GOVERNMENT OF INDIA
MINISTRY OF NEW AND RENEWABLE ENERGY
RAJYA SABHA
UNSTARRED QUESTION NO. 2221
ANSWERED ON 08/08/2023

PRESENT STATUS OF PRODUCTION OF GREEN HYDROGEN

2221. DR. DHARMASTHALA VEERENDRA HEGGADE

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

(a) the total hydrogen production capacity from renewable sources at present;
(b) the present status of India's progress towards green hydrogen;
(c) whether Government has approved the National Green Hydrogen Mission;
(d) if so, the details thereof, including objective, outlay and components of the Mission;
(e) whether the Mission targets import savings of about ₹ 1 lakh crore and generation of about 6 lakh jobs by 2030; and
(f) the expected outcomes of the Mission?

ANSWER

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

(a) Green Hydrogen can be produced through electrolysis of water using renewable electricity, and from biomass through thermochemical and biochemical routes.
At present, there is very limited production of Hydrogen through renewable sources in the country.

Several entities have announced plans to setup production facilities for Green Hydrogen/Green Ammonia in India. However, these are still at a preliminary stage.

(b) to (f) On 4th January 2023, the Union Cabinet approved the National Green Hydrogen Mission with an outlay of ₹ 19,744 crore. The overarching objective of the Mission is to make India a Global Hub for production, usage and export of Green Hydrogen and its derivatives. 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 green 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.

The expected outcomes of the Mission, by 2030, are as follows:

i. India's Green Hydrogen production capacity is likely to reach 5 MMT per annum, contributing to reduction in dependence on import of fossil fuels. Achievement of Mission targets is expected to reduce a cumulative ₹ 1 lakh crore worth of fossil fuel imports by 2030.
ii. This is likely to leverage over ₹8 lakh crore in total investments and create over 6 lakh jobs.
iii. Nearly 50 MMT per annum of CO_2 emissions are expected to be averted through production and use of the targeted quantum of Green Hydrogen.

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