GOVERNMENT OF INDIA
MINISTRY OF NEW AND RENEWABLE ENERGY
LOK SABHA
UNSTARRED QUESTION NO. 506
ANSWERED ON 23/07/2025

GREEN HYDROGEN CERTIFICATE SCHEME

506. SHRI PARBHUBHAI NAGARBHAI VASAVA
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Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

(a) the details of major objectives and features of the Green Hydrogen Certification Scheme;
(b) the manner in which the said scheme ensures transparency, monitorability and global credibility in India's green hydrogen ecosystem;
(c) the targets set under the National Green Hydrogen Mission (NGHM) in terms of green hydrogen production capacity, renewable energy promotion, investment and employment by 2030 particularly in Durg and Bemtara districts of Durg Lok Sabha Constituency in Chhattisgarh;
(d) the role of the Micro, Small and Medium Enterprises (MSMEs) in the green hydrogen supply chain and the key steps taken to integrate the same with NGHM;
(e) the measures taken in Sidhi Lok Sabha Constituency with regard to the said Green Hydrogen Certification Scheme; and
(f) whether any green hydrogen production or related pilot projects have been proposed or implemented in the State of Rajasthan and if so, the details thereof?

ANSWER

THE MINISTER OF STATE FOR NEW & RENEWABLE ENERGY AND POWER

(SHRI SHRIPAD YESSO NAIK)

(a)&(b) The Green Hydrogen Certification Scheme of India (GHCI) has been published by the Ministry of New and Renewable Energy in April 2025 to establish a transparent and credible framework for the certification of Green Hydrogen produced in the country.
The major objectives of the scheme are as follows:-

i. To outline the governance structure of the certification mechanism;
ii. To provide details of the scope and system boundaries for green hydrogen certification procedure;
iii. To define the monitoring requirements for green hydrogen production and its emissions;
iv. To establishing a robust verification approach for green hydrogen projects and designate nodal authority for issuing green hydrogen certification;

v. To develop a mechanism for reporting green hydrogen production and implement a system for continuous tracking of data (chain of custody) to ensure transparency and accountability in Green Hydrogen production and end use;
vi. To establish the green hydrogen certification procedure as Guarantee of Origin (GO).

GHCI aims to provide a holistic framework for the measurement, monitoring, and certification of green hydrogen production in India. It emphasizes transparency, accountability, aligning with national energy transition and climate goals, thereby contributing to the overall success of the National Green Hydrogen Mission.
Key features of the scheme are as follows:

(i) Green Hydrogen is defined as hydrogen that has a carbon footprint of 2 kg CO_2 equivalent or less per kg, measured from production to the factory gate (well-to-gate approach).
(ii) The certification structure includes a Concept and Facility Level Certificate at the construction stage, and Provisional and Final Certificates at the production stage.
(iii) Producers are required to appoint Accredited Carbon Verification (ACV) agencies, approved by the Bureau of Energy Efficiency (BEE), to verify their emission data on annual basis.

(c) The targets set under the National Green Hydrogen Mission (NGHM), by 2030, are as follows:

(i) To establish Green Hydrogen production capacity of 5 Million Metric Tonnes (MMT) per annum, with an associated renewable energy capacity addition of about 125 GW.
(ii) Estimated ₹8 lakh crore total investments and creation of over 6 lakh jobs.

The Mission is implemented on a pan India basis and there are no location specific targets.

(d) Micro, Small, and Medium Enterprises (MSMEs) are envisaged as pivotal stakeholders in realizing the targets under NGHM. With their capabilities in component manufacturing, engineering services, operations and maintenance, and technological innovation, MSMEs are well positioned to contribute to the development of a robust green hydrogen supply chain, including the manufacturing of different components of green hydrogen plants.

The Ministry of New and Renewable Energy (MNRE) organized a one-day National Workshop on opportunities for "Micro, Small & Medium Enterprises (MSMEs) in the Green Hydrogen Supply Chain", on 29th April 2025. The workshop deliberated opportunities and key role of MSMEs in development of green hydrogen ecosystem in India.

(e) There are no green hydrogen projects reported from Sidhi Lok Sabha Constituency.

(f) As per information available, there are two green hydrogen projects in Rajasthan:

(i) M/s ACME 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 INOX India Limited has commissioned a green hydrogen production plant of 190 tonnes per annum capacity at Chittorgarh, Rajasthan.

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