LOK SABHA
UNSTARRED QUESTION No.3062
TO BE ANSWERED ON 18th December, 2025

INTRODUCTION OF ETHANOL-BLENDED PETROL

3062. SHRI KODIKUNNIL SURESH:

पेट्रोलियम और प्राकृतिक गैस मंत्री

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

(a) whether the Government is aware of concerns regarding the nationwide rollout of twenty percent ethanol-blended petrol (E20), particularly relating to engine corrosion, lower mileage and performance issues in vehicles not certified for E20 compatibility, if so, the details thereof;

(b) whether any assessments have been conducted on the long-term impact of E20 on two-wheelers and passenger vehicles manufactured prior to 2023, if so, the details thereof;

(c) whether the Government has noted the sharp rise in profits of Indian Oil Corporation, Bharat Petroleum Corporation and Hindustan Petroleum Corporation following the rollout of E20 and whether the Ministry has examined any possible link between higher ethanol blending and increased corporate profitability, if so, the details thereof;

(d) whether the Government has evaluated the economic burden on consumers arising from reduced fuel efficiency and additional maintenance costs, if so, the details thereof; and

(e) the steps taken by the Government to ensure that the expansion of E20 does not adversely affect consumers or vehicle safety along with the measures proposed to reduce the price of E20 petrol?

ANSWER

पेट्रोलियम और प्राकृतिक गैस मंत्रालय में राज्य मंत्री
(श्री सुरेश गोपी)

MINISTER OF STATE IN THE MINISTRY OF PETROLEUM & NATURAL GAS
(SHRI SURESH GOPI)

(a) to (e): Government and OMCs have noticed certain media reports/social media postings and concerns relating to the use of E20 fuel. 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 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.

The price of petrol (including ethanol blended petrol) has been market determined with effect from 26.06.2010. Since then, OMCs take appropriate decisions on pricing on petrol based on inter-alia international product prices, domestic market conditions etc. Further, procurement prices of ethanol have been increasing over the years. For the Ethanol Supply Year 2024-25, the average procurement cost of ethanol stands at Rs. 71.55 per litre (inclusive of transportation and GST), which was higher than the cost of refined petrol for OMCs.

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