

India making Significant Progress in Ethanol Blending
10% ethanol blending achieved 5 months ahead of its schedule
PM dedicates 2G Ethanol Plant in Panipat on World Biofuel Day
(Ministry of Petroleum and Natural Gas)

August 11, 2022

“India is making great progress in ethanol blending. We are moving with the target of 20% blending of ethanol compared to 1-2% blending done before.”

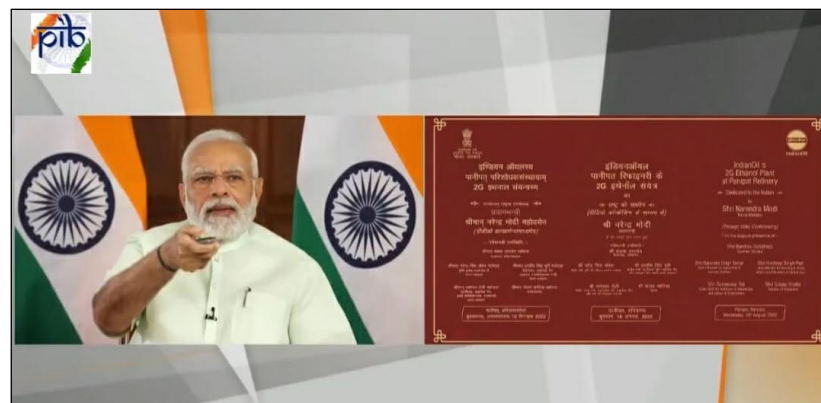
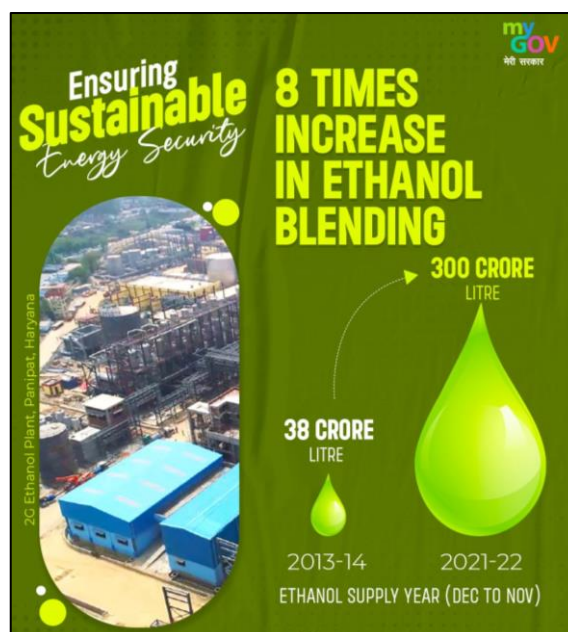
- [Prime Minister Narendra Modi](#)

India is the world’s third-largest energy-consuming nation and a significant part of India’s energy requirement is met through oil which largely continues to rely on imports. India’s share in global energy consumption is set to double by 2050.

Rising energy demand and high reliance on imports pose significant energy security challenges. It also leads to massive foreign currency outflow. Further, excessive use of fossil fuels leads to higher carbon emissions and associated health concerns.

Domestically produced ethanol is a potential opportunity to reduce reliance on oil imports by blending it with conventional fossil fuels for consumption. India started blending ethanol in petrol on a pilot basis in 2001.¹

On the occasion of World Biofuel Day (10.08.2022), [Prime Minister Shri Narendra Modi dedicated to the nation, the 2nd generation \(2G\), Ethanol Plant, in Panipat, Haryana](#). The Prime Minister said that in a country like ours that worships nature, biofuel is a synonym for protecting nature.



¹ <https://static.pib.gov.in/WriteReadData/specificdocs/documents/2021/oct/doc202110441.pdf>

Based on state-of-the-art indigenous technology, the project will turn a new chapter in India's waste-to-wealth endeavours by utilising about Two lakh tonnes of rice straw (parali) annually to generate around Three crore litres of Ethanol annually and will reduce Greenhouse Gases equivalent to about Three lakh tonnes of Carbon Dioxide equivalent emissions per annum.

What is Ethanol?

Ethanol is one of the principal biofuels, which is naturally produced by the fermentation of sugars by yeasts or via petrochemical processes such as ethylene hydration. It has medical applications as an antiseptic and disinfectant. It is used as a chemical solvent and in the synthesis of organic compounds, apart from being an alternative fuel source.²



Ethanol Blending Programme³

The Government, under the leadership of Prime Minister Narendra Modi, in line with its energy security, climate change and rural economy enhancement goals, has initiated multi-pronged reforms to boost Ethanol usage in the country. The government has been promoting the use of ethanol as a blend stock with main automotive fuel like petrol in line with the [National Policy on Biofuels - 2018](#) under the Ethanol Blended Petrol (EBP) Programme. **Under this programme, an indicative target of 20% blending of ethanol in petrol by 2030 was laid out. Subsequently, the target year for achieving 20% ethanol blending in petrol was also advanced to 2025.** To view the timeline of Ethanol Blending Programme, [click here](#).

The Central Government has taken various measures in the past Three years to increase the production of ethanol to meet the blending target which is enumerated as under:⁴

- To encourage the blending of fuel, the Union Budget 2022-23 has announced an additional differential excise duty of Rupees Two per litre on unblended fuel from the 1st day of October 2022⁵
- Extending financial assistance in the form of interest subvention @ 6% per annum or 50% of the rate of interest charged by banks/financial institutions whichever is lower for five years including one-year moratorium

LANDMARK ACHIEVEMENTS IN 8 YEARS



Ethanol distillation capacity almost doubled



Number of distilleries increased by 40% in 5 years



Helped contain petrol price by over ₹3/- per litre



Long Term Offtake Agreements (LTOAs) to bring in private investments of ₹25,000-₹30,000 crore in the coming years

² https://www.niti.gov.in/sites/default/files/2021-06/EthanolBlendingInIndia_compressed.pdf (page-13)

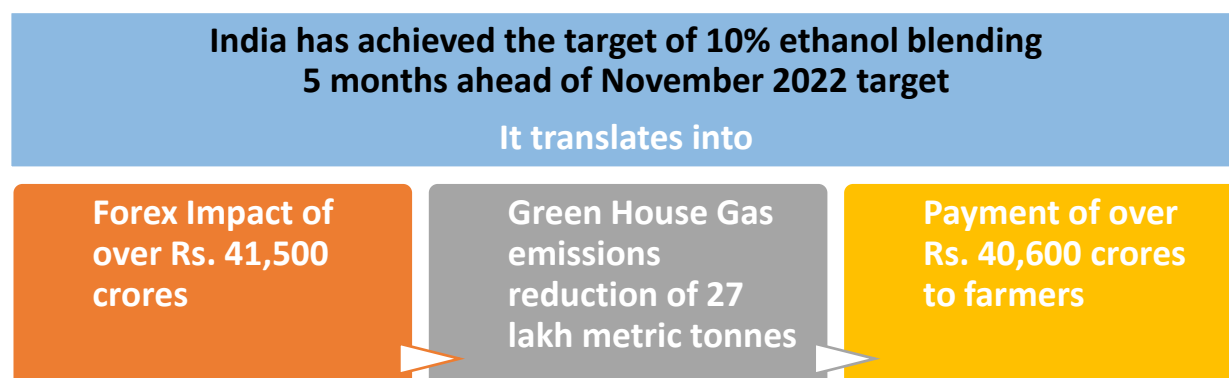
³ <https://static.pib.gov.in/WriteReadData/specificdocs/documents/2022/feb/doc202222720201.pdf>

⁴ <https://pib.gov.in/PressReleaseDetailm.aspx?PRID=1809735>

⁵ <https://static.pib.gov.in/WriteReadData/specificdocs/documents/2022/feb/doc202222720201.pdf>

- The Government has been fixing remunerative prices of ethanol produced from different feed-stocks for the supply of ethanol to OMCs for every Ethanol Supply Year
- Amended the Industries (Development & Regulation) Act, 1951 to ensure free movement of ethanol in the country
- Reduced Goods & Service Tax (GST) on ethanol meant for Ethanol Blended with Petrol (EBP) Programme from 18% to 5%
- FCI Rice & maize also allowed as feedstock
- Interest subvention scheme extended to grain-based distilleries
- Standard Operating Procedures (SOPs) issued by banks for faster loan sanctioning
- Environmental Clearance procedures simplified by the Ministry of Environment, Forest & Climate Change
- Enhancement of storage capacities to store ethanol started by Oil Marketing Companies (OMC)
- Notification for 20% blending from April 2023 issued
- Use of automotive fuel E12 (12% ethanol with 88% petrol) & E15 notified;
- Notification for direct sale of E100 by OMCs issued
- E20 material compatible vehicles being launched from April 2023 and E20 engine compatible vehicles being launched from April 2025
- Flexi-fuel engine & components (capable of running up to E85 fuel) included under Production Linked Incentive (PLI) scheme
- Cabinet approved amendments to National Policy on Biofuels to make India energy independent by 2047. The amendments are intended to allow more feedstocks for the production of biofuels, advance the ethanol blending target of 20 per cent blending of ethanol in petrol and promote the production of biofuels in the country. ⁶

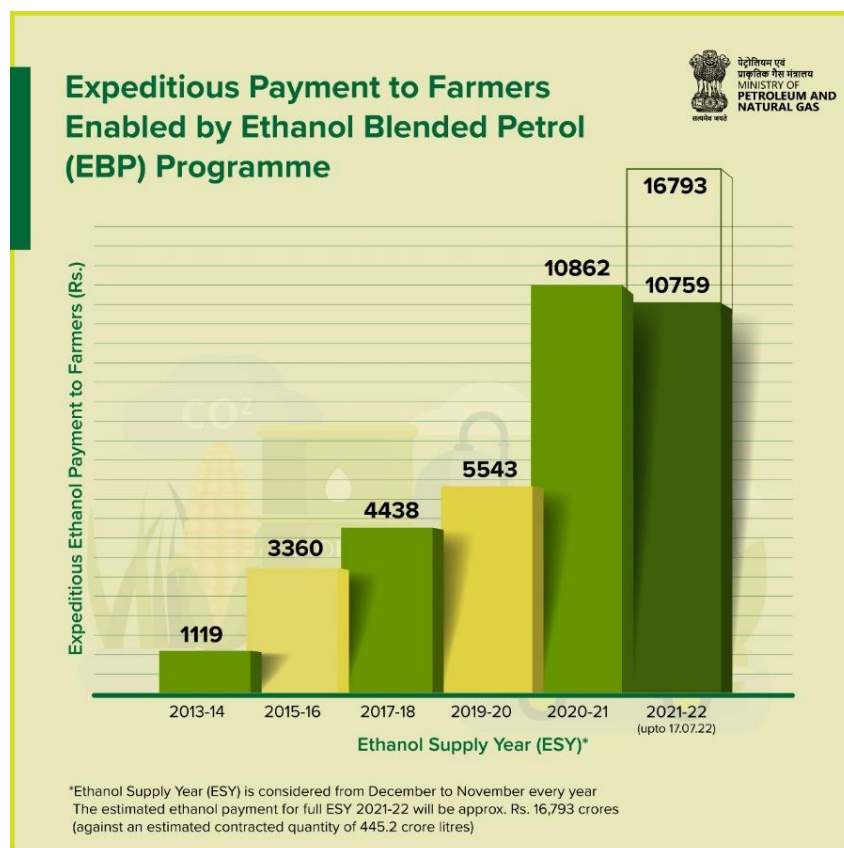
Progress so far: ⁷



A “Roadmap for Ethanol Blending in India 2020-25” was released by the Prime Minister in June 2021 which laid out a detailed pathway for achieving 20% ethanol blending. Due to the coordinated efforts of the [Public Sector Oil Marketing Companies \(OMCs\)](#) the target of 10% blending under the programme has been achieved much ahead of the targeted timelines of November 2022 wherein the Public Sector OMCs have attained an average 10% ethanol blending in petrol across the country.

⁶ <https://newsonair.gov.in/Main-News-Details.aspx?id=441203>

⁷ <https://pib.gov.in/PressReleasePage.aspx?PRID=1831289>



With all the initiatives taken by the Government, the Ethanol Blending Programme is on track to achieve the target of 20% blending by 2025-26.

In India's quest for a clean energy future and to keep up with its commitment to the Sustainable Development Goals (SDGs), the Government of India is been increasingly boosting the use of ethanol-blended fuel in the country. These efforts will pave the way for the 'Make in India' drive thereby leading to a reduction in the import of petroleum products. This will also promote the Aatmanirbhar Bharat Abhiyan and give an impetus to the Prime Minister's vision of India becoming energy independent by 2047.

References:

- <https://static.pib.gov.in/WriteReadData/specificdocs/documents/2021/oct/doc202110441.pdf>
- https://www.niti.gov.in/sites/default/files/2021-06/EthanolBlendingInIndia_compressed.pdf (page-13)
- <https://pib.gov.in/PressReleaseDetailm.aspx?PRID=1809735>
- <https://newsonair.gov.in/Main-News-Details.aspx?id=441203>
- <http://petroleum.nic.in/sites/default/files/biofuels.pdf>
- <https://pib.gov.in/PressReleasePage.aspx?PRID=1831289>

Other Important Links:

- <doc20222720201.pdf> (pib.gov.in)
- [Ministry of Petroleum and Natural Gas on Twitter: "Expeditious payment to farmers enabled by Ethanol Blended Petrol #EBP Programme #BiofuelDayWithMoPNG #WorldBioFuelDay #ethanolblend @PMOIndia @HardeepSPuri @Rameswar Teli @Secretary MoPNG @mygovindia @PIB India https://t.co/PiJXTD86hZ" / Twitter](https://twitter.com/MinistryOfPetroleumAndNaturalGas/status/1488888888888888888)
- [PIB in Maharashtra IN on Twitter: "#WorldEnvironmentDay2021 Watch how National Biofuel Policy is encouraging the use and production of ethanol blended petrol @moefcc @PetroleumMin @airnews_mumbai @UNEP https://t.co/LXlu9u8wPH" / Twitter](https://twitter.com/PIBIndia/status/1488888888888888888)
- https://www.youtube.com/watch?v=dWWPm_cJ1iI
- <https://newindiasamachar.pib.gov.in/WriteReadData/flipbook/2022/Mar/2nd/English/index.html>

- [Press Information Bureau \(pib.gov.in\)](http://pib.gov.in)
- [PIB India on Twitter: "**Increase in Ethanol Blending** Prior to 2014, the country received approximately 400 million liters of ethanol for blending. At present, more than 3000 million liters of ethanol is supplied for blending. #NewIndiaSamachar https://t.co/BMcGQEu9dM https://t.co/9fpssMex3E" / Twitter](#)
- [Dharmendra Pradhan on Twitter: "Ethanol has become one of the major priorities of 21st century India. #IndiasGreenFuture https://t.co/AJRGHayE7M" / Twitter](#)

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