GOVERNMENT OF INDIA MINISTRY OF NEW AND RENEWABLE ENERGY LOK SABHA UNSTARRED QUESTION NO. 1198 ANSWERED ON 27.07.2023

GREEN HYDROGEN

1198. DR. PRITAM GOPINATHRAO MUNDE SHRI CHANDRA SEKHAR SAHU SHRI RAHUL RAMESH SHEWALE

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

- (a) whether green hydrogen is one of the critical clean energy sources for decarbonizing India's energy needs and enhancing energy security in a sustainable manner;
- (b) if so, whether India is set to overachieve the target of 50 per cent power capacity from non-fossil fuel sources by 2030 and if so, the details thereof;
- (c) whether there is a need to address some of the key demands of the industry in terms of open access, grid banking and faster approvals for green hydrogen and ammonia projects;
- (d) if so, whether the Government has launched any incentive scheme to produce green hydrogen electrolyzers and if so, the details thereof;
- (e) whether the Government has organised the International Conference on green hydrogen recently; and
- (f) if so, the aims and objectives thereof along with the steps proposed to achieve its objectives?

ANSWER

THE MINISTER OF NEW & RENEWABLE ENERGY AND POWER

(SHRI R.K. SINGH)

(a) Yes, sir.

The Government launched the National Green Hydrogen Mission on 4th January 2023. The Mission is expected to lead to development of 5 MMT Green Hydrogen production capacity per annum by 2030.

It is estimated that nearly 50 MMT per annum of CO2 emissions can be averted through production and use of the targeted quantum of Green Hydrogen.

(b) As per the updated Nationally Determined Contribution (NDC) submitted to the United Nations Framework Convention for Climate Change (UNFCCC), India has committed inter alia to achieve about 50 percent cumulative electric power installed capacity from non-fossil fuel-based energy resources by 2030.

So far, a total of 183.97 GW non-fossil fuel-based energy capacity has been installed in the country as on 30.06.2023. This includes 70.10 GW Solar power, 51.81 GW Hydro Power, 43.77 GW Wind Power, 10.81 GW Bio-Power and 7.48 GW Nuclear Power. In addition, 88.81 GW of capacity is under implementation and 51.43 GW of capacity is under tendering.

(c) Some of the key demands of the industry in terms of open access, grid banking and faster approvals for green hydrogen and ammonia projects, have been addressed as under:

- i. The Electricity (Promoting Renewable. Energy through Green Energy Open Access) Rules, 2022, notified in June 2022 have specified provisions for facilitating supply of renewable energy through Open Access for Green Hydrogen production.
- ii. Ministry of Power's notification dated 17th February 2022, provides certain measures in respect of Green Hydrogen and Green Ammonia projects, including 'Banking shall be permitted for a period of 30 days for Renewable Energy used for making Green Hydrogen / Green Ammonia.'
- iii. Under the National Green Hydrogen Mission, there is a provision for development of a web-based portal for regulatory approvals for various aspects of Hydrogen production, storage and utilisation.

(d) Yes, sir

The Strategic Interventions for Green Hydrogen Transition (SIGHT) Programme, is a major financial measure under the National Green Hydrogen Mission with an outlay of ₹ 17,490 crore. The programme comprises of two distinct financial incentive mechanisms to support domestic manufacturing of electrolysers and production of Green Hydrogen.

In this regard, the guidelines for Incentive Scheme for Electrolyser Manufacturing have been issued on 28^{th} June 2023 with an outlay of $\gtrless 4,440$ crore.

(e)&(f) The Government organised a three-day International Conference on Green Hydrogen (ICGH-2023) during $5^{th} - 7^{th}$ July 2023 at Vigyan Bhawan, New Delhi.

The conference involved deliberations regarding establishment of a Green Hydrogen ecosystem and fostering a systemic approach for meeting the global decarbonization goals through Green Hydrogen.

The conference enabled various stakeholders to explore the evolving Green Hydrogen landscape and innovation-driven solutions in the sector, thus strengthening the sustainability ecosystem of the sector.
