

UNINTENDED CONSEQUENCE OF POLICY PUSH

Uneven Demand-Supply Blend Worries Ethanol Inc

Green fuel capacity has overshoot E20 mandate by over 50% leading to wide under-utilisation

Lijee Philip & Kalpana Pathak

Mumbai: India's ethanol industry is facing a supply glut, threatening to impact livelihoods and large-scale investments in the sector once considered the torchbearer of the country's green energy transition. Policymakers and ethanol producers are currently staring at an uncomfortable statistic—nearly 20 billion litres of installed capacity, with another 4 billion slated to come

onstream soon.

Against that, the requirement for mandatory 20% ethanol blending with petrol (E20) is estimated at just about 11 billion litres in the current ethanol year that began last November. In effect, more than 50% excess capacity is building up in the system, the unintended consequence of a policy push that raced ahead of a clearly articulated long-term road map.

Ethanol is a green fuel produced by fermenting sugar or foodgrain. It is widely recognised as a cleaner and renewable alternative to pure fossil fuels.

Distilleries, said industry officials, are utilising just 25–30% of capacity while fresh approvals for new plants have been halted.

Impact Across Value Chain ▶▶ 7

Tank Half Full

Lack of a clear roadmap beyond E20 creating investment and policy uncertainty

Blending of ethanol with diesel being considered

Automakers holding back flex-fuel vehicle launches pending firm policy direction

Industry seeking tax incentives and higher blending targets to revive demand and protect investments





Impact Across Value Chain

►► From Page 1

The strain of excess capacity and ensuing demand and regulatory uncertainty is visible across the value chain — from sugar mills and grain processors to farmers earlier encouraged to see ethanol as a stable revenue alternative.

According to the All India Distillers' Association (AIDA), ethanol has evolved into a ₹50,000 crore industry, propelled by the government's ambitious plans for the sector. Over the years, distilleries set up about 20 billion litres capacity for supplying to oil marketing companies. However, the lower-than-expected offtake has since resulted in underutilised capacity and excess inventory.

"Many distilleries were put up, thinking that ethanol consumption would gradually increase," said Deepak Ballani, director general of the Indian Sugar & Bio Energy Manufacturers Association. "The government needs to step up blending. No fresh permissions are being given to set up distilleries till the government gives clarity."

Raising the blending target from the current 20% could be an uphill task as discussions among policymakers on the issue stalled last year after a social media backlash over potential damage to vehicles not designed to run on higher ethanol blends. While the government dismissed the criticism as motivated, it hasn't taken any concrete

steps since to raise the blending threshold.

Drivers have also sought a price discount for ethanol-blended fuel, citing its lower energy content — about a third less than pure petrol. A 20% blend is estimated to lessen fuel efficiency by more than 3%. The oil ministry however rejected the demand in August, saying ethanol was costlier than petrol.

According to AIDA, during 2024-2025, around 100 new distilleries started operations and a few more are still getting commissioned. However, demand growth has not kept pace, as ethanol offtake remains largely dependent on existing blending targets.

The industry is currently awaiting government mandate for a further increase in the blending percentage beyond the current 20% to ensure optimal utilisation of installed capacities and maintain the financial viability of investments. India's ethanol blending programme was conceived as a multipronged solution—boost farmer incomes, curb costly crude oil imports, and lower vehicular emissions.

The early momentum was strong. Oil marketing companies contracted aggressively, mills borrowed and expanded, and new grain-based distilleries mushroomed. However, with the current blending ceiling at E20, the next milestone remains less defined. There is no clarity toward higher blends such as E27, E85, or E100.

Vadilal becomes top methane supplier to Surat lab-grown diamond industry

Melvyn Thomas

SURAT

Vadilal Industries Limited, which sells ice-cream and frozen food products under the Vadilal brand, has become the largest supplier of industrial gases such as methane and gas mixtures to the lab-grown diamond industry in Surat and across the country.

Rajesh Gandhi, promoter of Vadilal Industries, who was in Surat to inaugurate the 13th edition of Surat International Textile Exhibition (SITEX 2026) said, "We are the only suppliers of methane gas, hydrogen, and gas mixtures to the lab-grown diamond manufacturing units in

Surat and other places"

High purity methane and hydrogen are assumed to be the main process gases used in this technology to produce lab-grown diamonds. High purity methane gas is assumed to be produced from Liquefied Natural Gas (LNG), and therefore raw material acquisition begins with the extraction of natural gas. The production of the lab-grown diamond is a high-technology manufacturing process that uses significant amounts of electricity. Other than high purity methane and hydrogen no raw materials are used in material volumes. The production results in the creation of a rough diamond.

Gandhi said that the Vadilal industries is eyeing to become a multi-national company with presence in more than 40 countries around the world in the next few years.

Rajesh Gandhi, promoter of Vadilal Industries and senior vice-president of Gujarat Chamber of Commerce and Industry, stated that the ice-cream exports has largely remained unaffected with the US tariffs with a total of Rs 500 crore worth of ice-cream exported in 2025-26.

Talking with the reporters, Gandhi, who is also the senior-vice-president of Gujarat Chamber of Commerce and Industry (GCCI) said, "We want



to become a multi-national company in food and ice-cream segments, which operates in various countries around the world. The United States (US) is our largest market with more than 80% of ice-cream consumption among the Indian di-



aspora"

Asked about the US tariffs, Gandhi said, "The ice-cream segment has remained largely unaffected due to the US tariffs. The reason is that there is no Chinese or Bangladesh alternative for ice-cream as people

in the US would also want to consume Indian-made ice-cream. We have passed on the duty increase to the end consumers. Our Cassata ice-cream is popular among the US consumers"

"We have set up an ice-cream plant in the US and we are exporting ice-cream to Europe, Middle-East and other countries from there. We have plans to set up more ice-cream plants in other countries soon," said Gandhi.

Talking about the ice-cream consumption in India, Gandhi said, "Gujarat is the largest market for ice-cream consumption, with Surat and Ahmedabad being the huge ma-

rkets"

Gandhi said that the GCCI is collaborating with the Southern Gujarat Chamber of Commerce and Industry (SGCCI) for the upcoming exhibitions. The GCCI has organised its annual trade expo GATE-2026 from April 16 to April 18 at Helipad exhibition centre in Gandhinagar.

"We have covered about 16 sectors including automobile, auto ancillary, energy, engineering, industry 4.0, artificial intelligence, electronics, IT and ITes, tourism, real estate, industrial parks, renewable energy, co-working spaces, insurance and financial service, banking and allied industries etc" said Gandhi.

Smart measurement for energy transition

As the energy industry moves toward lower-carbon operations, companies face a dual challenge: maintaining the performance and safety of existing oil and gas infrastructure while integrating cleaner energy sources. At India Energy Week 2026, Endress+Hauser India highlighted how advanced measurement technologies, digital connectivity, and analytical systems can support both sides of this equation, helping operators create a practical pathway from conventional to renewable energy.

Saneel Shah, DGM – Marketing (Flow) at Endress+Hauser India, noted that the global energy shift is not a simple replacement of fossil fuels with renewables. Instead, he described it as a gradual integration. According to him, the focus today is on technologies that allow both systems to operate efficiently and safely in parallel. Endress+Hauser's role, he said, is to provide the instrumentation and expertise that make this integration possible.

Core of process performance

Flow measurement remains central to Endress+Hauser's offering. The company showcased a broad portfolio designed for traditional hydrocarbons as well as new energy media. Ultrasonic flow meters on display can measure gases such as CO₂, air, nitrogen, and biogas, supporting applications that range from emissions management to renewable gas processing.

Endress+Hauser India and Analytik Jena India present solutions linking oil & gas with renewables at India Energy Week 2026



Endress+Hauser products on display at IEW, Goa

Electromagnetic flow meters were presented with multiple liner and electrode options, enabling precise measurement of conductive liquids across diverse process conditions. Vortex flow meters, widely used for steam, gas, and liquid services, were another highlight. A key capability demonstrated was wet steam detection, including the ability to determine steam dryness fraction – an important parameter for energy efficiency and equipment protection.



WATCH:
<https://bit.ly/EndressHauser-IEW>

For high-accuracy applications, Coriolis flow meters were shown for custody transfer and refinery duties, handling liquids, gases, and even slurry media. The portfolio also covers CNG and LNG

dispensing and extends to high-pressure hydrogen flow meters rated up to 1,000 bar, underscoring readiness for future fuels.

Critical process variables

Beyond flow, Endress+Hauser presented a wide range of level measurement technologies aimed at improving reliability and operational control. These include nucleonic systems for level, density, and point detection, as well as free-space radar and guided wave radar solutions suited for both hazardous and non-hazardous areas.

For storage and transfer operations, custody tank gauging radars were featured for LNG, LPG, and other hydrocarbons, including cryogenic environments.

Such systems help ensure accurate inventory management and safe handling of volatile or low-temperature media.

The company's latest pressure transmitters, equipped with backlit displays and Bluetooth communication, were also introduced. Wireless connectivity allows direct interaction with field devices, reducing the need for additional hardware. Advanced diagnostics compliant with NAMUR NE107 provide clear status information on instrument and process conditions, supporting predictive maintenance.

Energy sectors

A consistent message across the portfolio was adaptability. Instruments traditionally used in refineries and pipelines are equally applicable in hydrogen, green ammonia, biogas, solar thermal, and other renewable or low-carbon processes. By using proven measurement platforms, operators can adopt new energy carriers without compromising on accuracy or safety.

Digitalisation

Endress+Hauser also emphasised industrial digitalisation. Its Ethernet-APL-enabled devices across flow, level, pressure, temperature, and liquid analysis allow high-speed, secure communication even in hazardous areas. This helps plants transition from legacy protocols to more data-rich, networked environments.