GOVERNMENT OF INDIA MINISTRY OF NEW AND RENEWABLE ENERGY LOK SABHA

UNSTARRED QUESTION NO. 3169

ANSWERED ON 19/03/2025

CHALLENGES FACED BY GREEN HYDROGEN PROJECTS

3169. DR. MALLU RAVI

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

- (a) whether the Government acknowledges the key challenges faced by green hydrogen projects including rising electrolyser costs, lack of offtake agreements and insufficient supportive policies; and
- (b) if so, the details thereof and the steps being taken to mitigate these issues and ensure the successful implementation of green hydrogen projects in India?

ANSWER

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

(a)&(b) 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.

Strategic Interventions for Green Hydrogen Transition (SIGHT) is a key component of the Mission, which provides incentives for production of Green Hydrogen and Electrolyser Manufacturing.

- i. Under the incentive scheme for Green Hydrogen production, a Green Hydrogen production capacity of 4,12,000 tonnes per annum has been allocated.
- ii. Under the incentive scheme for Electrolyser Manufacturing, an electrolyser manufacturing capacity of 3,000 MW per annum has been allocated.

In order to facilitate domestic offtake, following steps have been taken:

- i. Scheme Guidelines for Implementation of SIGHT Programme Component II: Incentive for Procurement of Green Ammonia Production (under Mode 2A i.e. demand aggregation for Green Ammonia) have been issued.
- ii. Scheme Guidelines for Implementation of SIGHT Programme Component II: Incentive for Procurement of Green Hydrogen Production (under Mode 2B i.e. demand aggregation for Green Hydrogen) have been issued.
- iii. Scheme Guidelines have also been issued to support Green Hydrogen based pilot projects under the Mission in steel, shipping and road transport sectors.

Other steps taken to ensure successful implementation of Green Hydrogen projects, 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.

The mission objectives are also supported by the following initiatives at state level:

- i. Dedicated Green Hydrogen policies notified by the states of Andhra Pradesh, Maharashtra, Uttar Pradesh, and West Bengal
- ii. Facilitative provisions under the Renewable Energy or Energy or Industrial policies notified by the states of Himachal Pradesh, Madhya Pradesh, Odisha, Telangana, Rajasthan, Assam, and Chhattisgarh.
