

## Biogas Plant NOYON



Location	Picardie, France
Construction Period:	2008/09
Input substrat:	Sludge, fat, process water, cofermente, food residues
Fermenter:	Steel tank 3,500 m <sup>3</sup>
CHP	Gas engine 716 kW
Special Features:	Gas holder above secondary digester tank, mesophilic operation, separation of digestates, recirculation of process water, compost works, external heat use
Cost:	Approximately EUR 6,4 Mio (incl. composting facility)

The biogas plant NOYON in France, built and operated by Ferti-NRJ SA is a waste digestion plant with mesophilic operation. This is followed by dewatering and composting of the digestate. The facility is designed to process sludge, fat, municipal organic waste, co-fermentation residues and process water. The biogas plant layout consists of one reception tank for the process water, one mixing tank, a reception tank for fat, one upright primary fermenter with a top-mounted agitator and a secondary digestion tank with a gasholder roof. The composting facility is located at the site. The fat is separately led into the fermenter through the use of an eccentric screw pump. The engineering of the biogas system is configured as a single-stage system and offers a phase separation of the digestate into solid and liquid phases. The separated liquid phase is used for the dilution of the input substrates while the solid phase is dried and then composted. The biogas produced is recovered by a gas engine with a capacity of 716 kWel. The electricity is supplied to the public grid connection. The generated heat is used for the drying of the digestate. Start-up of the biogas plant was in 2009