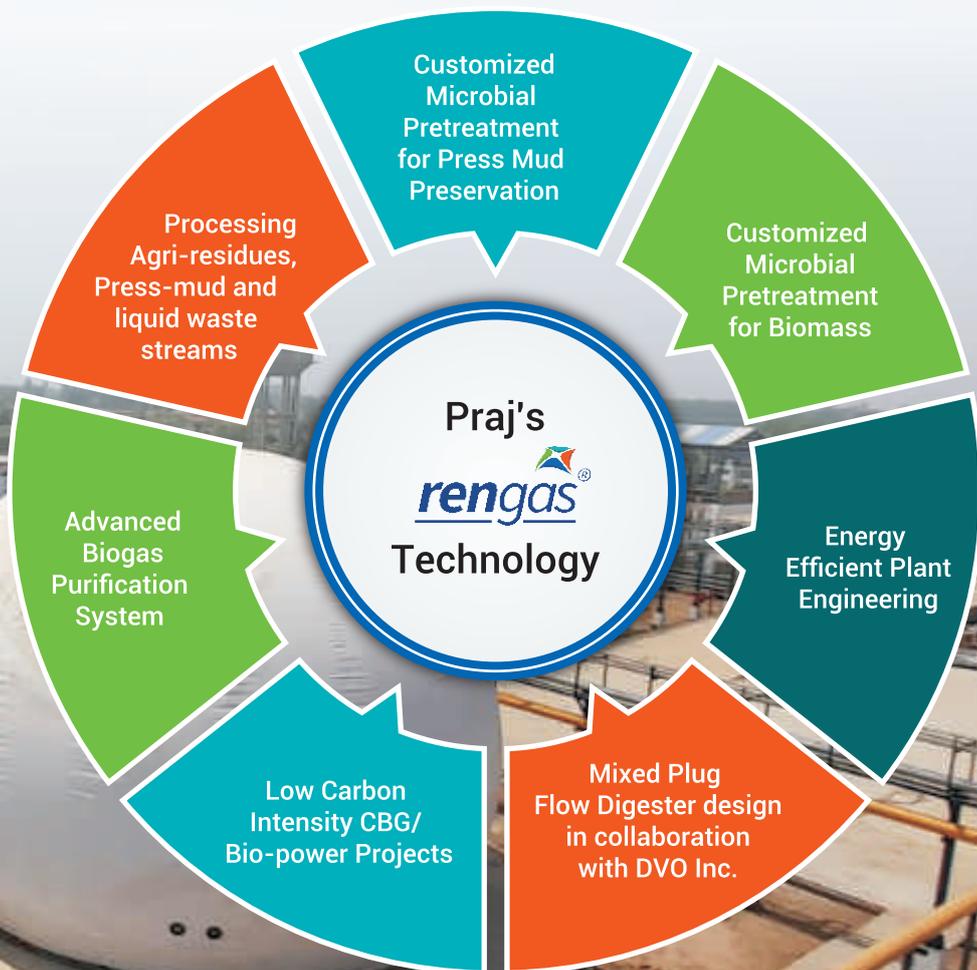


PRAJ *rengas*[®] Technology

*Partnering for Better Tomorrow with Compressed Biogas (CBG)
The Next Generation Biofuel*



RNG: Biomethane produced by anaerobic digestion of Agri-residues/organic wastes



Reduces Green House Emissions



Affordable as compared to CNG



Enabling Circular Bioeconomy

PRAJ *rengas*® Technology From - Agri-residues, Farm & Industrial waste

Sugarcane Bagasse



Wheat Straw



Corn Stover



Chicken Litter



Sugarcane Pressmud



Cow Dung



Rice Straw



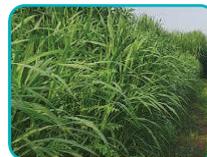
Soybean Straw



Corn Cobs



Napier Grass



Corn Biomass



Empty Fruit Bunches of Palm



PRAJ *rengas*® Technology Unique Value Proposition

Compositional data of Agro-residues & Sugar / Grain Plants Co-products

Unique Microbial Consortia for Feedstock Pretreatment & Anaerobic digestion

Mixed Plug Flow Biomethanation Process

Digestate processing into Value added Soil Conditioner co-products

Advanced and Cost Effective Biogas Purification System to provide CBG meeting IS 16087:2016

The Process:

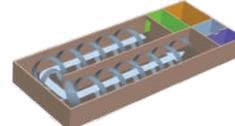
- PM - STAB
- BM SOLVE – LC Hydrolysis
- RC Biomethanation Process
- Organic Manure

The Plant:

- Feedstock handling
- Digester design
- Advanced Biogas Purification
- Digestate processing
- Energy & water conservation



Pre Treatment



Bio Methanation



Gas Purification



Organic Manure



Best in class yields

Flexible design to make:

- Vehicular Grade CBG
- Biopower with CHP
- Industrial heating
- Organic Manure as co-product (Solid & Liquid)
- Eligible for Green Credits
- CBG for Grid Injections

Testimony

- Over 45 Biogas Plants in operation
- Two Commercial projects on Press mud to CBG Project commissioned
- One commercial project on Rice Straw
- One Commercial project on Distillery Biogas to CBG

Success factors

- Proven global track record
- Attractive ROI
- Feed stock flexibility
- Bio mobility
- Reduces GHG Emissions by 90 %

PRAJ – Leading the way in Renewable Gas:

As global leader in Biofuels Technology & Plants, PRAJ has a strong track record in Renewable Gas Plants. Over 45 industrial installations.

Praj's Commercial Scale Press Mud to CBG Operational Plants in India

- Praj offers world class **rengas**[®] technology for CBG projects.
- Patented Microbial Pre-treatment to preserve Press Mud for round the year operation.
- Partnered with DVO Inc. for the mixed plug flow digester design.
- Robust Biogas Purification System.
- FCO compliant organic manure.

First of its kind Pressmud Based 200TPD CBG Plant In North India



Upto 15 TPD CBG plant based on Rice Straw in North India



Praj's CBG Demonstration Plant

Location: Praj Matrix R&D Center
Pune

India's first-of-its-kind CBG demonstration facility using agri-residue as feedstock

Processes agri waste/ industrial co-products / organic wastes like straws, agri waste, grasses, press mud, food waste and MSW

Automated facility can produce up to 35000m³ of raw biogas annually

To be utilized for demonstration, testing, improving, and optimizing technology on different feed stocks.



1000++ references in 100+ countries across 5 continents and still counting...



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