GOVERNMENT OF INDIA
MINISTRY OF COAL

RAJYA SABHA
UNSTARRED QUESTION NO. 1789
TO BE ANSWERED ON 17.03.2025

Carbon emissions in mining operations

1789 # Shri Sanjay Singh:

Will the Minister of **COAL** be pleased to state:

(a) the overall strategy of Government to reduce carbon emissions in mining operations and whether any National or State level policy has been implemented in this regard, if so, the details thereof;

(b) the modern technologies that the mining companies are being encouraged to adopt in order to reduce carbon emissions and environmental damage; and

(c) the number of times mining companies are required to review their Environmental Impact Assessment (EIA), particularly with reference to carbon emissions?

ANSWER

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

(a): In line with India's Panchamrit & Nationally Determined Contribution (NDC) commitments, Ministry of Coal is promoting sustainable coal mining and reduction in carbon footprint by encouraging the following:

- **Greening Initiatives**—**Bio-Reclamation/Plantation**: The Coal/Lignite PSUs have been constantly making efforts to minimize the footprints of coal mining through sustained reclamation and afforestation of areas in and around their operating mines.
- **Energy Efficiency Measures**: Coal/Lignite PSUs have been taking various energy conservation and efficiency measures over the years to reduce carbon intensity such as replacement of conventional lights with LED lights, installation of energy-efficient air conditioners, super fans, deployment of EVs and installation of efficient water heaters, energy-efficient motors for pumps, auto timers in street lights etc.
- **Green Credit Programme:** Coal PSUs are also participating in extensive plantation under Green Credit Program launched by MoEF&CC.
- **First Mile Connectivity (FMC) projects:** The Coal PSUs have taken steps to upgrade the mechanized coal transportation and loading system under 'First Mile Connectivity' projects. Commissioning of FMC projects in coal mining areas reduces consumption of diesel significantly and therefore reduces carbon emissions.

- **Deployment of Blast free technology in coal mining:** Coal companies are deploying modern equipment having environment friendly features, like Surface Miner, Continuous Miner in coal mining, which eliminates the drilling, blasting and crushing operations in coal and hence, in turn, obviates pollution caused due to these operations. Rippers are also being deployed for blast-less removal of overburden in some mines.
- **Renewable Energy and clean coal initiatives**: Coal PSUs have also started commissioning Renewable Energy power projects. Additionally, they are venturing into various clean coal technologies like Coal gasification, Coal Bed methane (CBM) etc.

(b): Sustainable coal production is being promoted by ensuring compliance with applicable environmental laws like prior Environmental Clearance (EC), Forest Clearance (FC), Consent to Operate (CTO), Consent to Establish (CTE) etc. In addition, the steps adopted to reduce carbon emissions and environmental impact due to coal mining includes:

- Use of surface miners, continuous miners, highwall / longwall mining, etc.
- Increasing installation & usage of First Mile Connectivity (FMC) initiatives to reduce coal transport via roads.
- Improving energy efficiency across coal mining projects.
- Reclamation and eco-restoration of mined-out areas including development of eco-parks, mine tourism sites, etc.
- Conceptualizing re-purposing of de-coaled areas for sustainable uses like installation of renewable energy generation plants, development of agricultural avenues for surrounding communities, development of mine sumps, etc.

(c): At present, there is no specific directive / guideline stipulating the number of times mining companies are required to review their Environmental Impact Assessment (EIA), particularly with reference to carbon emissions.

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