

**GOVERNMENT OF INDIA  
MINISTRY OF COAL  
LOK SABHA  
STARRED QUESTION NO.252  
ANSWERED ON 15/12/2021**

**Reduction in Carbon Emission by CIL**

**\*252. SHRIMATI RITA BAHUGUNA JOSHI:**

Will the Minister of Coal be pleased to state :-

- (a) the details of the initiatives taken by the Coal India Limited (CIL) to reduce carbon emission during the last three years;
- (b) whether CIL has planned to run all their dumpers/ big trucks on Liquefied Natural Gas (LNG) fuel instead of fossil fuel;
- (c) if so, the details of the pilot programme, State- wise and mine-wise;
- (d) the details of the amount that will be saved by this initiative;
- (e) whether CIL will consider usage of only LNG/ CNG fuel based vehicles to further reduce the carbon emissions; and
- (f) if so, the details thereof?

**ANSWER**

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

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

**STATEMENT IN REPLY TO THE LOK SABHA STARREED QUESTION NO.252  
ANSWERED ON 15/12/2021 ASKED BY SHRIMATI RITA BAHUGUNA JOSHI  
REGARDING REDUCTION IN CARBON EMISSION BY CIL**

(a) The details of the initiatives taken by Coal India Limited (CIL) to reduce carbon emission during the last three years are as follows:

- (i) **First Mile Connectivity (FMC) projects:** CIL has taken up FMC projects to replace road transport by belt conveyor transport coupled with mechanized rapid loading system. These FMC projects will lower the consumption of diesel resulting in reduction in carbon emission. In addition to existing FMC capacity of 151 MTPA, CIL has taken up new 35 FMC Projects of 414.5 MTPA scheduled to be commissioned by FY2023-24. Out of 35 FMC Projects, 5 Projects of 70 MTPA capacity has already been commissioned and 1 Project of 12 MTPA is under Trial run.
- (ii) **Use of low emission engines:** For Diesel driven HEMM, CIL has introduced emission norm certified electronically controlled engines with reduced emission level.
- (iii) **Energy Efficiency Measures:** Efficient use of energy ultimately translates into reduction of carbon footprint. CIL has been taking various energy efficiency measures like use of LED lights, energy efficient ACs, Super Fans, Efficient Water Heaters, Auto timer switches in street lights, capacitor banks etc.
- (iv) **Creating Carbon sink through extensive plantation:** During last 3 years, CIL has planted more than 61 Lakh saplings covering 2,632 Ha of area in and around mine leasehold.
- (v) **Promoting renewables:** CIL has installed 6.63 MW of solar power plants, of which 2 MW is ground mounted and 4.63 MW is rooftop installation.

(b) CIL has taken an initiative for techno - economic feasibility study for introduction of dual fuel (Diesel - LNG) operation in the existing dumpers through a pilot project. Based on the outcome of pilot project, strategy for adoption of LNG for dual fuel operation in dumpers will be finalized.

(c) Coal India Ltd. has signed an MOU with GAIL and BEML on 31.08.2021 for conducting a pilot project on dual - fuel (Diesel - LNG) operation by retrofitting LNG Kit in 02 nos. existing BEML make 100T Dumper at Lakhanpur OCP of Mahanadi Coalfields Ltd, Orissa.

(d) Amount of saving in financial terms is a variable entity and depends on multiple factors such as cost of LNG, percentage replacement of diesel by LNG, size of dumper, efficiency of operation, ease of maintenance of LNG system, operating conditions etc. Amount of Savings and other financial details can be ascertained only after the completion of on-going pilot study.

(e) & (f) Depending on the experience of use of LNG in dumpers (dual fuel mode), CIL may finalize a view on the use of LNG vehicles subject to availability of fuel, required machines/vehicles and also the place where vehicles have to ply.

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