







Dear reader,

The recently announced Indian Biofuel Policy 2018 comes as a fresh breeze for the domestic ethanol industry. Progressive in its approach, it promises to usher in a new age for the Biofuels industry in India, keeping pace with similar developments at a global level.

Some of the most important provisions of this policy are related to the production of 1st Gen and 2nd Gen Fuel Ethanol. 1st Gen Fuel Ethanol can now be produced from a variety of other feedstocks apart from sugarcane molasses. These include sugarcane juice, B heavy molasses, corn, cassava, damaged food grains like wheat, broken rice, rotten potatoes and other items unfit for human consumption.

 2^{nd} Gen Ethanol – an advanced biofuel, finds even more prominence in the policy. 2^{nd} Gen Ethanol is produced from agri-residues like rice & wheat straw, cane trash, corn cobs, stover, cotton stalk, bagasse etc. This goes a long way in enhancing the blend ratio of ethanol in transport sector for ensuring sustainability of the program.

Recognizing the importance of renewable energy, this policy also has provisions to build the production

capability of 2nd Gen Ethanol including a viability gap funding scheme of ₹ 5,000 crore over 6 years, tax incentives and a higher purchase price compared to 1st Gen biofuels. The recently released sugar bailout package too approved a slew of measures to help the liquidity of Indian sugar industry viz. interest subvention to the mills for augmenting ethanol production capacity.

In the global markets, sugar stockpiles are poised for a record as production levels surge in major producing countries like India and Thailand. In such a scenario, it is prudent for producers to divert excess sugar production to the more remunerative revenue stream of ethanol.

With over 30 years of experience across a wide range of geographies, Praj is well versed with the feedstock mentioned above. We have an array of technologies and solutions coupled with a proven track record. In this issue of Bioenergy newsletter, we will further elaborate upon our technological preparedness in the light of these developments on the policy front.

Thank you for your constant support to Praj. Please write to us at communication@praj.net.

Yours truly,

Atul Mulay

President - Bioenergy Business



Feedstock capability

Praj in Colombia



Destileria Riopaila S.A.S.

Colombia is one of the remarkable examples of successful implementation of ethanol blending program – right from building an ecosystem around sugar & ethanol production to usage of flex fuel vehicles.

It is always heartening to see our solutions adding to the profitability and sustainability goals of our customers. In Colombia, **Praj's technologies have been fulfilling 100% the country's ethanol blending program for over a decade**.

Multifeed, multi-product plants supplied by Praj are energy efficient. The capability to process an array of streams from the sugar mill and combinations thereby viz. molasses A/B/C, juice and syrup add to the profitability, asset utilization and agility to respond to the dynamic market needs. The tropical climate of Colombia also demands specialized vinasse/effluent treatment solutions. Our plants are compliant with the local pollution control norms.

The capacity of these plants ranges between 100 to 480 KLPD.



Manuelita S.A.

At Praj, we are in constant pursuit of meaningful engagement with our customers. Thus, support service and knowledge sharing platforms are extremely important to us. We periodically hold technical seminars such as Ethanol Masterclass for the operating staff of our customers.

South America is close to our heart for multiple reasons. We look forward to a long lasting and mutually fulfilling association with the ethanol industry in the region.

Customer Speak - I, Argentina



Name: Ing. Raúl Omar Audi Falú Designation: Production Manager Plant: Complejo Azucarero

Concepción

Qualification: Chemical Engineer **Total years of experience:** 15 years

I am happy to share about technology supplied by Praj. Praj has been supplying us 200 klpd Bioufel plant, with Ecomol Molecular Sieve Dehydration technology, which is proven technology and working absolutely fine. We are extremely happy with trouble free operations.

We appreciate Praj and it's Customer Care cell for the continuous technical support. We look forward to continued business association with Prai.



Customer Speak - II, Colombia



Name: Mr. Pedro Nel Lopez Lopez Designation: Manufacturing Manager

Company: Incauca S.A.S

Praj Industries Ltd, Pune, India, the global process engineering and solution provider for Biofuels mainly Bioethanol, has installed seven plants in Colombia including our 300 KLPD Bio ethanol plant at Incauca S.A.S.,Cali, Colombia.

The plant is in operation for more than 12 years now. Praj has successfully designed, engineered, erected and commissioned our Bioethanol plant. It covers sections like feedstock handling, fermentation, vacuum distillation, MSDH and with vinnasse evaporation for producing Bioethanol.

Praj has configured the plant in such a way that, the plant can be operated on purely Molasses A, Molasses 8, Molasses C, Sugar Cane Juice, Sugar cane Syrup and combinations of any of two streams together as per availability.

We are also happy with the technical support being provided by Praj and the after-market solutions support. Praj has also undertaken technology related workshop specific for advancements in Bioethanol technology.

Events

Alcohol and Ethanol Masterclass, Indonesia

e are happy to share that recently we hosted an interactive technical program exclusively for industry participants in Indonesia. The

program was aimed to build awareness about fuel ethanol, biorefinery concept, roadmap for ethanol industry in Indonesia in the midst of challenges affecting the



ethanol industry and advanced technologies present in market to overcome them. Indonesia is on the verge of implementing fuel ethanol blending program nationwide. Masterclass is a knowledge sharing platform aimed at collaboration among industry participants and brain storming on various developments in the industry.





Fuel Ethanol Workshop (FEW) 2018, USA



Fuel Ethanol Workshop (FEW 2018) is the largest, longest running ethanol conference in the world, the FEW is renowned for its superb programming—powered by Ethanol Producer Magazine—that maintains a strong focus on commercial-scale ethanol production, new technology, and near-term research and development.

It was 34th consecutive year of the grand event. We are participating in FEW from last 13 years. This year the event was held at Century Link Center, Omaha in Nebraska state of USA from 11th to 13th June 2018. The overall participation in the event was 300 exhibitors and 2000+ attendees from various industries like producers, suppliers, universities, finance, EPC companies, etc. This year, Mr. Jayant Godbole, Mr. Shrikant Rathi and Mr. Shantanu Jalgaonkar represented Praj in FEW-2018. We were silver sponsor for this event.

Our presentation was much appreciated by the delegates.

Topics of the presentation were -

- Praj's Innovative Technologies for Reducing Carbon Intensity of Existing Ethanol Plants. And the presenter was Mr. Shantanu Jalgaonkar.
- 2) Simultaneous Expansion and Energy Reduction of Your Ethanol Plant. And the presenter was Mr. Shrikant Rathi

In addition, we represented through our booth No. 1214 in the main hall which was mainly focusing on

- 1) Providing energy efficient ethanol and beverage alcohol plants
- 2) Enhance profitability of existing ethanol plant through our modernization services
- 3) Future ready 2G ethanol plants for a greener, cleaner and sustainable world.

The booth was visited by many executives of the producers and other industries

Upcoming Events









Across 5 continents | More than 75 countries | Over 750 References

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