

## BEL Chennai Transforms Food Waste into Clean Energy Green Connect Installs 150 kg Capacity Biogas Plant for Sustainable Power

BEL Chennai Partners with Green Connect to Install 150 kg Food Waste Biogas Plant

## / Blog / By Green Connect

- Bharat Electronics Limited (BEL), a leading aerospace and defense electronics enterprise under the
  Ministry of Defence, Government of India, is set to collaborate with Green Connect for the installation of a
  150 kg capacity food waste biogas plant at its Chennai campus. This upcoming initiative is part of BEL's
  commitment to sustainability and circular economy practices, aimed at efficiently managing food waste
  generated from its cafeteria, which serves hundreds of employees daily.
- Green Connect will be installing a 150 kg/day food waste biogas system with a 15 m³ gas capacity. Once commissioned, the plant will convert daily kitchen waste into clean biogas equivalent to 7.5 kg of LPG per day, resulting in a saving of up to 11.5 LPG cylinders per month. Designed to fit within 175 sq.ft., the compact plant will significantly support BEL's sustainability goals by reducing waste, minimizing carbon emissions, and generating renewable energy onsite.

- This installation is projected to offset more than 18 tons of carbon dioxide annually, further reinforcing BEL's dedication to environmental protection and national sustainability objectives. Additionally, the system will produce nutrient-rich organic bio-slurry, which will be used as an eco-friendly fertilizer for landscaping and green areas within the BEL premises, promoting zero-waste operations.
- The biogas plant will feature advanced Fiber Reinforced Plastic (FRP) digesters and a robust biogas storage system to ensure safe gas collection and uninterrupted utilization. Green Connect's innovative technology will address the critical challenge of food waste management while advancing energy self-reliance and environmental responsibility.
- This upcoming initiative will serve as a benchmark for industrial sustainability, demonstrating how food waste can be transformed into a valuable energy resource through modern biogas technology. BEL's proactive approach in adopting this solution reflects its leadership in integrating clean energy into industrial operations and aligns with India's national vision for a cleaner, greener, and energy-secure

future.



From Salem to Chennai – Delivering Sustainable Energy Solutions
"150 kg capacity biogas plant successfully transported from Salem to BEL
Chennai, marking a new step toward green energy and waste-to-energy
conversion."