GOVERNMENT OF INDIA MINISTRY OF PETROLEUM AND NATURAL GAS

RAJYA SABHA STARRED QUESTION No. 133 ANSWERED ON 13.03.2023

INTERNATIONAL BIOFUEL ALLIANCE

*133 DR. KIRODI LAL MEENA:

Will the Minister of PETROLEUM AND NATURAL GAS be pleased to state :-

- (a) whether India is the fifth largest producer of biofuels in the world and if so, the details thereof;
- (b) whether Government proposes to utilise its G20 presidency to push for an international biofuels alliance on the pattern of International Solar Alliance and if so, the details thereof;
- (c) whether Green Hydrogen has been approved for use in the country and if so, the details thereof;
- (d) whether Government proposes to set up twelve biorefineries to produce fuel from items like crop stubble, plant waste, and municipal solid waste in the country; and
- (e) if so, the details thereof along with the other measures taken by Government in this regard?

ANSWER

THE MINISTER OF PETROLEUM & NATURAL GAS

(SHRI HARDEEP SINGH PURI)

(a) to (e) A Statement is laid on the Table of the House.

STATEMENT REFERRED TO IN REPLY TO PART (a) TO (e) OF THE RAJYA SABHA STARRED QUESTION No. 133 TO BE ANSWERED ON 13.03.2023 REGARDING INTERNATIONAL BIOFUEL ALLIANCE ASKED BY DR. KIRODI LAL MEENA.

(a): Biofuels including Ethanol, Bio-diesel, Compressed Bio-Gas (CBG), and Sustainable Aviation Fuel (SAF), etc are fuels produced from renewable resources and used in place of or in blend with diesel, petrol and other fossil fuels.

Amendment were made to the National Policy on Biofuels in 2018, thereby allowing more feedstocks for production of biofuels, advancing the target of 20% blending of Ethanol in Petrol to ESY 2025-26 from 2030, and promotion of the production of biofuels in the country. With concerted efforts of the Government, India is now one of the leading producers of biofuels in the world.

While the Ethanol blending in Petrol stood at just 1.57% in the year 2014, the target of blending 10% Ethanol in Petrol (E-10 Petrol) was achieved in May 2022, ahead of its target date in November 2022.

The Public Sector Oil Marketing Companies (OMCs) procured and blended 433.60 crore litres of Ethanol in Petrol during the Ethanol Supply Year (ESY) 2021-22 (ESY: 1st December to 30th November). OMCs have procured approximately 6 crore litres of Bio-diesel till February, 2023 for blending with Diesel during the financial year 2022-23. Several demand and supply side interventions by the Government have enabled increase in annual domestic Ethanol production capacity from 421 crore litres to approximately 1037 crore litres in last eight years.

Further, the Oil and Gas Marketing Companies (OGMCs) have issued 4128 Letters of Intent (LoIs) to potential entrepreneurs for procurement of Compressed Bio Gas (CBG) up to February, 2023. Also, 44 Bio-CNG plants under Sustainable Alternative Towards Affordable Transportation (SATAT) initiative have been commissioned till February, 2023 with a production capacity of around 250 tonnes per day (TPD).

(b): India, during its Presidency of G20, is emphasising on collaboration with leading biofuel producer and consumer countries towards development of a Global Biofuel Alliance aiming at intensifying the use of sustainable biofuels, including in transportation sector. Its membership will be open to all interested countries. The Alliance shall work in collaboration with and complement the existing regional and international agencies as well as initiatives in the bioenergy, bio-economy and energy transition fields.

(c): The Government has recently approved the National Green Hydrogen Mission. The overarching objective of the Mission is to make India the Global Hub for production, usage and export of Green Hydrogen and its derivatives.

Various Research and Development (R&D) activities on Hydrogen are being undertaken by Oil & Gas Public Sector Undertakings (OGPSUs). OGPSUs have also formed a Hydrogen Corpus Fund to support R&D on various facets of Hydrogen including its application as an automotive fuel. R&D projects have been undertaken by OGPSUs to use Green Hydrogen for fuel cell based mobility. Oil & Gas PSUs have also undertaken pilot projects for production of green hydrogen with a production capacity of 2.5 Kilo Tonnes Per Annum (KTPA). Blending of green hydrogen has started with Natural Gas for supplying to the township of Oil India Limited at Jorhat. Trial run of Hydrogen Fuel Cell buses on tourist routes including Vadodara to Kevadiya, New Delhi to Agra and Jorhat to Kaziranga have started.

(d) & (e): Government has notified Pradhan Mantri JI-VAN (Jaiv Indhan - Vatavaran Anukool fasal awashesh Nivaran) Yojana for promoting Second Generation (2G) ethanol production from cellulosic and lignocellulosic biomass including petrochemical route in the country by providing financial support for setting up 2G ethanol bio-refineries.

Under the PM JI-VAN Yojana, commercial 2G project has been set up by Indian Oil Corporation Ltd. in Haryana and are being established by Hindustan Petroleum Corporation Ltd. in Punjab, by Bharat Petroleum Corporation Ltd. in Odisha, by Numaligarh Refinery Limited in Numaligarh, by Mangalore Refinery and Petrochemicals Ltd (MRPL) and by Shell India Market Pvt. Ltd in Karnataka. Demonstration projects are also being set up by Indian Oil Corporation Ltd. in Haryana, by Hindustan Petroleum Corporation Ltd in Bihar and by Chempolis India Pvt Ltd in Punjab.
