

Jain Farm Fresh Foods Limited

Fuel Switch Project

Chittoor, Andhra Pradesh | **PRACTICE**



Jain Farm Fresh Foods Limited (JFFFL) owns a fruit-processing plant in Chittoor district of Andhra Pradesh, with the plant comprising units.

The plant had two boilers each in Unit I and II that were operated on furnace oil to generate steam. This steam was utilised within the plant for food processing. However, the steam demand at the fruit-processing plant increased, resulting in the need to install additional boilers in both units at the Chittoor plants.

The steam demand prior to the installation of new boilers was 4950 kg/h for Unit I and 6350 kg/h for Unit II, which was later raised to 9,000–10,000 kg/h for both the units.

Instead of adding new fossil fuel-based boilers, the project involved installation of 10 total hydrogen petroleum (TPH) solid fuel (briquettes + mango stones)-fired boiler in Unit I and a renewable technology-based boiler with 10 TPH capacity in Unit II. The initially installed boilers were continued, however for standby purpose only. The new boilers are run on biomass (briquettes and mango stones) for generating steam. A part of the biomass requirement is met through in-house availability of mango stones that are generated during the plant operations. While the remaining requirement for biomass is met via locally procured biomass briquettes.

In the absence of the biomass-fired boilers, JFFFL would have sourced its residual energy requirement from fossil fuels. The implementation of the project activity helps in avoidance of fossil fuel combustion, aids the mitigation of greenhouse gas emissions. Through this project initiative, JFFFL aims to encourage the adoption of less carbon intensive, and renewable energy technology in the food-processing industry.

IMPACTS

Through the initiative of fuel switch, JFFFL reduced 7430 tonnes of CO₂e emissions in the year 2021.

