

which was 2.06 billion litres in 2014, has also risen - to 2.98 billion litres. In total, India's ethanol production capacities have increased from 4.21 billion litres to 8.67 billion litres in just 8 years.

The blending programme promises several benefits, such as augmentation of domestic energy production leading to increase in energy security; reduction of oil import bill, thereby saving foreign exchange; addressing structural problems in sugar industry and providing remunerative income to farmers; making use of damaged and surplus grains; and addressing environmental concerns.

To achieve the blending targets, the Government is encouraging sugar mills and distilleries to enhance their distillation capacities and is facilitating them in availing loans from banks, with interest subvention @ 6% or 50% of the interest charged by the banks, whichever is lower, being borne by Government. This will bring in an investment of about ₹ 41,000 crore.

As a result of these measures, it is likely that ethanol distillation capacities in the country would be doubled by 2025, which would ensure realisation of the 20% blending target. It will also address the problem of surplus sugar and ensure timely payment of cane dues of farmers.

ETHANOL: KEY POLICY AND MARKET DEVELOPMENTS 2014

- **Re-introduced administered price mechanism** for ethanol to be procured under the EBP Programme. Opened alternative route for ethanol production (2nd Generation including Petrochemicals), directed Oil PSEs to set up bio-refineries.
- **Tendering processes simplified:** Multiple Expression Of Interest (EOI), transportation slab rates.

2018

- **Notified forward-looking and updated National Policy on Biofuels - 2018**, involving all stakeholders.
- **Interest Subvention Scheme** to improve and increase the ethanol production capacity in the country. Government to provide interest (interest subvention), for a period of 5 years. GST on Ethanol lowered from 18% to 5%.
- **Differential ethanol pricing:** Allowed conversion of B heavy molasses, sugarcane juice, and damaged food grains to ethanol. Fixed differentiated ex-mill ethanol price and sourcing of raw material utilised for ethanol production given priority. Marked beginning of differentiated ethanol pricing, based on raw material utilised for ethanol production.



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2019

- **Relaxation given for getting environmental clearance** for distillery units to increase the capacities, either through incidental enhancements or by adding on capacities to speed up the infrastructure requirements to meet EBP 20 target.
- **New sources of sugar and sugar syrup introduced** for ethanol production at fixed remunerative price.
- **Published "Ethanol Procurement Policy on a long-term basis under EBP Programme"**.

2020

- **One-time registration of ethanol suppliers for long term**, including giving them visibility of ethanol demand for 5 years.
- **Approval of National Biofuel Coordination Committee (NBCC) to utilise maize for ethanol production.** Interest subvention scheme for enhancement and augmentation of ethanol production capacity extended to grain-based distilleries.

2021

- **Scheme for extending financial assistance:** The scheme for extending financial assistance to project proponents for enhancement of their ethanol distillation capacity or to set up distilleries for producing 1st Generation (1G) ethanol from feed stocks such as cereals (rice, wheat, barley, corn & sorghum), sugarcane, sugar beet etc.
- **Use of a blend of 12% and 15% ethanol in gasoline as automotive fuels facilitated:** The Ministry of Road Transport & Highways has notified General Statutory Rules (GSR) to facilitate use of a blend of 12 percent and 15 percent ethanol in gasoline as automotive fuels. Comments and objections have been solicited from concerned stakeholders.

- Doubling incentive on sugar sacrificed for producing ethanol from October 2021:** With a view to encourage sugar mills to divert excess sugar cane / sugar to ethanol & to achieve targets of blending ethanol with petrol in line with Ethanol Blended with Petrol program, incentive on sugar sacrificed for producing ethanol from B-heavy molasses/sugarcane juice/sugar syrup/sugar has been doubled from October 2021, onwards in their monthly release quota. Now, those sugar mills which will be diverting sugar to ethanol would be getting the entire quantity of sugar sacrificed on producing ethanol from B-heavy molasses/sugarcane juice/sugar syrup/sugar in their monthly release quota.
- Tax Breaks on Ethanol:** In order to promote ethanol blending, the Government has lowered Goods and Services Tax (GST) rate to 5% from 18% on ethanol meant for blending under the Ethanol Blended Petrol (EBP) Programme.

2022

- Government extends timeline for disbursement of loan/completion of ethanol projects:** In respect of all the schemes notified during 2018-2021, the Central Government has decided to extend the time line for disbursement of loans up to September 30, 2022 to facilitate project proponents to complete their projects & to avail benefits of interest subvention.
- Fresh applications to set up new distilleries:** Department of Food and Public Distribution (DFPD),

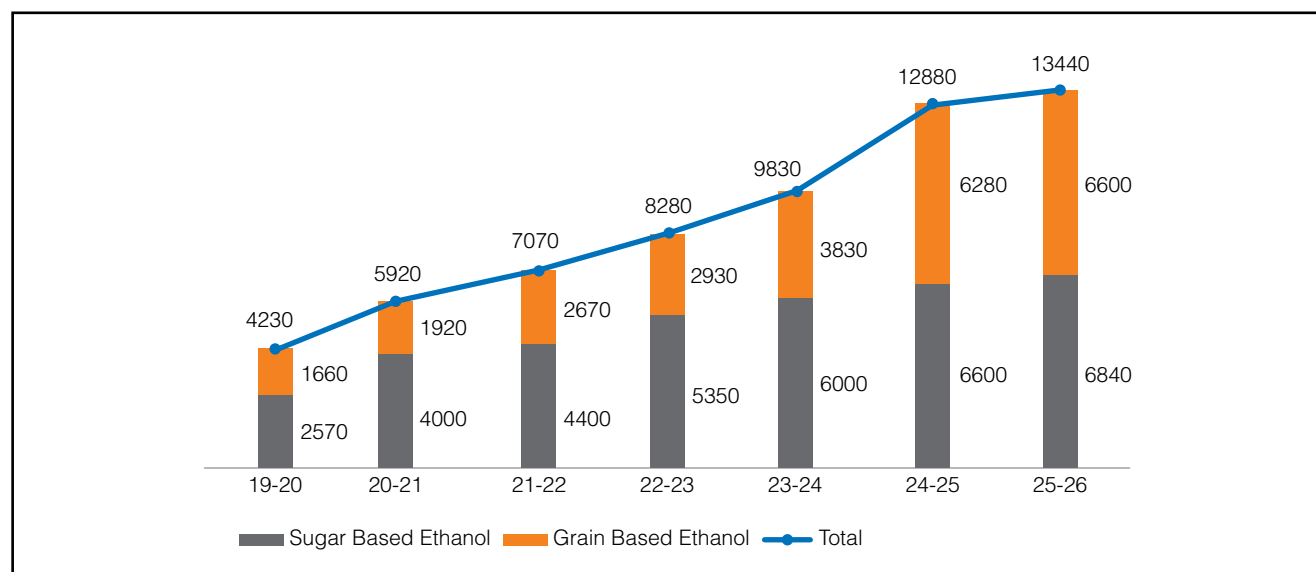
opened a window for 6 months, w.e.f 22.04.2022, for inviting applications from project proponents for enhancement of their existing ethanol distillation capacity or to set up new distillery for producing 1st Generation (1G) ethanol from feed stocks such as cereals (rice, wheat, barley, corn & sorghum), sugarcane (including sugar, sugar syrup, sugarcane juice, B-heavy molasses, C-heavy molasses), sugar beet etc.

- Encouragement to produce ethanol from other sustainable crops:** To increase production of fuel grade ethanol, the Government is also encouraging distilleries to produce ethanol from maize and rice available with FCI. Government has fixed remunerative price of ethanol from maize & FCI rice.

The Government of India announced revised prices for ethanol for the season from December 2021 to November 2022:

- Ethanol from C molasses: ₹ 46.66/litre, an increase of ₹ 0.97/litre
- Ethanol from B-heavy molasses: ₹ 59.08/litre an increase of ₹ 1.47/litre
- Ethanol from sugarcane juice: ₹ 63.45/litre, an increase of ₹ 0.80/litre
- Ethanol from Maize and damaged foodgrains: ₹ 52.92/- per litre and
- Ethanol from surplus rice available with FCI route: ₹ 56.87/- per litre

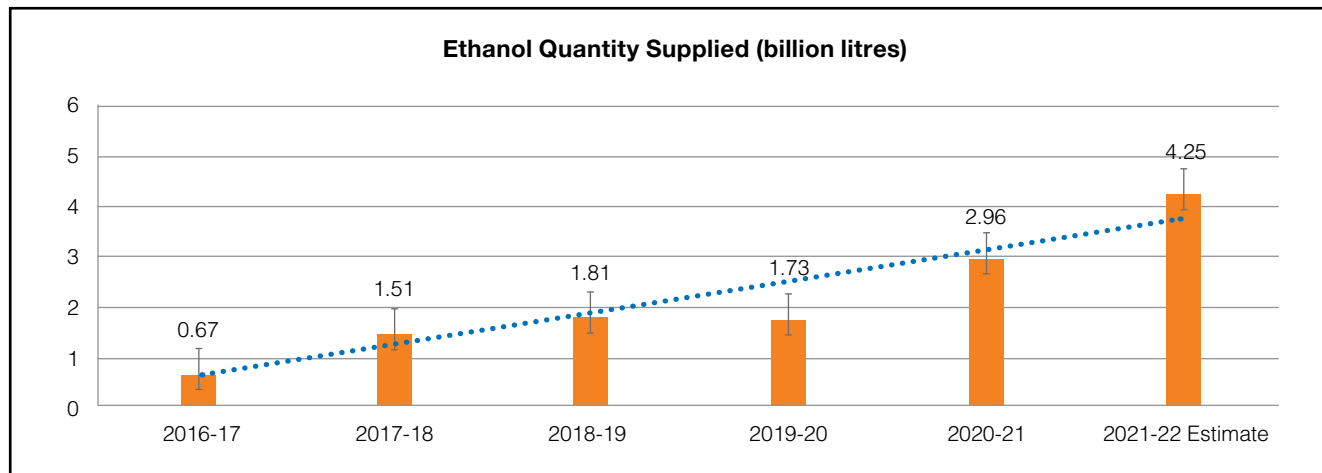
India's ethanol blending roadmap ESY 2025-26: Ethanol production projections (in million litres)



Source: Roadmap for Ethanol Blending in India 2020-25 by Niti Aayog, Ministry of Petroleum and Natural Gas

For the Ethanol Supply Year 2021-22, the total LOI issued by Oil Marketing Companies (OMCs) has been 4.25 billion litres, of which 4.10 billion litres had been contracted till April 24, 2022.

Ethanol Supply as on April 24 - ESY 21-22			All India Blending %
Pan India Quantity Billion Litres			
Total LOI	Contracted	Supplied	
4.252	4.103	1.687	9.82



ALCOHOL BUSINESS PERFORMANCE

Overview

Our growing presence in the Alcohol business is powered by our focus on being an active partner in India's self-reliance journey, and is driven by our passion for premium quality production at all our manufacturing facilities. During the year, we had two well-equipped ultra-modern distilleries, at Muzaffarnagar and Sabitgarh (MZN & SBT), engaged in the production of quality Ethanol. They had a combined capacity of 320 Kilo Litre Per Day (KLPD), with the flexibility of MZN distillery to also produce Extra Neutral Alcohol (ENA). Subsequent to the year, we enhanced operations at Sabitgarh from 160 KLPD to 200 KLPD and commissioned a new 160 KLPD Multi Feed Distillery at Milak Narayanpur (MNP) to further augment the total distillation capacity to 520 KLPD. This distillery at MNP is capable of being operated on molasses / sugarcane juice / syrup and grains. It is among the largest new multi-feed distilleries being set up in India. One more grain-based distillery of 60 KLPD is in the final stage of establishment at the Muzaffarnagar Distillery complex, where superior quality of Extra Neutral Alcohol (ENA) / Ethanol will be produced.

We plan to enhance the total distillation capacity to 660 KLPD by July 2022, with expansion / debottlenecking of existing distilleries and establishment of the new grain-based facility as mentioned. Apart from this, we are also bottling Indian Made Indian Liquor at our bottling facility in the premises of our

existing distillery in Muzaffarnagar, Uttar Pradesh, to effectively use molasses reserved to be sold to country liquor units, and to facilitate forward integration of our distillery operations.

The Muzaffarnagar distillery has flexible operations to produce Ethanol, Extra Neutral Alcohol (ENA), Rectified Spirit (RS) and Special Denatured Spirit (SDS); Milak Narayanpur is one of the largest multi feed distillery units with flexibility to operate on molasses / syrup and grains; and Sabitgarh operates on B-heavy molasses to manufacture high quality ethanol. All the distilleries have assured access to consistent supply of captive raw material (molasses) - C-heavy, B-heavy molasses as well as Syrup.

As an environmentally conscious and responsible corporate, we follow the highest standards in Environment, Health and Safety (EHS), with stringent compliance to environmental and pollution norms. We have set up concentrated spent wash (termed as SLOP) fired incineration boilers at all the distilleries, as per the Indian Government's directives and guidelines for effluent treatment.

How we responded proactively in FY 22

During the pandemic period, we pushed our strengths to meet the COVID-19 challenge head-on through a dynamic and futuristic approach. We surged actively forward to implement our plans and stay on track with our targets.