

GOVERNMENT OF INDIA
MINISTRY OF NEW AND RENEWABLE ENERGY
LOK SABHA
UNSTARRED QUESTION NO. 555
ANSWERED ON 23/07/2025

HYDROGEN PRODUCTION CAPACITY

555. SHRI P C MOHAN

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

- (a) the current status of hydrogen production capacity in the country under the National Green Hydrogen Mission and the targets set for the next five and ten years;
- (b) the number and location of hydrogen production or pilot facilities established or proposed across the country including Karnataka particularly in Bengaluru;
- (c) whether the Government has identified specific industrial clusters, technology parks or public-private partnerships for hydrogen-based energy projects in Karnataka;
- (d) the incentives, policy frameworks or viability gap funding being offered to encourage green hydrogen production, storage and utilisation; and
- (e) the role of research institutions and startups in advancing hydrogen technologies particularly in Bengaluru and the steps being taken by the Government to support innovation in this sector?

ANSWER

THE MINISTER OF STATE FOR NEW & RENEWABLE ENERGY AND POWER

(SHRI SHRIPAD YESSO NAIK)

(a) & (b) The National Green Hydrogen Mission has set targets to establish green hydrogen production capacity of 5 Million Metric Tonnes (MMT) per annum by 2030. As per the information available, the current status of green hydrogen production capacity, is placed at **Annexure**.

A lab scale green hydrogen pilot project has been commissioned at IISc Bengaluru for production of green hydrogen through biomass route.

(c) No.

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

The policy framework developed to encourage 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.

The Mission, through viability gap funding, has supported pilot projects for utilizing green hydrogen in steel, shipping and road transport sectors.

(e) The Ministry of New and Renewable Energy (MNRE) had issued scheme guidelines for the implementation of the R&D scheme under the National Green Hydrogen Mission. MNRE has awarded 23 projects to various research institutions for research, innovation and development on specific topics covering hydrogen production, applications and safety. This includes one project awarded to M/s Hylan Power One Pvt. Ltd. in Bengaluru, Karnataka. In addition, a lab scale green hydrogen pilot project has been commissioned at IISc Bengaluru for production of green hydrogen through biomass route.

Current status of green hydrogen production capacity in India

- i. M/s ACME Cleantech Solutions Pvt. Ltd. has built a green ammonia integrated demonstration and pilot plant in Bikaner, Rajasthan with green ammonia production capacity of 5 metric tonnes per day and green hydrogen production capacity of 500 normal cubic meter per hour.
- ii. M/s Bharat Petroleum Corporation Limited (BPCL) has commissioned a green hydrogen plant with a capacity of 0.7 kilotonnes per annum at its Bina refinery.
- iii. National Institute of Solar Energy has commissioned a green hydrogen plant with a capacity of 10 normal cubic meters per hour in Gurugram, Haryana.
- iv. M/s INOX India Limited has commissioned a green hydrogen production plant of 190 tonnes per annum capacity at Chittorgarh, Rajasthan.
- v. M/s Hygenco Green Energies Pvt. Ltd. has commissioned a green hydrogen plant of 16 tonnes per annum capacity in Ujjain, Madhya Pradesh.
- vi. M/s Hygenco Green Energies Pvt. Ltd. has also commissioned a green hydrogen plant of 78 tonnes per annum capacity in Hisar, Haryana.
- vii. Additionally, M/s Hygenco Green Energies Pvt. Ltd. has also set up a green hydrogen plant of 230 tonnes per annum capacity in Chhatrapati Sambhajanagar, Maharashtra.
- viii. M/s SJVN Limited has inaugurated India's multi-purpose (Combined Heat and Power) Green Hydrogen Pilot Project at SJVN's 1,500 MW Nathpa Jhakri Hydro Power Station (NJHPS) in Jhakri, Himachal Pradesh. The state-of-the-art Green Hydrogen Pilot Project has capacity to produce 14 kilograms of Green Hydrogen daily during 8 hours of operation. In addition, it has the capacity to generate electricity through its fuel cell of 25 kW capacity.
- ix. M/s THDC India Limited has developed a green hydrogen plant with a production capacity of 50 kilograms per day in Rishikesh, Uttarakhand.
- x. M/s Larsen & Toubro Limited has set up a green hydrogen production plant of 15 tonnes per annum capacity in Hazira, Gujarat.
- xi. M/s Oil India Limited has commissioned a green hydrogen plant designed to generate 10 kilograms of green hydrogen in 8 hours and can produce upto 30 kilograms per day.
- xii. M/s Hero Future Energies has commissioned a green hydrogen production plant with a capacity of 25 tonnes per annum in Tirupati, Andhra Pradesh.
- xiii. M/s GAIL (India) Limited has commissioned a 10 MW green hydrogen plant at Vijaipur, Madhya Pradesh.
- xiv. M/s Adani New Industries Limited (ANIL) has commissioned a 5 MW green hydrogen pilot plant in Kutch, Gujarat.
- xv. M/s NTPC Limited has commissioned a green hydrogen plant at its Kawas township, Surat, Gujarat.
- xvi. M/s NTPC Limited has commissioned a green hydrogen plant at Leh, Ladakh.

