GOVERNMENT OF INDIA
MINISTRY OF NEW AND RENEWABLE ENERGY
RAJYA SABHA
UNSTARRED QUESTION NO. 1101
ANSWERED ON 29/07/2025

PROGRESS OF GREEN HYDROGEN MISSION

1101. SHRI IRANNA KADADI

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;
(b) the detailed data on the number of green hydrogen hubs identified under the mission in 2025;
(c) the steps taken to address the economic sustainability challenges of green hydrogen production under the mission in 2025; and
(d) whether any necessary infrastructure has been built under the mission in 2025, 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 Government of India is implementing the National Green Hydrogen Mission (NGHM), with an objective to make India a global hub of production, usage and export of green hydrogen and its derivatives.

Strategic Interventions for Green Hydrogen Transition (SIGHT) is a key component of the Mission which provides financial incentives for production of green hydrogen and electrolyser manufacturing. A production capacity of 8,62,000 tonnes per annum of green hydrogen has been allocated, while electrolyser manufacturing capacity of 3,000 MW per annum has been allocated.

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

i. Total seven pilot projects have been sanctioned for use of green hydrogen in the steel sector.
ii. Five pilot projects are sanctioned for use of green hydrogen in road transport sector consisting total of 37 vehicles (buses and trucks), and 9 hydrogen refueling stations. 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 following green hydrogen hubs have been identified under the mission so far:

i. M/s NTPC group, through its subsidiary, NTPC Green Energy Limited, has identified a Green Hydrogen Hub project at Pudimadaka, Andhra Pradesh.
ii. The Ministry of Ports, Shipping and Waterways has identified three major ports viz. Deendayal, Paradip and V.O. Chidambaranar (Tuticorin) Ports as hydrogen hubs.
iii. Four Hydrogen Valley Innovation Clusters (HVIC) have been identified namely Jodhpur HVIC, Pune HVIC, Bhubaneshwar HVIC and Agency for New and Renewable Energy Research and Technology (ANERT) HVIC, Kerala.

The Ministry of New and Renewable Energy has also awarded 23 projects to various research institutions under the research & development scheme of NGHM for research, innovation and development on specific topics covering hydrogen production, applications and safety.

Five technical institutions have been shortlisted for establishment of testing infrastructure.
The Green Hydrogen Certification Scheme of India (GHCI) has been published by the Ministry of New and Renewable Energy on 29th April 2025 to establish a transparent and credible framework for the certification of Green Hydrogen produced in the country.

The steps taken to address the economic sustainability challenges of green hydrogen production are as follows:

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. Duty benefits under Section 26 of SEZ Act, 2005 have been allowed to the units for installation as well as Operation and Maintenance (O&M) of renewable energy equipment exclusively for captive consumption of the unit.

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