

Hohenhameln / Germany

Biogas Plant: EUCCO[®] Titan 7500G, 7.5 MW_{GAS}



Biogas plant with gas upgrading unit for gas grid injection

Project Data

Owner and investor	AC Biogasanlage Hohenhameln GmbH, Germany
Plant engineering	HZI Schmack GmbH, Schwandorf, Germany
Location	Am Windpark, 31249 Mehrum, Germany
Start of operation	Summer 2012

Energy Balance

Feed-in capacity/a	Approx. 60 million kWh/a; potential electric power requirement for approx. 5,500 households* as well as heat supply for approx. 1,400 households* *3-person household with 120 m ² living area incl. hot water generation
Energy efficiency	High energy efficiency (approx. 92%) through the utilisation of heat and electricity all year round
Feed-in gas grid	E.ON Avacon

Input Material

Substrate mix from	Maize silage, whole crop silage, grass silage, dry chicken manure, sugar beet
--------------------	---

Plant Data

Quantity	Plant component	Dimension / Capacity
1	Silage clamp	approx. 10,000 m ²
2	PASCO feeding system (with liquid feeding)	80 m ³ each
1	CALIX reception pit (2 chambers)	200 m ³
1	EUCCO [®] DTS high performance fermenter	2 x 1,000 m ³
3	COCCUS [®] TSS post fermenter	4,000 m ³ each
1	Gas upgrading unit	1,300 Nm ³ /h biogas
2	SULA GSI final storage basin	5,500 m ³ each
2	SULA GSH final storage basin	5,500 m ³ each
1	Separator and liquid slurry tank	50 m ³
1	CHP (Pro2)	600 kW _{el}
1	Gas-burner for inertgas (e-flox)	
1	Technical building EUCCO [®]	
1	Weight bridge, technical hall with gas station (own consumption)	