GOVERNMENT OF INDIA MINISTRY OF NEW AND RENEWABLE ENERGY

RAJYA SABHA

UNSTARRED QUESTION NO. 2074

ANSWERED ON 18/03/2025

GREEN HYDROGEN MISSION

2074. SHRI SANJAY SETH

Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

- (a) the detailed data on the progress of the National Green Hydrogen Mission;
- (a) the detailed data on the number of Green Hydrogen Hubs identified under the mission in 2024:
- (b) the steps taken to address the economic sustainability challenges of green hydrogen production under the mission in 2024; and
- (c) whether any necessary infrastructure has been built under the mission in 2024, and if so, the details thereof, and if not, the reasons therefor?

ANSWER

THE MINISTER OF STATE FOR NEW & RENEWABLE ENERGY AND POWER (SHRI SHRIPAD YESSO NAIK)

(a) to (d) The Ministry of New and Renewable Energy (MNRE) is implementing the National Green Hydrogen Mission, with an objective to make India a global hub of production, usage and export of Green Hydrogen and its derivatives.

India's Green Hydrogen production capacity is likely to reach 5 Million Metric Tonne per annum by 2030.

A production capacity of 4,12,000 tonnes per annum of Green Hydrogen has been allocated, while electrolyser manufacturing capacity of 3,000 MW per annum has been assigned.

Scheme Guidelines for Implementation of SIGHT Programme – Component – II: Incentive for Procurement of Green Ammonia Production (under Mode – 2A) and Component – II: Incentive for Procurement of Green Hydrogen Production (under Mode – 2B), under the Mission have been issued on 16^{th} January 2024.

Additionally, scheme guidelines have been issued for implementing Green Hydrogen-based pilot projects in the steel, shipping, and road transport sectors.

- i. Total three pilot projects have been sanctioned in the steel sector.
- ii. Five pilot projects are sanctioned consisting total of 37 vehicles (buses and trucks), and 9 hydrogen refueling stations. The vehicles that will be deployed for the trials include 15 hydrogen fuel cell-based vehicles and 22 hydrogen internal combustion engine-based vehicles. These vehicles will run on 10 different routes across the country viz., Greater Noida Delhi Agra, Bhubaneshwar Konark Puri, Ahmedabad Vadodara Surat, Sahibabad Faridabad Delhi, Pune Mumbai,

Jamshedpur – Kalinga Nagar, Thiruvananthapuram – Kochi, Kochi – Edappally, Jamnagar – Ahmedabad, and NH-16 Visakhapatnam – Bayyavaram.

The Scheme Guidelines for setting up Hydrogen hubs in India under the National Green Hydrogen Mission (NGHM) were notified on 15th March 2024. The NTPC Green Energy Limited Green Hydrogen Hub Project at Pudimadaka near Visakhapatnam in Andhra Pradesh is the first Green Hydrogen Hub under the Mission. The Ministry of Ports, Shipping and Waterways has also identified three major ports viz. Deendayal, Paradip and V.O. Chidambaranar (Tuticorin) Ports to be developed as hydrogen hubs.

The Scheme Guidelines for funding of testing facilities, infrastructure, and institutional support for development of Standards and Regulatory framework under the Mission have been issued on 4th July 2024.

Other steps taken to ensure timely completion of Mission's objectives, include the following:

- i. Green Hydrogen/Green Ammonia Plants commissioned on or before 31.12.2030, and which utilize renewable energy for the production of Green Hydrogen or Green Ammonia, have been granted exemption from the payment of Inter State Transmission System (ISTS) charges for a period of 25 years, starting from the date of commissioning of the project.
- ii. Standalone plants producing Green Hydrogen/Green Ammonia by way of electrolysis of water using Renewable Energy, have been exempted from requirement of prior Environmental Clearance under the provisions of the Environment Impact Assessment Notification 2006.
- iii. Duty benefits under Section 26 of SEZ Act, 2005 have been allowed to the units for installation as well as O&M of renewable energy equipment exclusively for captive consumption of the unit.
- iv. Exemption has been granted from Approved List of Models & Manufacturers (ALMM) for Solar PV Modules and Revised List of Models & Manufacturers (RLMM) for Wind Turbine models requirements for Renewable Energy plants located inside an Special Economic Zone (SEZ) or Export Oriented Unit (EOU) and supplying power exclusively for production plants of Green Hydrogen (or its derivatives), which are located inside an SEZ or set up as an EOU.
