

GOVERNMENT OF INDIA
MINISTRY OF PETROLEUM AND NATURAL GAS
RAJYA SABHA
UNSTARRED QUESTION NO-1089
ANSWERED ON - 09/02/2026

STATUS OF ETHANOL BLENDING PROGRAMME

1089. SHRI BHUBANESWAR KALITA:

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

- (a) the progress achieved under the Ethanol Blended Petrol (EBP) Programme and the current level of ethanol blending in the country;
- (b) whether Government has taken any measures to ensure consistent availability of feedstock and infrastructure for ethanol production;
- (c) whether Government has undertaken studies to assess the impact of E20 fuel on vehicle performance, efficiency, and environmental sustainability; and
- (d) the steps taken to address public concerns and ensure that the transition to higher ethanol blends benefits both farmers and consumers while maintaining fuel quality standards?

ANSWER

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

(SHRI SURESH GOPI)

(a): Government has promoted blending of ethanol in petrol under the Ethanol Blended Petrol (EBP) Programme. The National Policy on Biofuels – 2018, as amended in 2022, *inter-alia*, advanced the target of 20% blending of ethanol in petrol from 2030 to Ethanol Supply Year (ESY) 2025–26 (1st November, 2025 to 31st October, 2026). This target of 20% has been achieved in December, 2025 due to the concerted efforts of Government that have led to increased ethanol blending with petrol from 38 crore litres in ESY 2013-14 to over 1000 crore litres in ESY 2024-25. Public Sector Oil Marketing Companies (OMCs) achieved the target of 10% ethanol blending in petrol in June 2022, i.e. five months ahead of the target during ESY 2021–22. Ethanol blending levels thereafter increased to 12.06% in ESY 2022–23, 14.60% in ESY 2023–24, and 19.24% in ESY 2024–25. During the ESY 2025–26, as on 31.12.2025, more than 179 crore litres of ethanol have been blended, achieving an average ethanol blending of 20% in petrol.

(b) In order to ensure consistent availability of feedstock and infrastructure for ethanol production in the country, Government have taken several steps which *inter-alia* includes expansion of feedstock for Ethanol production, administered price mechanism for Ethanol procurement under the Ethanol Blended Petrol (EBP) Programme, lowered GST rate to 5% for Ethanol for EBP Programme, introduction of various Ethanol Interest Subvention Schemes (EISS) during 2018-22, a dedicated subvention scheme for Cooperative Sugar Mills to convert existing sugarcane-based distilleries into multi-feedstock plants for ethanol production from molasses as well as grains, signing of 233 Long Term Offtake

Agreements (LTOAs) between OMCs and Dedicated Ethanol Plants, allocation of 72 Lakh Metric Tonne (LMT) of surplus Food Corporation of India (FCI) rice for ethanol production for the ESY 2025-26, diversion of 40 LMT of sugar for ethanol production for the ESY 2024-25 and unrestricted production of ethanol from sugarcane juice/sugar syrup, B-Heavy Molasses as well as C-Heavy Molasses for ESY 2025-26, notified the “Pradhan Mantri JI-VAN (Jaiv Indhan- Vatavaran Anukool fasal awashesh Nivaran) Yojana” to provide financial assistance for setting up Advanced Biofuels projects in the country using lignocellulosic biomass and other renewable feedstock, multimodal transportation of ethanol and increasing ethanol storage capacity along with other allied infrastructure for handling of higher blends of ethanol.

(c) & (d): The Inter-Ministerial Committee (IMC) constituted on 26.12.2020 under NITI Aayog had inter-alia, examined various aspects of vehicle compatibility and mileage. This assessment was also supported by research studies conducted by Indian Oil Corporation Limited (IOCL), the Automotive Research Association of India (ARAI), and the Society of Indian Automobile Manufacturers (SIAM). Extensive field trials on vehicles with E20 fuel did not indicate any compatibility issue or any negative effect of E20. These studies have confirmed that even legacy vehicles do not exhibit any significant variations in performance, nor do they show abnormal wear-and-tear when operated with E20 fuel. No issues were reported in parameters such as drivability, startability, metal compatibility, and plastic compatibility. Only in case of certain older vehicles, some rubber parts and gaskets may require replacement earlier than in case non blended fuel was used. This replacement is inexpensive and can be easily managed during routine servicing. It may need to be done once in the life time of the vehicle and is a simple process to be carried out at any authorized workshop.

With regard to the concern of vehicle mileage due to the use of E20 fuel, Press Release dated 12.08.2025 issued by the Government and a Joint Press Release dated 30.08.2025 issued by the Society of Indian Automobile Manufacturers, the Automotive Research Association of India, and the Federation of Indian Petroleum Industry (ARAI-FIPI-SIAM) have clarified that vehicle mileage is influenced by a variety of factors beyond just fuel type. These include driving habits, maintenance practices such as oil changes and air filter cleanliness, tyre pressure and alignment, and even air conditioning load. The efficiency drop (if any) in E 10 vehicles has been marginal. For some manufacturers, vehicles have been E 20 compatible from as far back as 2009.

As per the Joint Statement dated 30.08.2025 released by ARAI, FIPI and SIAM, the use of E20 fuel gives better acceleration, better ride quality and most importantly, lowers carbon emissions by approximately 30% as compared to E10 fuel. Ethanol's higher-octane number makes ethanol-blended fuels a valuable alternative for higher-octane requirements that is crucial for modern high-compression engines. Vehicles tuned for E20 deliver better acceleration which is a very important factor in city driving conditions. Additionally, ethanol's higher heat of vaporization reduces intake manifold temperatures, increasing air-fuel mixture density and boosting volumetric efficiency.

EBP Programme has resulted in expeditious payment to farmers to a tune of over Rs. 1,43,822 crore from Ethanol Supply Year (ESY) 2014-15 up to December 2025, besides savings of more than Rs. 1,63,395 crore of foreign exchange, net CO2 reduction of approximately 832 lakh metric tonne and substitution of more than 277 lakh metric tonnes of crude oil.
