



Opportunities for Self Sustainable and Energy Independent Entities thru Waste Management and Biogas Plants.

Increased Energy demand and waste management both are acute problems all over the world. We at Urja Bio System Private Limited , Pune, India are working for customized scientific waste management projects as per clients requirement. We cater our services to all bodies where wet waste like food and vegetable waste , dung waste , litter , slaughter house waste , energy crops are converted to useful form like LPG replacement, power generation , CBG production etc. We deal in House hold biogas plants, Dairy based biogas plants, Poultry Litter based biogas plants, Slaughter house biogas plants, Carbon neutral EV charging stations on Napier grass or available substrate based biogas to power projects and community biogas plants for the waste generated in villages , its scientific disposal , generating revenue , employment generation and use of organic manure produced in this method for organic farming promotion and improve soil health.

We propose different models which can easily solve the waste management issue at rural level, generate better income to dairies, poultries, and food / hotel industries and also ensure proper revenue generation to the villages, town, municipalities along with promotion of organic farming in nearby areas.

As those projects are self-sustainable and suitable revenue generation is possible for any capacity.

Working model –

Model 01- House Hold Biogas Plants

Individual Family type Prefabricated Biogas plant.

Capacity – We have ready to install 2 m³ per day biogas plant , which is very suitable for small families and very customer friendly (Gas is sufficient for cooking for 5-6 no. of people in one family)

Feed – 40 to 50 kg Cow Dung per day

Solid Manure – 10 kg per day (will use as organic fertilizer in farms)

Model 02 – Dairy Based Biogas Plants

Suitable biogas plants can be designed for different capacity dairies , based on their dung waste , This biogas can be used for power generation or LPG replacement , making the dairy almost independent for their power need.

Model 03 - Poultry Litter Based Biogas Plants

Poultry is one of the fastest growing segment. Suitable biogas plants can be designed for different capacity Poultry, based on their Poultry Litter . This biogas can be used for power generation or LPG replacement, making the Poultry almost independent for their power need and removal of complete social nuisance caused by poultry litter.

Model 04 –Resorts/Hotels Wet Waste Based Biogas Plants

As per available wet organic waste / cook food waste/ vegetable waste we can go for biogas plant for LPG replacement in canteen/kitchen.

Model 05 – Slaughter House Biogas Plants

As per available slaughter house waste we can go for biogas plant for power generation or thermal application as per requirement.

Model 06 - Carbon Neutral EV charging stations on Napier Grass/ Food waste Based Biogas to Power Projects

EV is going to be future in Automobile industry. To cater its energy need, we can go for suitable Napier grass based biogas to power projects.

Model 07 –Napier Grass or Food Waste Based Biogas to CBG Plants

Suitable project for CBG production can be thought where more waste like 25 to 30 TPD is available or from Cultivation Napier Grass (Daily feed is 50 Tons per day) is possible using biomethanation and purification , compression system CBG (Compressed biogas) can be produced .

Model 08 - Community Biogas Plants for the Waste Generated in villages

We can setup the centralized biogas plant for village of any capacity as per available waste. Generated gas can be supplied to nearby houses ,thru pipe line to make the village smokeless one. Also we can generate power and use it for any common facility. The available Liquid and Dry manure will be used in nearby farms which help to improve the soil fertility and increases crop productions suitable Employment generation is possible.

Looking at all those options , we can easily find that biogas is possible in any capacity , we have strongly demonstrated such multiple units all over India and is very much eager to work with your organization for this noble cause.