

LOK SABHA
UNSTARRED QUESTION No. 6315
TO BE ANSWERED ON 2nd April, 2026

IMPACT OF ETHANOL BLENDING ON VEHICLES AND CONSUMERS

6315. SHRI M K RAGHAVAN:

पेट्रोलियम और प्राकृतिक गैस मंत्री

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

- (a) whether the Government has conducted any scientific or technical assessment on the impact of higher ethanol blending (E10 and E20) on older vehicles and agricultural machinery not designed to operate on ethanol-blended fuel and if so, the details thereof;
- (b) whether the Government is aware of complaints from the public regarding reduced engine performance, corrosion of fuel system components and increased maintenance costs due to ethanol-blended petrol and if so, the details thereof;
- (c) whether the Government proposes to provide an option for ethanol-free petrol in the country, if so, the details thereof;
- (d) whether the Government has examined international practices where ethanol-free fuel is made available for specific categories of vehicles and whether any such model is proposed to be adopted in India, if so, the details thereof; and
- (e) whether automobile manufacturers, fuel retailers and consumer groups were consulted before expanding ethanol blending targets and if so, the details thereof?

ANSWER

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

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

(a) to (e): The Inter-Ministerial Committee (IMC) constituted on 26.12.2020 under NITI Aayog had, inter-alia, examined various aspects of vehicle compatibility and mileage on E20 fuel. This study 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 impact 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 of non blended fuel was used. This replacement is inexpensive and can be easily done once during routine servicing. It may be done once in the lifetime of the vehicle and is a simple process to be carried out at any authorized workshop.

According to the Joint Statement dated 30.08.2025 by Society of Indian Automobile Manufacturers (SIAM) and Automotive Research Association of India (ARAI), E20 fuel improves acceleration and ride quality while reducing carbon emissions by about 30% compared to E10. Ethanol's higher octane supports modern high-compression engines, and its higher heat of vaporization enhances efficiency by cooling intake air and improving combustion.

Ethanol Blended Petrol (EBP) Programme has resulted in expeditious payment to farmers to a tune of over Rs. 1,50,925 crore from Ethanol Supply Year (ESY) 2014-15 up to February 2026, besides savings of more than Rs. 1,70,560 crore of foreign exchange, net CO2 reduction of approximately 869 lakh metric tonne and substitution of more than 289 lakh metric tonnes of crude oil.
