

Biomass Utilization

Methane Fermentation Technology

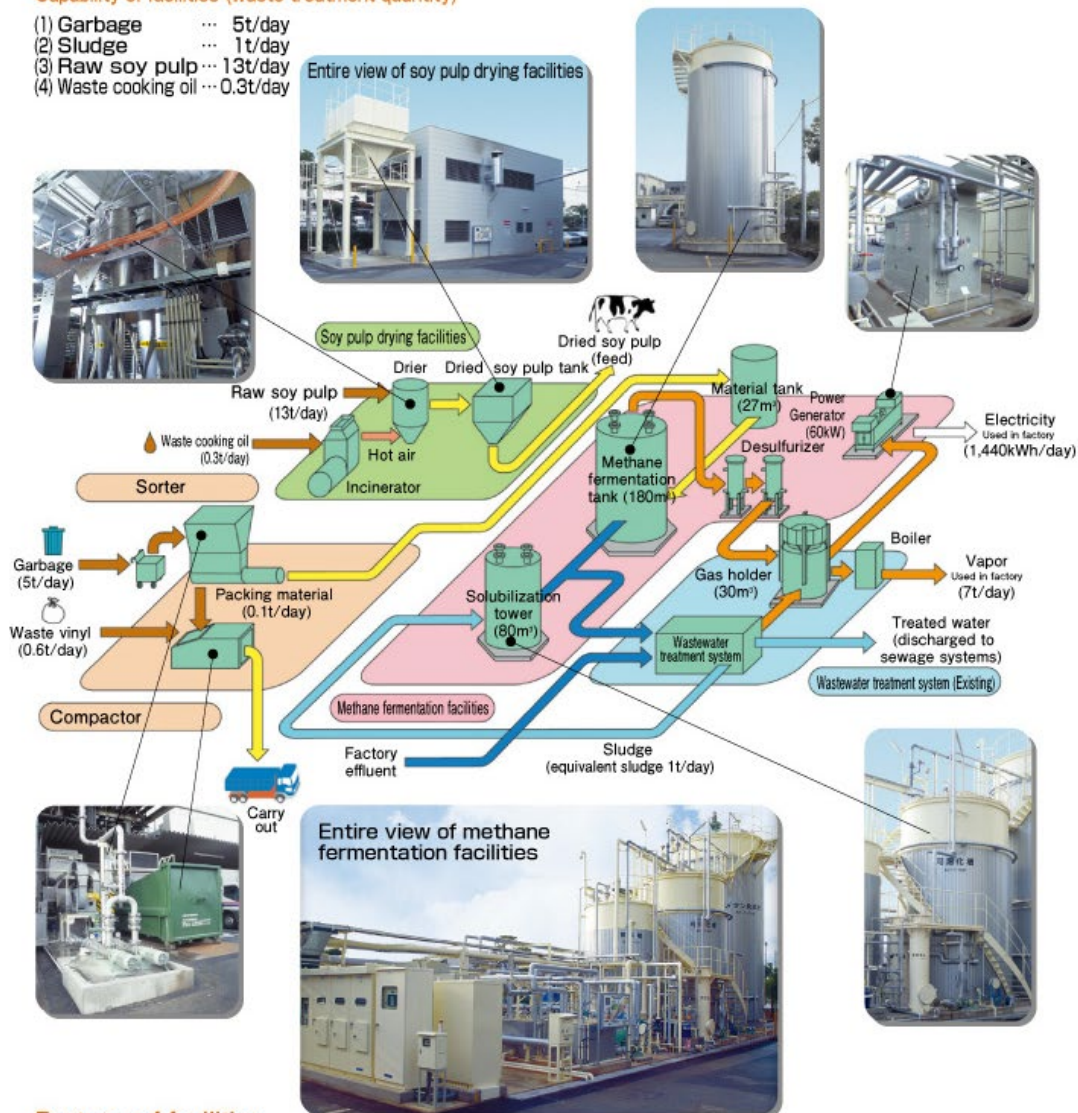
Record : Co-op Kobe (December, 2003)

Food Waste Method Fermentation Systems (PAMEDIS)

Delivery COOP Kobe Rokko Island Food Processing Plant

Capability of facilities (waste treatment quantity)

- (1) Garbage ... 5t/day
- (2) Sludge ... 1t/day
- (3) Raw soy pulp ... 13t/day
- (4) Waste cooking oil ... 0.3t/day



Features of facilities

- (1) Food waste (garbage) including bread, Japanese-style confection, and Tofu is methane-fermented with waste sludge in a wet and hot environment (55°C) and generated biological gas is collected.
- (2) The biological gas is used by a gas engine power generator to generate electric power of 1,440kWh/day and supply it to the food factory. In addition, extra biological gas is used by a boiler to generate vapor of 13t/day and supply it to the food factory.
- (3) This energy-saving equipment is clean and green, not burning or reclaiming waste but reusing it to generate electricity and heat energy.
- (4) Raw soy pulp is reused using the waste cooking oil as fuel to produce and sell dried feed which can keep for a long time.
- (5) We achieved 96% of waste recycling ratio and 90% reduction of industrial waste treatment cost (87 million yen/year). (Achievement in FY2002)