GOVERNMENT OF INDIA MINISTRY OF NEW AND RENEWABLE ENERGY LOK SABHA UNSTARRED QUESTION NO. 1570

ANGWEDED ON 04/12/2024

ANSWERED ON 04/12/2024

INVESTMENT IN GREEN HYDROGEN

1570. SHRI NARESH GANPAT MHASKE SHRI RAJESH VERMA DR. SHRIKANT EKNATH SHINDE SMT. SHAMBHAVI

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

- (a) the steps taken by the Government for green hydrogen production, utilization and export under the recently unveiled vision;
- (b) the steps being taken by the Government to ensure investments in the green hydrogen sector and to create jobs;
- (c) the measures taken for green hydrogen production by 2030 and the manner in which these will contribute to India's decarbonization and energy goals;
- (d) whether the Government has signed any strategic international collaborations for research and development in green hydrogen technology and if so, the details thereof; and
- (e) the manner in which these policies are expected to support private sector involvement in the green hydrogen industry?

ANSWER

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

(a)to (e) The Ministry of New and Renewable Energy 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.

Government has launched several initiatives under the Mission, including scheme guidelines for incentive schemes for production of Green Hydrogen and electrolyser manufacturing under the Strategic Interventions for Green Hydrogen Transition (SIGHT) Programme.

A production capacity of 4,12,000 tonnes per annum of Green Hydrogen has been allocated, while electrolyser manufacturing capacity of 1,500 MW per annum has been assigned under Tranche I, with companies shortlisted for an additional allocation of 1,500 MW under Tranche II.

Additionally, scheme guidelines have been issued for implementing Green Hydrogen-based pilot projects in the steel, shipping, and road transport sectors, as well as for establishing hydrogen hubs, advancing research and development initiatives, fostering skill development, and creating testing facilities.

Other steps taken by the Government to encourage investments in the Green Hydrogen sector, 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 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 Operation and Maintenance (O&M) of renewable energy equipment exclusively for captive consumption of the unit.
- iv. Exemption has been granted from Approved List of Models and Manufacturers (ALMM) and Revised List of Models & Manufacturers (RLMM) 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 expected outcomes of the Mission, by 2030, are as follows:

- i. India's Green Hydrogen production capacity to reach approximately 5 Million Metric Tonnes (MMT) per annum.
- ii. Leverage over ₹8 lakh crore total investments and create over 6 lakh jobs.
- iii. Nearly 50 MMT per annum of CO2 emissions are expected to be averted.

The Ministry has established cooperation frameworks in the field of Hydrogen technology through Memoranda of Understanding/Letters of Intent/Joint Declarations of Intent with Australia, Finland, France, Germany, the Netherlands, Saudi Arabia, the UAE and Uzbekistan.

In addition to the above, under the Strategic Clean Energy Partnership with United States, an India-US Hydrogen Task Force has been formed. Further, Green/Clean Hydrogen has also been identified as a focus area under the India-US New and Emerging Renewable Energy Technology Action Platform (RETAP).
