

Ethanol makers to get a boost with compulsory fuel blending

Ethanol producers are preparing to take advantage of OMCs being required to sell petrol blended with 5% ethanol



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Mumbai: A government initiative to promote the blending of ethanol with petrol to reduce the country's dependence on hydrocarbons is getting a slow start although implementation is just months away and the policy received a further push in January this year.

Ethanol producers are preparing to take advantage of oil marketing companies being required to sell petrol blended with 5% ethanol across the country from 1 July. The January notification said that by 2017, every litre of petrol should be blended with 20% of ethanol.

Such a practice is followed in several parts of the world, most notably in the US and Brazil, where the product is known as gasohol and usually contains 10% ethanol. The Indian government initiatives are part of the national biofuel policy announced in December 2009.

While some companies are planning investments for capacity expansion and new plants to cater to the anticipated requirement, others are looking at focusing on research and development to tap alternative methods for ethanol production.

For instance, Pune-based **Praj Industries Ltd**, which installs biofuel plants and distilleries, plans to set up India's first plant to make new-generation ethanol produced directly from agro-waste. It marks a shift from the traditional molasses-based extraction, chairman **Pramod Chaudhari** said in an interview.

"We will be setting up the country's first 30,000 litres per day demonstration plant in southern Maharashtra with an investment of at least `125 crore for one of our clients," said Chaudhari, adding that the new technology is for producing ethanol directly from agriculture waste such as stover, cobs, trash, husk and bagasse.

He said the existing ethanol production capacity in the country is adequate to meet the currently mandated 5% ethanol blending with petrol. "The new investments are mainly driven by the hope that the blending ratio will be raised to 20% by 2017 as indicated by the government," he said.

Across the world, there exist only three factories that produce ethanol from agricultural waste. While the first two commercial plants were set up in the US, the third has been commissioned in Europe, but is yet to start production.

Praj's "demonstration plant" for ethanol production has been developed following a successful 300 litre a day pilot at the company's research centre in Pune.

Praj hopes to start commercial production in a year's time, according to Chaudhari, who said he plans to bring in a "strategic investor" for the project.

Blending petrol with ethanol makes sense, said experts, given that India imports more than 70% of its crude oil requirements.

The ex-refinery price of petrol is around `35 per litre for oil marketing companies. By blending ethanol, the oil marketers won't save anything in terms of cost as the price of ethanol across the country varies between `32 and `43 per litre but it would mean significant savings of foreign exchange that would have been spent on the import of crude.

In India, Ethanol is mostly produced from molasses, a by-product of sugar manufacture. According to data from the Ethanol Manufacturers Association of India, the current capacity of the country is around 1.74 billion litres.

Nearly half the capacity is exported, and about 2% is used by the pharmaceutical and cosmetics industries. The rest is used by oil marketing companies.

Of this, 900 million litres are produced in Maharashtra, which houses the largest number of sugar mills and accounts for one-third of the country's sugar production.

Around 40% of India's sugar production takes place in the cooperative sector. Private sector companies such as **Shree Renuka Sugars Ltd**, **Balrampur Chini Mills Ltd**, **Bajaj Hindusthan Ltd** and **Simbhaoli Sugar Mills Ltd** are among the country's listed sugar companies.

Institutions such as the Central Salt and Marine Chemicals Research Institute in Bhavnagar, International Crop Research Institute for the Semi-Arid Tropics, Hyderabad, and Central Leather Research Institute in Chennai are engaged in research to seek out alternative ways of producing ethanol and bio-diesel.

Experts and some ethanol makers, however, are sceptical about the implementation of the government notification.

"Before deciding to make investments for creating additional capacities, we would like the policy of 5% blending implemented by oil marketing companies and the central government," said **R.G. Mane**, secretary, All India Ethanol Manufacturing Association.

Pointing out that although the oil marketing companies have floated a tender for 1.4 billion litres of ethanol for fiscal 2014, manufacturers have committed the supply of just around 560 million litres "due to haphazard policies of government on this issue".

There are practical difficulties too.

"There is no proper mechanism in place to collect, grade, store and distribute agricultural waste because of which lot of power generation capacity based on bio-mass in country is stranded as they are not able to get sustained feedstock," said **Debashis Mishra**, senior director in the energy and resource practice at audit and consultancy firm **Deloitte Touche Tohmatsu India Pvt. Ltd**.