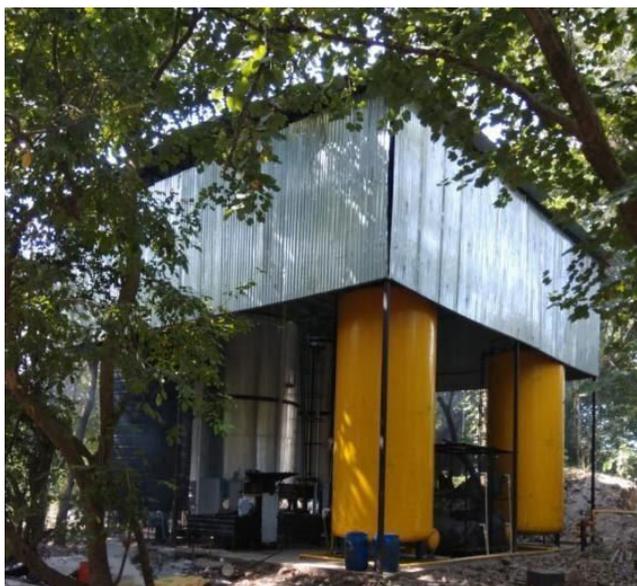


Case Study – IIT Bombay

The present case study discusses the Indian Institute of Technology, Bombay BioUrja which is a 2000 kg per day biogas plant. It was commissioned on 26th July 2019. The system has been setup as 2 nos. of 1 ton capacity each. The plant is designed for daily feeding since a lot of students reside on the campus and thus the mess and canteens are functional through the week.

The waste stream includes both food preparation waste and cooked food waste. The energy generated from the BioUrja fuels 4 large burners, which are used to cook 3 meals a day alongside LPG burners.



Project Details

Waste processing capacity	2000 kg per day
Total expected gas generation	140 kg of LPG equivalent
Total area covered by the system	100 m ²
Operational since	July, 2019

Efficient Energy Utilization is ensured by enabling a good cooking experience and thus better returns. A lot of traditional biogas plants in India do not work since the client is not motivated to run them due to higher and non-uniform cooking times due to lower calorific value of biogas and lack of pressure. Our BioUrja system however ensures that the biogas is supplied to the kitchen at an optimum pressure and used through specifically designed and larger (compared to LPG/PNG) burners. This ensures that the cooking experience is similar to LPG/PNG thus ensuring that the generated energy in form of biogas is utilized by the kitchen staff.

Operations & Maintenance

The system is operated by operators provided by us at IIT Bombay. The high level of automation ensures that even unskilled personnel can carry out the basic operation procedure



Case Study – IIT Bombay

of feeding the waste, thus reducing the operations cost. However, GPS Renewables communicates with the operating staff on a daily basis to ensure a smooth and stable operation.

GPS Renewables, through our proprietary Remote Monitoring System (RMS) track the operational parameters 24x7. Any anomalies or alarms are immediately received by the back end team, which, in coordination with the maintenance team, ensures that any issues identified are immediately addressed and resolved. RMS is at the very heart of our philosophy of O&M and has ensured that downtimes have been less than 2% for all our installations.

About GPS Renewables

GPS Renewables is a Bangalore headquartered company and pioneer in decentralized waste-to-energy solution. Our biogas solutions are based on cutting edge technology that delivers twice the amount of energy as compared to any other solution and comes complete with Cloud Based Remote Monitoring System which enables us to offer our Clients system up-times of more than 98%.

For further details please contact: info@gpsrenewables.com