal, consequently reducing operational costs.
- Conducting regular cost audits and implementing cost optimization programs to identify areas where expenses can be reduced without compromising productivity or safety.
- Continuous miners are in operation.
- Use of high capacity Excavators, Dumpers and Surface Miner in Open Cast Mines.

(A) Subsidiary wise, Quality, Quantity wise, Opencast & Underground coal production during FY 2020-21 to FY 2022-23

Fig in Million Tonnes

Name of Subsidiaries	Quality/ Grade	Quantity Produced						
		Open cast Mines			Underground Mines			
		2020-21	2021-22	2022-23	2020-21	2021-22	2022-23	
ECL	Coking Coal	0.000	0.000	0.000	0.015	0.014	0.007	
	Non-Coking Coal	35.695	23.432	26.050	9.294	8.982	8.961	
BCCL	Coking Coal	22.776	28.236	33.030	0.608	0.806	0.686	
	Non-Coking Coal	1.272	1.470	2.463	0.000	0.000	0.000	
CCL	Coking Coal	14.842	16.989	20.397	0.201	0.175	0.157	
	Non-Coking Coal	47.324	51.102	54.827	0.222	0.581	0.706	
NCL	Coking Coal	0.000	0.000	0.000	0.000	0.000	0.000	
	Non-Coking Coal	115.042	122.431	131.169	0.000	0.000	0.000	
WCL	Coking Coal	0.000	0.000	0.000	0.181	0.158	0.094	
	Non-Coking Coal	46.873	54.665	61.396	3.221	2.883	2.793	
SECL	Coking Coal	0.000	0.000	0.000	0.219	0.225	0.248	
	Non-Coking Coal	138.430	130.987	155.364	11.957	11.302	11.394	
MCL	Coking Coal	0.000	0.000	0.000	0.000	0.000	0.000	
	Non-Coking Coal	147.478	167.667	192.821	0.535	0.500	0.441	
NEC	Coking Coal	0.000	0.000	0.000	0.000	0.000	0.000	
	Non-Coking Coal	0.036	0.028	0.200	0.000	0.000	0.000	
SCCL	Coking Coal	0.000	0.000	0.000	0.000	0.000	0.000	
	Non-Coking Coal	46.065	58.764	59.938	4.515	6.258	7.199	
Captive &	Coking Coal	4.952	4.283	5.393	0.993	0.817	0.748	
Others	Non-Coking Coal	63.087	84.973	115.294	0.250	0.482	1.414	
	Total	683.872	745.027	858.342	32.211	33.183	34.848	

Note: 1. Coking Coal includes (Steel-I, Steel-II, W-I, W-II, W-III, W-IV, W-V)

2.Non-Coking Coal includes (G1 to G17)

(B) Opencast & Underground coal production during FY 2020-21 to FY 2022-23 (Million Ton)

Year	Open cast	Under ground	Total Production			
2020-21	683.872	32.211	716.083			
2021-22	745.027	33.183	778.210			
2022-23	858.342	34.848	893.190			