Will the Minister of New and Renewable Energy be pleased to state:

(a) the total production of green hydrogen in the country, State/UT-wise;
(b) the total production of green hydrogen from renewable and clean energy resources;
(c) the steps taken/proposed to be taken by the Government to increase the production of green hydrogen through renewable and clean energy resources;
(d) the quantum of funds released by the Government for improving the infrastructure for the production of green hydrogen; and
(e) the steps taken/proposed to be taken by the Government to improve the infrastructure to store green hydrogen?

ANSWER

THE MINISTER OF NEW & RENEWABLE ENERGY AND POWER
(SHRI R.K. SINGH)

(a)&(b) Currently there is very limited production of Green Hydrogen in the country. Under Research and Development projects supported by Ministry of New and Renewable Energy, a 5 Nm$^3$/h (normal cubic meter per hour) Green Hydrogen production plant based on solar energy and electrolysis has been established at Gurugram, Haryana and a 6 kg per hour Green Hydrogen production plant based on biomass gasification has been established at Bengaluru, Karnataka.

Details of some pilot projects set up in the country are as follows:
   (i) A Green Hydrogen manufacturing pilot plant of capacity 10 kg per day at Jorhat, Assam.
   (ii) A Green Hydrogen production plant of capacity 0.5 tonnes per annum at Kawas, Gujarat.
   (iii) A Green Ammonia plant in Bikaner, Rajasthan which produces Green Hydrogen at a rate of 500 Nm$^3$/hr - about 175 tonnes per annum.

(c) to (e) On 4th January 2023, the Union Cabinet approved the National Green Hydrogen Mission with an initial outlay of ₹ 19,744 crore, including ₹ 17,490 crore for the SIGHT programme, ₹ 1,466 crore for pilot projects and hydrogen hubs, ₹ 400 crore for R&D, and ₹ 388 crore towards other Mission components.

The following components have been announced as part of the Mission:

   I. Facilitating demand creation through exports and domestic utilization;
   II. Strategic Interventions for Green Hydrogen Transition (SIGHT) programme, which includes incentives for manufacturing of electrolysers and production of green hydrogen;
   III. Pilot Projects for steel, mobility, shipping, decentralized energy applications, hydrogen production from biomass, hydrogen storage, etc.;
   IV. Development of Green Hydrogen Hubs;
   V. Support for infrastructure development;
   VI. Establishing a robust framework of regulations and standards;
   VII. Research & Development programme;
   VIII. Skill development programme; and
   IX. Public awareness and outreach programme.

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