GOVERNMENT OF INDIA MINISTRY OF NEW AND RENEWABLE ENERGY

LOK SABHA

UNSTARRED QUESTION NO. 4142

ANSWERED ON 26/03/2025

GREEN HYDROGEN PRODUCTION

4142. DR. M P ABDUSSAMAD SAMADANI

(SHRI SHRIPAD YESSO NAIK)

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

- (a) whether the Government is aware that green hydrogen, the clean energy powerhouse derived from splitting water using renewable electricity is rapidly emerging as a transformative force in the global energy landscape and if so, the details thereof; and
- (b) whether the Government has taken any concrete steps to achieve the ambitious targets of producing five million metric tonnes of green hydrogen annually by the year 2030 not only to reduce its reliance on fossil fuels but also to create an investment pool worth 8 trillion Indian rupees and generate 6 lakh new jobs and if so, the details thereof?

ANSWER

THE MINISTER OF STATE FOR NEW & RENEWABLE ENERGY AND POWER

(a)&(b) Yes, the Government is aware that green hydrogen produced through splitting of water using renewable electricity is emerging as a transformative force in the global energy landscape.

The Government of India 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.

The expected outcomes of the National Green Hydrogen Mission, by 2030, are as follows:

- i. India's green hydrogen production capacity is likely to reach 5 Million Metric Tonnes (MMT) per annum, contributing to reduction in dependence on import of fossil fuels. Achievement of Mission targets is expected to reduce a cumulative ₹ 1 lakh crore worth of fossil fuel imports by 2030.
- ii. This is likely to leverage over ₹8 lakh crore in total investments and create over 6 lakh jobs.

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.

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 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.

Other steps taken to achieve the green hydrogen production target by 2030, 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 O&M of renewable energy equipment exclusively for captive consumption of the unit.
- iii. 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.
