The Pioneer
NEW DELHI | WEDNESDAY | JULY 8, 2026

India's ethanol strategy should win public trust

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In early July 2026, just a few days ago, the Ministry of Petroleum and Natural Gas convened a press conference in New Delhi with leaders from Energy Industry. Their message was loud and clear — India's petrol now contains 20% ethanol nationwide, the target has been met five years ahead of the original 2030 deadline, and vehicle owners have nothing to worry about.

Ethanol is not a new or experimental automotive fuel. It has been called "fuel of the future".

Ethanol's exceptionally high-octane number (approximately 108 RON) has made it a preferred fuel component for high-performance internal combustion engines. Ethanol has historically been used in several sports cars .

But the social media was aflush with a very different message. Videos claiming E20 fuel corrodes engines, attracts insects to fuel caps and requires copious quantities of water to produce had been circulating for months, some of them viewed hundreds of thousands of times. India has executed one of the more consequential fuel-policy shifts of the decade, but unfortunately many do not trust it . This piece of mine tries to separate what is verified and why public should be open to see that truth ignoring the content that went viral on social media .

What the Programme Actually Is

The Ethanol Blended Petrol (EBP) Programme did not begin with E20 nor did it begin recently. Pilot blending at 5% started at three locations in 2001, spread across nine states and four union territories in 2003. The programme's real acceleration dates to a revised National Policy on Biofuels in 2018, which reset the 20% target to 2030.

By December 2025, public sector oil marketing companies had reached the 20% blending mark nationwide — feedstock now drawn from a widening mix of sugarcane juice and molasses, surplus rice released by the Food Corporation of India and increasingly maize.

This is not framed by the Government purely as an industrial or agricultural policy. It sits explicitly within India's climate commitments too — ethanol blending is a decarbonisation lever supporting the country's Nationally Determined Contributions under the Paris Agreement and its 2070 net-zero target. Roughly 930 lakh metric tonnes of avoided CO_2 emissions and crude oil substitution of more than 310 lakh metric tonnes can be attributed to this program.

TRANSITION — Phased, Consultative, Science-Led

The Government's defence of the rollout is that it has not been sudden. A joint IOCL-ARAI-SIAM (Indian Oil Corporation Ltd — Automotive Research Association of India — Society of Indian Automobile Manufacturers) study in 2010 examined the effects of E10 on existing vehicles, running

mileage accumulation of 20,000 km on two-wheelers and 40,000 km on four-wheelers, with interim testing every 5,000-10,000 km. That study found hydrocarbon and carbon monoxide emissions falling by roughly 20% with E10, with no drivability or startability issues. Another more consequential study followed soon , when the government tasked ARAI — working with IOCL, IIP-Dehradun and SIAM — with assessing "material compatibility and emission performance" for E20. That study reported carbon monoxide emissions falling by around 50% in two-wheelers and 30% in four-wheelers, and unburnt hydrocarbon emissions down roughly 20% across both categories, with no significant issues across most compatibility parameters — the one downside being that certain rubber parts and gaskets in older vehicles might need earlier replacement than under non-blended fuel.

At the recent press conference, industry gave this research a commercial angle. Toyota Kirloskar's Vikram Gulati stressed that vehicle testing and certification in India is governed by internationally standardised protocols under UNECE. Maruti Suzuki's Rahul Bharti offered a "statement of confidence" — of 2.84 crore vehicles serviced by Maruti in FY2025-26, more than 1.5 crore were over three years old and therefore not E20-certified — and the company reported no field-level incidents of corrosion, wear or component damage attributable to E20 among them. Hero MotoCorp's Ashutosh Varma made a similar claim for two-wheelers based on service data analysis.

Internationally, the US runs E10 as its standard blend, with E15 expanding under federal backing and flex-fuel vehicles capable of E85. Brazil mandates E27 today, moving toward roughly 35% with more than 80% of new Brazilian passenger vehicles built as flex-fuel. Canada, Japan and Thailand run E10, and several European countries blend ethanol as a matter of course. On this reading, India's E20 is catching up to an established global norm, not experimenting ahead of one.

The Water-Intensity Controversy

A separate and more agriculture-rooted critique concerns what ethanol is made from. Sugarcane and paddy are both water-intensive crops in a country with acute water stress in several regions, and viral claims have circulated a figure — roughly 10,000 litres of water per litre of ethanol — that the Ministry has explicitly rejected as baseless.

The Government argues that paddy and sugarcane are grown mainly for food security, with only surplus stocks used for ethanol, so their water use should not be fully attributed to ethanol production.

The Geopolitical Urgency Layer

The most important piece in this whole ethanol gambit is the geopolitical angle. The timing of this year's push cannot be separated from the wider energy environment. West Asian Crisis reintroduced volatility into Middle Eastern crude supply routes — a live reminder of the vulnerability that comes with import dependence. India imports the large majority of its crude oil, and disruptions of this kind translate quickly into price and supply pressure at the pump.

The Government's energy-security figures are pitched directly at this pressure-foreign exchange savings exceeding ₹1.9 lakh crore and crude oil substitution of more than 310 lakh metric tonnes since 2015 attributed to the ethanol program. E20 is not simply an environmental initiative running on its own schedule — it is being actively positioned as a hedge that happened to be ready just as global crude markets became less predictable again.

The Misinformation Layer

The pattern worth noting is that a scientifically grounded policy is being communicated in a way that leaves gaps for both genuine grievance and fabricated claims to occupy the same space. A vehicle owner with a legitimate question about a three-year-old car's gasket compatibility encounters the same information ecosystem as someone sharing a fake video of separated petrol and diesel. When the loudest official response bundles both categories together as "misinformation," it risks looking dismissive of the first group even while correctly debunking the second — and that in turn feeds the trust deficit rather than closing it.

Way Forward

India's ethanol blending programme has produced measurable, verifiable outcomes: a five-year acceleration on target, real emissions reductions, real crude substitution, and a credible hedge against Middle Eastern supply shocks at a moment those shocks have returned.

Clearing the fog around E20 will require more than another round of press releases or conferences. A few concrete steps like independent, longitudinal verification, a genuine feasibility study on fuel choice, continued transparent feedstock transition, a standing fact-check mechanism separate from ministry messaging will go a long way in making citizens ride the high-octane road of trust.

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