

GOVERNMENT OF INDIA  
MINISTRY OF STEEL  
**RAJYA SABHA**  
**UNSTARRED QUESTION NO. 1279**  
**FOR ANSWER ON 31/07/2023**

**USE OF NET-ZERO TECHNOLOGY IN STEEL SECTOR**

1279. Shri Mohammed Nadimul Haque:

Will the Minister of STEEL be pleased to state:

- (a) the steps taken by Government in Scaling up Net-Zero Technologies like Carbon Capture and Storage (CCS) plants;
- (b) the steps taken by Government to encourage green steel consumption in end-use; and
- (c) plans of Government to invest in carbon capture, utilisation and storage?

**ANSWER**

THE MINISTER OF STATE IN THE  
MINISTRY OF STEEL

(SHRI FAGGAN SINGH KULASTE)

(a)&(c): Government has taken following initiatives to scale up Net- Zero Technologies like Carbon Capture and Storage (CCS) plants and to Invest in carbon capture, utilisation and storage:-

- i. NITI Aayog has conducted study oriented towards formulating framework for CCUS policies in India and a viable economic model for CCUS adoption and implementation in various industries and sectors.
- ii. A dialogue was initiated between Department of Energy, United States and Department of Science and Technology (DST) on Carbon Capture Utilisation & Storage (CCUS) Technologies among others. One of the notable outcomes of the dialogue is the participation of India in the multilateral platform for Accelerating CCUS Technologies (ACT).
- iii. CCUS is one of the identified innovation challenges in the Mission Innovation (MI) Programme, a global initiative to accelerate the global clean energy innovation in which the Department of Science & Technology (DST) is an active partner. The DST has already funded 19 R&D projects in the area of CCUS under the MI umbrella, partnering with 13 MI countries as of August 2020.
- iv. Oil and Natural Gas Corporation Ltd. (ONGC) has signed Memorandum of Understanding (MoU) with Indian Oil Corporation Ltd. (IOCL) for capturing of CO<sub>2</sub> from IOCL's Koyali refinery and its utilization in two reservoirs of Gandhar field for CO<sub>2</sub> sequestration. Additionally, ONGC has also signed MoU with Equinor and Shell to collaborate on CCUS/CCS studies in India.

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v. National Thermal Power Corporation (NTPC) has undertaken a 10 tonnes per day (TPD) CO<sub>2</sub> to Methanol pilot project at NTPC Vindhyachal. Under this project, 20 TPD CO<sub>2</sub> Capture plant has been commissioned on 15<sup>th</sup> August 2022. NTPC has also taken up a CO<sub>2</sub> storage potential mapping study for Coal Bed Methane (CBM) rich Cat-1 fields in India in collaboration with IIT Bombay.

(b) 13 (Thirteen) Task Forces constituted by Ministry of Steel with engagement of industry, academia, think tanks, S&T bodies, different Ministries and other stakeholders to discuss, deliberate and recommend upon different levers of decarbonisation of steel sector. Task Force on Demand Generation is constituted to define a framework for creating demand of green steel across the key end-use sectors.

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