

GOVERNMENT OF INDIA
MINISTRY OF COAL

RAJYA SABHA
UNSTARRED QUESTION NO. 1148
TO BE ANSWERED ON 10.03.2025

Long-term coal strategy and carbon emission reduction measures

1148 Shri Sanjeev Arora:

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

- (a) the details of a long-term strategy for the role of coal in country's energy security, particularly in light of increasing pressures from climate change policies, and the need to reduce greenhouse gas emissions from the energy sector;
- (b) feasibility of deploying carbon capture and storage (CCS) technologies in country's coal-fired power plants, and Government's plans to incentivize such investments; and
- (c) steps taken by Government to integrate CCS with existing coal-fired power plants to reduce the carbon emissions from the sector and meet country's climate targets under the Paris Agreement?

ANSWER

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

(a): The Ministry of Coal has made a roadmap to achieve the vision of "Viksit Bharat 2047" in the coal sector wherein one of the goals is "Energy Independence". To further this goal, the Ministry of Coal has set a vision to increase coal production to 1.5 billion tonnes by FY 2030. This initiative is aligned with the Aatmanirbhar Bharat mission, which focuses on reducing India's dependency on imported coal and strengthening domestic coal production thereby ensuring energy security for the nation.

Besides, as informed Ministry of Power, in order to meet the estimated electricity demand by the year 2031-32, generation planning studies have been carried out by Central Electricity Authority (CEA). As per the study results, it is envisaged that to meet the base load requirement of the country in 2032, the required coal & lignite based installed capacity is 283 GW against the present installed capacity of 221.7 GW. Considering this, Government of India has proposed in November 2023 for setting up of an additional minimum 80 GW coal-based capacity by 2031-32.

(b) & (c): As informed by Ministry of Power, NTPC has taken up the following small-scale pilot/R&D projects for flue gas CO₂ capture and utilization.

- A 10 tons per day flue gas CO₂-to-Methanol project at NTPC Vindhyachal, Madhya Pradesh.
- A 10 tons per day flue gas CO₂-to-Gen-4 Ethanol project at NTPC Lara, Chhattisgarh.

The projects are in demonstration stage. No dedicated study has been conducted to evaluate the impact of CCUS technology on local pollution and emission challenges.
