LOK SABHA UNSTARRED QUESTION No. 2526 TO BE ANSWERED ON 03rd August, 2023

CO2 CAPTURE HUBS

2526. SHRI GAURAV GOGOI:

पेट्रोलियम और प्राकृतिक गैस मंत्री

Will the Minister of PETROLEUM AND NATURAL GAS be pleased to state:

- (a) whether the Government has any plans to develop CO2 capture hubs for marine transport of CO2 and if so, the details thereof including capture location, transport distance, capacity, delivery location, shipping schedule, number of ships, service speed, technical restrictions etc.;
- (b) the details of expenditure plans by the Government related to electricity consumption for booster compressor, dehydration system, control systems, manpower cost for operation and inspection, overhead consumables, spares as well as regular maintenance;
- (c) whether the Government has any plans to develop storage of CO2 in saline aquifers and if so, the details thereof;
- (d) whether the Government has any plans to develop storage potential of CO2 in basalts and if so, the details thereof; and
- (e) whether the Government has any plans to ensure safety and environmental concerns of the Carbon Capture Utilisation and Storage (CCUS) projects and if so, the details thereof?

ANSWER

पेट्रोलियम और प्राकृतिक गैस मंत्रालय में राज्य मंत्री (श्री रामेश्वर तेली)

MINISTER OF STATE IN THE MINISTRY OF PETROLEUM & NATURAL GAS (SHRI RAMESWAR TELI)

(a) & (e): Carbon Capture, Utilization and Storage (CCUS) is one of the technology pathways which help in reducing net emission and support to accomplish net zero by 2070 by decarbonising large industrial sectors particularly steel, cement, thermal power plants, fertilizer and petrochemical industries etc. The work on CCUS is at conceptual stage to make CO_2 capture economically viable. Four inter-ministerial committees have been constituted by NITI Aayog to study the challenges and finalize recommendations in the area of safety and technical standard development, carbon capture projects, carbon utilization projects, and carbon transportation and storage.

Department of Science and Technology (DST) has supported various activities in area of CCUS which inter alia include:

- R&D projects through national and bilateral efforts to identify and prioritize breakthrough technologies.
- two National Centres of Excellence to facilitate capturing and mapping of current R&D and innovation activities and develop a network of researchers, industries and other stakeholders.
- > a multilateral research project to study the risk associated with permanent storage of CO_2 in basalts.
- > 25 CCUS projects (capture:10, utilization:10 & storage:5)
