

GOVERNMENT OF INDIA  
MINISTRY OF NEW AND RENEWABLE ENERGY  
**RAJYA SABHA**  
**UNSTARRED QUESTION NO. 1579**  
ANSWERED ON 14.03.2023

**PRODUCTION OF ETHANOL, BIOGAS ETC. IN GUJARAT**

1579. SHRI JUGALSINH LOKHANDWALA  
SMT. SUMITRA BALMIK

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

- (a) the total volume of renewable energy sources, such as hydrogen, ethanol, biogas etc., being produced annually in the country at present, and the extent to which this production would be increased in future;
- (b) the quantum of foreign currency being saved, as a result thereof, and the number of new employment opportunities being generated thereby;
- (c) the number of schemes and nomenclature thereof, which are currently being run or proposed to be run for the production of hydrogen, ethanol, and biogas etc., in the State of Gujarat and Madhya Pradesh; and
- (d) the details thereof?

**ANSWER**

**THE MINISTER OF NEW & RENEWABLE ENERGY AND POWER**

**(SHRI R.K. SINGH)**

(a) Currently there is very limited production of Green Hydrogen in the country, under Research & Development projects and pilot projects. The total hydrogen production capacity from renewable sources is approximately 235.4 tonnes/annum. Under the National Green Hydrogen Mission, the Green Hydrogen production capacity of 5 Million Metric Tonne Per Annum (MMTPA) has been targeted by 2030.

The current annual ethanol production capacity in the country is approximately 1037 crore litres. As per the Roadmap prepared by NITI Aayog which is based on the projected sale of Motor Spirit (MS), the estimated requirement of ethanol for blending with petrol is 542 crore litres for Ethanol Supply Year (ESY) 2022-23, 698 crore litres for ESY 2023-24, 988 crore litres for ESY 2024-25 and 1016 crore litres for ESY 2025-26.

The installed production capacity of Biogas plants capacity is 8,45,008 m<sup>3</sup> per day. The national Bio-Energy programme launched in November, 2022 for the period FY 2021-2022 to FY 2025-26 provides for Central Financial Assistance (CFA) for setting up about 1.66 lakh small Biogas plants and about 80-100 Compressed Biogas (CBG) plants.

The Sustainable Alternative Towards Affordable Transportation (SATAT) initiative launched in October, 2018 envisages setting up of 5000 Compressed Biogas (CBG) plants for production of 15 Million Metric Ton (MMT) per annum of Compressed biogas by 2023-24.

(b) The Green Hydrogen production in the country is at R&D and pilot scales, so there is no substantial foreign currency saving and employment generation through Green Hydrogen, at present. The National Green Hydrogen Mission targets import savings of about ₹ 1 lakh crore and generation of about 6 lakh jobs by 2030.

As per inputs received from Indian Oil Corporation Limited, approximately ₹ 2341 crore of Foreign exchange was saved by blending of ethanol in petrol during 2021-22.

According to International IRENA's 'Renewable Energy and Jobs Annual Review 2022', 85,000 jobs were generated in biogas industry in India.

(c)& (d) On 4<sup>th</sup> January 2023, the Union Cabinet approved the National Green Hydrogen Mission which will support production of Green Hydrogen in India, including in the States of Madhya Pradesh and Gujarat.

Further, the following schemes are being implemented for production of ethanol and biogas in India, including in the States of Madhya Pradesh and Gujarat:

- I. Ethanol Blending Programme
- II. Programme on Energy from Urban, Industrial, Agricultural Waste
- III. National Bioenergy Programme
- IV. Sustainable Alternative Towards Affordable Transportation (SATAT) Programme

Also, as per the Government of Madhya Pradesh, the Madhya Pradesh's Renewable Energy Policy- 2022 has provisions to promote production of hydrogen or any other form of energy projects registered under the Renewable Energy Policy-2022.

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