

GOVERNMENT OF INDIA
MINISTRY OF PETROLEUM AND NATURAL GAS

RAJYA SABHA
UNSTARRED QUESTION No. 3633
ANSWERED ON 03.04.2023

**USE AND PRODUCTIVITY OF ALTERNATE FUELS INCLUDING ETHANOL
BLENDED FUEL**

3633. SMT. SHANTA CHHETRI:

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

- (a) the steps taken by Government to explore alternate fuels including ethanol blended fuel;
- (b) whether Government has chalked out a plan to increase use and productivity of alternate fuels i.e. ethanol blended fuel;
- (c) if so, the details thereof and if not, the reasons therefor;
- (d) whether increase in alternative fuel use will provide us energy security and reduce carbon emissions; and
- (e) if so, the details thereof?

ANSWER

THE MINISTER OF STATE IN THE MINISTRY OF PETROLEUM & NATURAL GAS

(SHRI RAMESWAR TELI)

(a) to (c): The Government is promoting biofuels including ethanol blended fuel with the broader objectives of reducing import dependency, generating employment, providing better remuneration to farmers, for associated environmental benefits, promoting better waste management practices, etc. To promote the use of biofuels across the country various programmes such as Ethanol Blended Petrol (EBP) Programme, wherein Oil Marketing Companies (OMCs) sell petrol blended with ethanol; Biodiesel blending programme wherein biodiesel is blended with diesel; and Sustainable Alternative towards Affordable Transportation (SATAT) initiative wherein Compressed Bio Gas (CBG) is marketed along with Compressed Natural Gas (CNG) have been taken up.

Further, the Government has notified the use of hydrogen as automotive fuel for fuel cell vehicles on 16th September, 2016. The specifications of Hydrogen as a reference fuel for Internal Combustion Engine BS IV vehicles have also been notified on 16th December, 2022.

Government, since 2014, has taken several measures to increase production and utilization of alternate fuels including ethanol in the country which includes permitting procurement of ethanol produced from other non-food feedstock besides molasses, like cellulosic and lignocelluloses materials like cotton stalk, wheat straw, rice straw, bagasse, bamboo etc. including petrochemical route, subject to meeting the relevant BIS standards; allowing use of sugarcane and food grains (maize and surplus stocks of rice with Food Corporation of India) for conversion to ethanol;

administered price mechanism for procurement of ethanol under the Ethanol Blended Petrol (EBP) Programme including enhanced ex-mill price of ethanol year on year from ethanol supply year 2017-18; lowered GST rate to 5% on ethanol for EBP Programme; amendment in Industries (Development & Regulation) Act for free movement of ethanol across states for blending; interest subvention scheme for enhancement and augmentation of ethanol production capacity in the country.

Oil Marketing Companies (OMCs) had floated an Expression of Interest (EoI) for signing long term offtake / bipartite agreement with upcoming dedicated ethanol plants in ethanol deficit states for supply of denatured anhydrous ethanol in August, 2021 to meet the ethanol requirement for 20% blending.

Through this EoI, OMCs have signed Long Term Offtake Agreements (LTOA) with 131 shortlisted Dedicated Ethanol Plant proponents in various states which is estimated to add a production capacity of approximately 757 crore litre per annum of ethanol in the next few years.

Government has also notified the “Pradhan Mantri JI-VAN (Jaiv Indhan - Vatavaran Anukool fasal awashesh Nivaran) Yojana” for providing financial support for setting up Second Generation (2G) ethanol projects in the country using lignocellulosic biomass and other renewable feedstock.

(d) & (e): Under the EBP Programme, Public Sector OMCs have saved 433.6 crore litres of petrol on account of ethanol blending during the Ethanol Supply Year (ESY) 2021-22 with an approximate savings of more than Rs. 20,000 Crore of foreign exchange. Further, the anticipated emission benefits with E10 & E20 fuels compared to neat petrol are as under:

Emission	Gasoline	Two-wheelers		Four-wheelers	
		E10	E20	E10	E20
Carbon Monoxide	Baseline	20% lower	50% lower	20% lower	30% lower
Hydrocarbons	Baseline	20% lower	20% lower	20% lower	20% lower

(Source: Roadmap for Ethanol Blending in India 2020-25 published in June, 2021)
