GOVERNMENT OF INDIA MINISTRY OF MINES

RAJYA SABHA UNSTARRED OUESTION NO. 1716

ANSWERED ON 15.12.2025

GREEN MINING AND SUSTAINABLE PRACTICES

1716. SHRI SANJAY RAUT:

Will the Minister of MINES be pleased to state:

- (a) whether Government has taken note of the slow progress in adopting green mining practices across major mineral-producing States;
- (b) the steps being taken to promote zero-waste mining, cleaner extraction technologies and the use of renewable energy, including solar installations at mine sites;
- (c) whether Government has formulated uniform standards for mine closure, rehabilitation and ecological restoration and the details thereof;
- (d) whether Government proposes to introduce a national Green Mining Index to assess and rank States and mining companies on sustainability parameters; and
- (e) the timeline for full implementation of these measures to ensure environmentally responsible mineral development?

ANSWER

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

- (a) & (b): Under the National Mineral Policy, 2019, specific emphasis has been given on sustainable development and eco-sensitive mining in the entire country. Indian Bureau of Mines implements Star Rating system of mines, which covers parameters of Sustainable Development Framework including zero-waste mining, cleaner extraction technologies and use of renewable energy, including solar installations at mine sites. The number of 5-star rated mines for the last five assessed years i.e. 2019-20 to 2023-24 are 40, 40, 76, 68 and 95, which shows progress made in adopting green mining practices across major mineral-producing States. To further encourage the adoption of green mining and sustainable practices, a 7-Star Rating system has been introduced in July 2025, under which the five-star rated mines with exemplary performance in green mining initiatives have been awarded 7- star rating. Of the 95 5-star rated mines for assessed year 2023-24, 3 mines were awarded 7-star.
- (c): Uniform standards have been formulated for mine closure, rehabilitation and ecological restoration. A comprehensive mine closure policy has been implemented for the major mineral mines in the country. Since August 2003, provisions for progressive and final mine closure

have been incorporated as an essential component of mining plan to ensure sustainable and scientific mining.

Mining plan includes a chapter on Environment, Progressive Mine Closure Plan (PMCP) and Final Mine Closure Plan (FMCP). Reclamation & rehabilitation of mined out area, and management of air & water quality, top soil and tailing dump are incorporated in these plans. The holder of a mining lease is not allowed to abandon a mine unless FMCP duly approved by the competent authority, is implemented i.e. protective, reclamation and rehabilitation work in accordance with the FMCP have been carried out. As per Rule 26 of Mineral Conservation and Development Rules (MCDR), 2017, a lessee is required to submit a yearly report before 1st day of July every year setting forth the extent of protective and rehabilitative works carried out as envisaged in the approved mine closure plan.

- (d): Ministry of Mines has already rolled out a State Mining Readiness Index (SMRI), under which sustainable mining is one of the four indicators used for assessing State's relative contribution in developing the country's mining sector along with sustainable development. This indicator includes sustainability parameters such as utilization of waste dump material; construction & maintenance of check dams/ garland drains/ retaining walls/ dust suppression measures; water quality monitoring stations; and status of Star Rating system.
- (e): As per Rule 35(4) of MCDR, 2017, every holder of a mining lease is mandated to achieve at least three-star rating within a period of four years from the date of commencement of mining operations, and thereafter, at least maintain the same on year-on-year basis.
