

Case Study – 1.5 TPD Biogas Plant at Sanjeevani S3, Malad, Mumbai

Introduction:

Sanjeevani S3 is collecting municipal solid waste (MSW), both wet as well as dry from about 3000 households in the Malad area of Mumbai. They are also collecting waste from about 20 commercial complexes on a user fee basis. They used to do recycling of the dry waste and composting of the wet waste. All put together about 1500 waste is collected per day. Due to the limitation of space constraint and non-viability of compost to such high quantity waste, Gangotree Energy Projects Pvt. Ltd. (GEPPL) offered the solution of biogas to power to Sanjeevani S3. The biogas plant was commissioned in January 2020 and is successfully running till date.

Project Details:

1. Waste processing capacity : 1.5 tons
2. Biogas generation : 180 m³ per day
3. Total area of the plant : 100 m²
4. Operational since : January, 2020

Operation:

GEPPL is monitoring the daily operation and maintenance work of the biogas plant. The biogas plant is of CSTR type with controlled temperature. The plant's designed capacity is to process 1.5 tons of household wet waste. The biogas generated from the plant is stored in a storage balloon. A biogas generator with a net metering mechanism installed which feeds the surplus electricity generated to the grid.

