

*Dear Reader,*

Welcome to the maiden edition of our quarterly **Bio-energy Newsletter**.

Over the past three decades, Praj is delivering solutions to fulfill needs of customers. We are committed to providing the latest process technology and state-of-the-art equipment to maximize the value for customers. Our success is contingent upon **YOUR** success.

At the outset, I am delighted to share the recent study conducted by International Wines and Spirits Research (IWSR) report. The study shows 80% of the ENA used in global top 10 brands comes from PRAJ's technology and process plant.

3 Indian whisky brands appear in such global top ten brands. 90% of ENA used here is based on PRAJ's technology and process plant

My sincere heartfelt thanks to our customers for their continued trust on us.



In this edition, we have covered the latest developments on customer front. It is our intention to keep you posted of interesting and relevant happenings on market, technology development, innovation and policy updates in bio-energy industry, in addition to various innovative developments at Matrix, our R&D center.

I welcome your feedback and will be pleased to respond to any comments that you may have.

I once again thank you for your continued support and look forward to strengthening our partnership.

Best Regards,  
**Atul Mulay**  
President – Bio-Energy Division



## Asia

**Customer: Thai Roong Ruang Energy Co. Ltd., Thailand**



**Project Information:**

Feedstock	Sugarcane molasses, C grade
Capacity	150000 liters per day
Product	Fuel ethanol
Project Highlights	First international installation of EcoSmart ED (Evaporative Distillation) - an advanced technology to reduce steam consumption by 30%

**Customer Speak:**

We appreciate the overall efforts put in by Praj Team to set up 150000 liters per day fuel grade ethanol plant based on sugarcane molasses at our Saraburi, Thailand facility. We are happy with the overall performance of the Plant. Fermentation, distillation and dehydration plants are running satisfactorily as per the desired capacity. Plant consumes less steam as compared to agreed parameters and the quality of fuel grade ethanol meets our expectations.

Praj established a perfect example of planned approach and excellent site coordination to complete the project on time. The flexibility and agility demonstrated by Praj team to understand the

site challenges and adapting to the best practices is commendable. It was indeed a very good experience of working with Praj as a technology partner to set up our fuel grade ethanol plant. Praj's new Advance Eco Smart-ED (Evaporation Distillation) technology with lower energy requirement eliminated requirement of a new Boiler.



**Mr Anu Solarum,**  
Plant Manager,  
Thai Roong Ruang Energy Co Ltd

## Africa

**Customer: Kakira Sugar Ltd, Uganda**



**Project Information:**

Feedstock	Sugarcane molasses
Capacity	60000 liters per day
Product	Multiproduct – Extra neutral alcohol, fuel ethanol
Project Highlights	This is one of the most sustainable ethanol complexes in Africa with energy self-sufficiency. <ul style="list-style-type: none"> <li>• Executed on EPC basis (without civil works)</li> <li>• Scope includes main distillery process plant along with auxiliaries, utilities, bio gas plant and boiler</li> </ul>

The plant was inaugurated at the hands of His Excellency Mr Yoweri Museveni, President of the Republic of Uganda.

## Europe

**Customer: PHP Wieslaw Wawrzyniak, Poland**



### Project Information:

Feedstock	Rye, corn
Capacity	48000 liters per day
Product	Extra neutral alcohol
Project Highlights	<ul style="list-style-type: none"> <li>• Successful commissioning of the extra neutral alcohol in Poland</li> <li>• Repeat order for ENA plant from PHP Wieslaw Wawrzyniak. Praj has installed 36000 liters per day ENA and molecular dehydration plant in 2012</li> </ul>

## Americas

**Customer: Ingenio y Refineria San Martin del Tabacal SRL, Argentina**



### Project Information:

Feedstock	Sugarcane juice/molasses , corn
Capacity	480000 liters per day anhydrous fuel ethanol 800000 liters per day dehydration plant
Product	Fuel ethanol

Project Highlights	<ul style="list-style-type: none"> <li>• Successful commissioning of integrated vacuum distillation and molecular sieve dehydration plant designed for sugarcane juice and molasses based fermented wash</li> <li>• Largest dehydration plant in Argentina</li> <li>• Project completed on fast-track basis within 9 months on CFR basis</li> </ul>
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1) Praj's Pune factory wins safety award by National Safety Council of India 2) Mr. Nitin Gadkari, Minister for Road Transport, Highways and Shipping inaugurated Praj's Integrated Bio-refinery for Renewable Fuels & Chemicals 3) Dr. Saraswat, member of NITI Ayog visited Praj 4) Praj recognized for best supply chain management practice by IIMM 5) Praj participated in Bio-energy Urja Utsav at Pune 6) Praj participated in Fuel Ethanol Expo and Workshop

## Upcoming Events

**Event:** Drinktec  
**Venue:** Germany  
**Date:** 11 to 15 September 2017

**Event:** Ethanol LatAm  
**Venue:** Antigua Gautemala  
**Date:** 5 to 7 December 2017

**Event:** Philsutech  
**Venue:** Philippines  
**Date:** 5 to 7 December 2017

Across 5 Continents | More than 75 Countries | Over 750 References

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