

GOVERNMENT OF INDIA
MINISTRY OF PETROLEUM AND NATURAL GAS
RAJYA SABHA
UNSTARRED QUESTION NO. 932
ANSWERED ON 27/07/2026

**ASSESSMENT OF INTERNATIONAL STANDARDS AND PRACTICES BENCHMARKS
TO ETHANOL BLENDING**

932. SMT. RENUKA CHOWDHURY:

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

- (a) whether Government has studied international standards, regulations and practices relating to ethanol blending and ethanol-based fuels, if so, the details thereof;
- (b) the countries and institutions whose standards and practices have been examined by Government;
- (c) whether Government has assessed the suitability of international ethanol standards for Indian climatic, vehicular and fuel conditions, if so, the details thereof;
- (d) whether any modifications or safeguards have been adopted for India based on international experience and if so, the details thereof; and
- (e) the measures taken to ensure that ethanol blending levels adopted in India are safe, sustainable and internationally benchmarked?

ANSWER

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

(a) to (e): Ethanol is not a new fuel. It has been used globally for over a century, with countries such as Brazil operating higher ethanol blends for decades. In India, the Ethanol Blended Petrol (EBP) Programme commenced with a pilot in 2001, E5 was introduced in 2006, and although blending remained around 1.53% in 2013-14, it has since been increased progressively in a calibrated manner after creating the necessary production capacity, infrastructure and regulatory framework. The Roadmap for Ethanol Blending in India 2020-25 prepared by NITI Aayog also examined Roadmap/Mandate for ethanol blending in various countries/region including Brazil, United States, European Union, China and Thailand. Guided by the indicative target of 20% ethanol blending in petrol by 2025-26, India has achieved 20% ethanol blending five years ahead of the original target after more than two decades of phased policy development, stakeholder consultations, scientific evaluation and capacity creation.

The scientific studies, field validation and extensive real-world operating experience have shown that E20 is a safe, cleaner and technologically superior fuel when used in accordance with the prescribed specifications and manufacturer recommendations. The Government's assessment is based not only on laboratory research but also on large-scale experience after nationwide implementation.

This is evident as E15+ blended petrol has been in widespread use for over three-and-a-half years and E19-E20 fuel for over two-and-a-half years. More than 20 crore two-wheelers and over 3 crore petrol cars have been operating on these blends without any verified evidence of widespread engine failure or vehicle breakdown attributable to ethanol blending. This is further validated through large-scale real-world experience. Manufacturer service data confirm that there is no abnormal corrosion, wear or reduction in vehicle life due to E20 fuel. Manufacturers continue to honour warranty obligations for vehicles using E20 fuel, providing further confidence in its safety and reliability.

One of the country's largest passenger vehicle manufacturers serviced 2.84 crore vehicles during FY 2025-26, including approximately 1.5 crore older, non-E20-certified vehicles, without reporting any E20-related engine damage or abnormal component wear. Similarly, one of the leading two-wheeler manufacturers has reported, based on extensive service records, no higher incidence of damage in vehicles operating on E20 compared with earlier fuel blends.
