

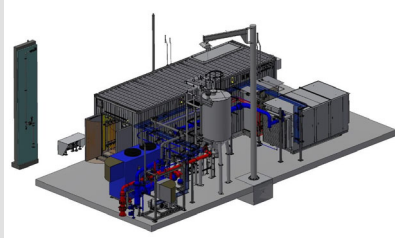


Hitachi Zosen
INOVA

Reference Projects

HZI BioMethan

in chronological order

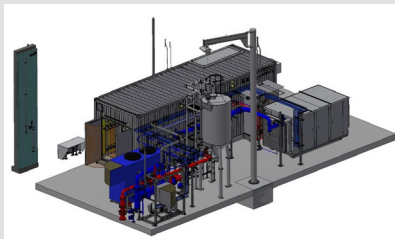


US, Boston

Start of operation
Gas Upgrading

2024
Technology
Input Gas
Plant Capacity
Hourly Biomethane Production
Biomethane Usage

In planning phase
Amine Scrubbing
Biogas from Energy Crops
7'366 Nm³/h
4'198 Nm³/h
Biomethane for gas-grid injection



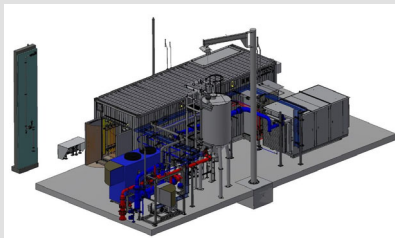
US, Auburn

Start of operation
Gas Upgrading

2024
Technology
Input Gas

Plant Capacity
Hourly Biomethane Production
Biomethane Usage

In planning phase
Membrane Technology
Biogas from Source Separated
Municipal Waste
1'000 Nm³/h
547 Nm³/h
Biomethane for gas-grid injection



US, Rice Lake

Start of operation
Gas Upgrading

2024
Technology
Input Gas
Plant Capacity
Hourly Biomethane Production
Biomethane Usage

In planning phase
Membrane Technology
Biogas from Agricultural Residues
478 Nm³/h
296 Nm³/h
Biomethane for gas-grid injection



DE, Amtzell II

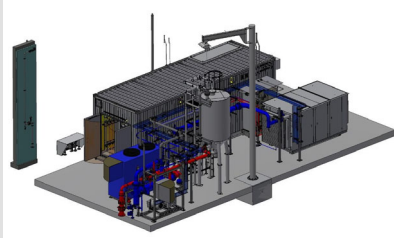
Start of operation
Anaerobic Digestion

Gas Upgrading

2024
Number of Digester(s)
Net volume per digester
Waste Type
Technology
Input Gas

Plant Capacity
Hourly Biomethane Production
Biomethane Usage

In construction
1
1'800 m³
Bio Waste, Green Waste
Membrane Technology
Biogas from Source Separated
Municipal Waste
423 Nm³/h
330 Nm³/h
Biomethane for gas-grid injection



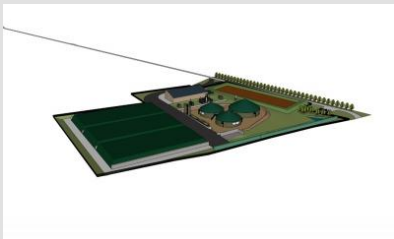
CA, London II

Start of operation
Gas Upgrading

2023
Technology
Input Gas

Hourly Biomethane Production
Biomethane Usage

In construction
Membrane Technology
Biogas from Green Waste & Bio Waste
1'200 Nm³/h
Biomethane for gas-grid injection



FR, Brion

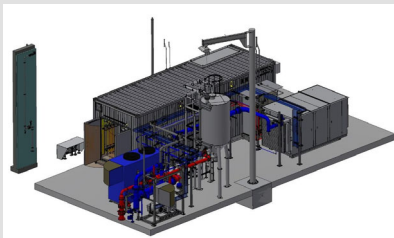
Start of operation
Anaerobic Digestion

Gas Upgrading

2023
Number of Digester(s)
Net volume per digester
Digester Type

Technology
Input Gas
Plant Capacity
Hourly Biomethane Production
Biomethane Usage

In construction
2
2'300 m³
Wet AD
Membrane Technology
Biogas from Agricultural Residues
600 Nm³/h
300 Nm³/h
Biomethane for gas-grid injection

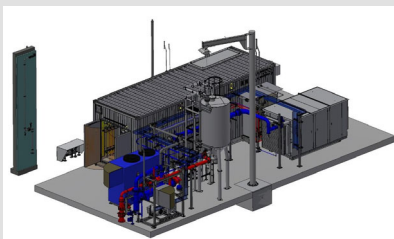


US, Carpenter

Start of operation
Gas Upgrading

2023
Technology
Input Gas
Plant Capacity
Hourly Biomethane Production
Biomethane Usage

Membrane Technology
Biogas from Agricultural Residues
1'014 Nm³/h
575 Nm³/h
Biomethane for gas-grid injection,
Compression Bio-CNG

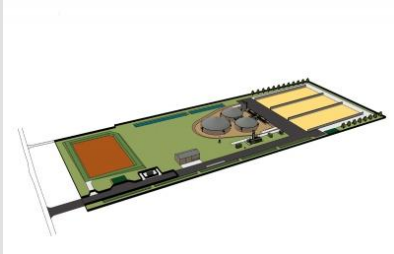


US, Windsor

Start of operation
Gas Upgrading

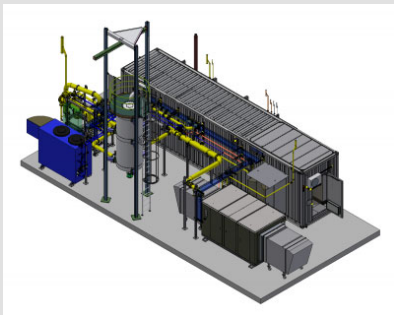
2023
Technology
Input Gas
Plant Capacity
Hourly Biomethane Production
Biomethane Usage

In planning phase
Membrane Technology
Biogas from Agricultural Residues
1'014 Nm³/h
575 Nm³/h
Biomethane for gas-grid injection,
Compression Bio-CNG



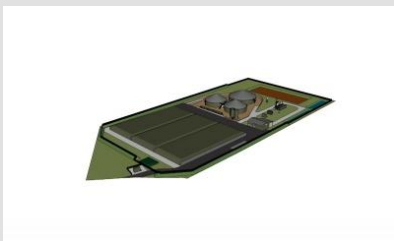
FR, Courpalay

Start of operation	2023	In construction
Anaerobic Digestion	Number of Digester(s)	2
	Net volume per digester	2'300 m ³
	Digester Type	Wet AD
Gas Upgrading	Technology	Membrane Technology
	Input Gas	Biogas from Agricultural Residues
	Plant Capacity	600 Nm ³ /h
	Hourly Biomethane Production	220 Nm ³ /h
	Biomethane Usage	Biomethane for gas-grid injection



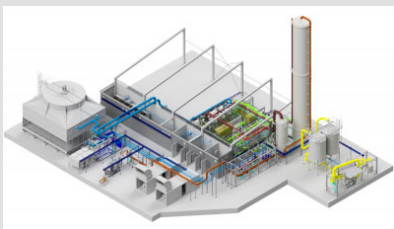
DK, Gråsten

Start of operation	2022	
Gas Upgrading	Technology	Membrane Technology
	Input Gas	Biogas from Agricultural Residues
	Plant Capacity	900 Nm ³ /h
	Hourly Biomethane Production	495 Nm ³ /h
	Biomethane Usage	Biomethane for gas-grid injection



FR, Lierville

Start of operation	2022	
Anaerobic Digestion	Number of Digester(s)	2
	Net volume per digester	2'300 m ³
	Digester Type	Wet AD
Gas Upgrading	Technology	Membrane Technology
	Input Gas	Biogas from Agricultural Residues
	Plant Capacity	700 Nm ³ /h
	Hourly Biomethane Production	350 Nm ³ /h
	Biomethane Usage	Biomethane for gas-grid injection



HU, Dunaföldvár

Start of operation	2022	In construction
Gas Upgrading	Technology	Amine Scrubbing
	Input Gas	Biogas from Agricultural Residues
	Plant Capacity	5'000 Nm ³ /h
	Hourly Biomethane Production	2'500 Nm ³ /h
	Biomethane Usage	Biomethane for gas-grid injection



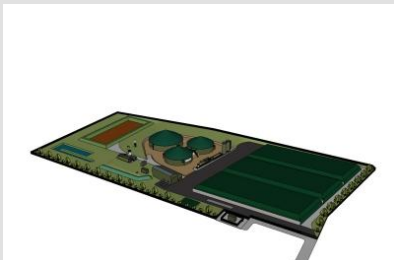
FR, Faremoutiers

Start of operation	2022	
Anaerobic Digestion	Number of Digester(s)	2
	Net volume per digester	2'300 m ³
	Digester Type	Wet AD
Gas Upgrading	Technology	Membrane Technology
	Input Gas	Biogas from Agricultural Residues
	Plant Capacity	600 Nm ³ /h
	Hourly Biomethane Production	300 Nm ³ /h
	Biomethane Usage	Biomethane for gas-grid injection



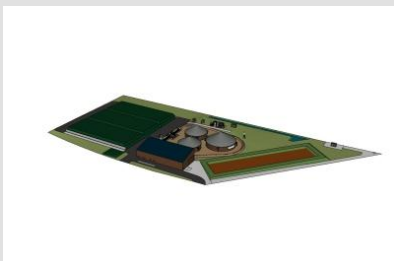
FR, Missy-lès-Pierrepont

Start of operation	2022	
Anaerobic Digestion	Number of Digester(s)	2
	Net volume per digester	2'930 m ³
	Digester Type	Wet AD
Gas Upgrading	Technology	Membrane Technology
	Input Gas	Biogas from Agricultural Residues
	Plant Capacity	500 Nm ³ /h
	Hourly Biomethane Production	250 Nm ³ /h
	Biomethane Usage	Biomethane for gas-grid injection



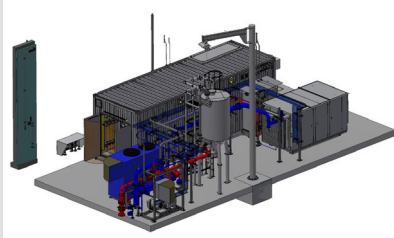
FR, Voulton

Start of operation	2022	
Anaerobic Digestion	Number of Digester(s)	2
	Net volume per digester	2'300 m ³
	Digester Type	Wet AD
Gas Upgrading	Technology	Membrane Technology
	Input Gas	Biogas from Agricultural Residues
	Plant Capacity	500 Nm ³ /h
	Hourly Biomethane Production	250 Nm ³ /h
	Biomethane Usage	Biomethane for gas-grid injection



FR, Saint-Martin-du-Boschet

Start of operation	2022	
Anaerobic Digestion	Number of Digester(s)	2
	Net volume per digester	2'300 m ³
	Digester Type	Wet AD
Gas Upgrading	Technology	Membrane Technology
	Input Gas	Biogas from Agricultural Residues
	Plant Capacity	600 Nm ³ /h
	Hourly Biomethane Production	300 Nm ³ /h
	Biomethane Usage	Biomethane for gas-grid injection

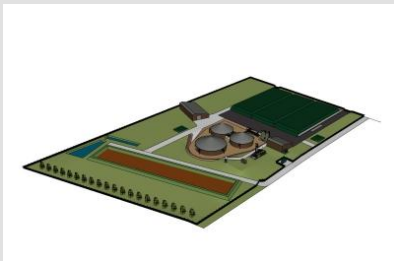


DE, Leuna

Start of operation
Gas Upgrading

2022
Technology
Input Gas
Plant Capacity
Hourly Biomethane Production
Biomethane Usage

In construction
Amine Scrubbing
Biogas from Sewage Sludge
1'000 Nm³/h
700 Nm³/h
Biomethane for gas-grid injection



FR, Tremblay-les-Villages

Start of operation
Anaerobic Digestion

2022
Number of Digester(s)
Net volume per digester
Digester Type
Technology
Input Gas
Plant Capacity
Hourly Biomethane Production
Biomethane Usage

2
2'300 m³
Wet AD
Membrane Technology
Biogas from Agricultural Residues
500 Nm³/h
250 Nm³/h
Biomethane for gas-grid injection



FR, Saignacq-et-Muret

Start of operation
Anaerobic Digestion

2022
Number of Digester(s)
Net volume per digester
Digester Type
Technology
Input Gas
Plant Capacity
Hourly Biomethane Production
Biomethane Usage

2
2'300 m³
Wet AD
Membrane Technology
Biogas from Agricultural Residues
600 Nm³/h
300 Nm³/h
Biomethane for gas-grid injection

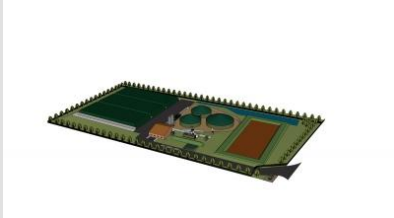


FR, Vinantes

Start of operation
Anaerobic Digestion

2021
Number of Digester(s)
Net volume per digester
Digester Type
Technology
Input Gas
Plant Capacity
Hourly Biomethane Production
Biomethane Usage

2
2'930 m³
Wet AD
Membrane Technology
Biogas from Agricultural Residues
400 Nm³/h
200 Nm³/h
Biomethane for gas-grid injection



FR, Réau

Start of operation	2021	
Anaerobic Digestion	Number of Digester(s)	2
	Net volume per digester	2'300 m ³
	Digester Type	Wet AD
Gas Upgrading	Technology	Membrane Technology
	Input Gas	Biogas from Agricultural Residues
	Plant Capacity	500 Nm ³ /h
	Hourly Biomethane Production	250 Nm ³ /h
	Biomethane Usage	Biomethane for gas-grid injection



FR, Mont-I'Evêque

Start of operation	2021	
Anaerobic Digestion	Number of Digester(s)	2
	Net volume per digester	2'300 m ³
	Digester Type	Wet AD
Gas Upgrading	Technology	Membrane Technology
	Input Gas	Biogas from Agricultural Residues
	Plant Capacity	600 Nm ³ /h
	Hourly Biomethane Production	300 Nm ³ /h
	Biomethane Usage	Biomethane for gas-grid injection



FR, Chauconin-Neufmontiers

Start of operation	2021	
Anaerobic Digestion	Number of Digester(s)	2
	Net volume per digester	2'300 m ³
	Digester Type	Wet AD
Gas Upgrading	Technology	Membrane Technology
	Input Gas	Biogas from Agricultural Residues
	Plant Capacity	500 Nm ³ /h
	Hourly Biomethane Production	250 Nm ³ /h
	Biomethane Usage	Biomethane for gas-grid injection



FR, Boutigny-sur-Essonne

Start of operation	2021	
Anaerobic Digestion	Number of Digester(s)	2
	Net volume per digester	2'300 m ³
	Digester Type	Wet AD
Gas Upgrading	Technology	Membrane Technology
	Input Gas	Biogas from Agricultural Residues
	Plant Capacity	500 Nm ³ /h
	Hourly Biomethane Production	250 Nm ³ /h
	Biomethane Usage	Biomethane for gas-grid injection



FR, Pouan-les-Vallées

Start of operation	2021	
Anaerobic Digestion	Number of Digester(s)	2
	Net volume per digester	2'930 m ³
	Digester Type	Wet AD
Gas Upgrading	Technology	Membrane Technology
	Input Gas	Biogas from Agricultural Residues
	Plant Capacity	500 Nm ³ /h
	Hourly Biomethane Production	250 Nm ³ /h
	Biomethane Usage	Biomethane for gas-grid injection



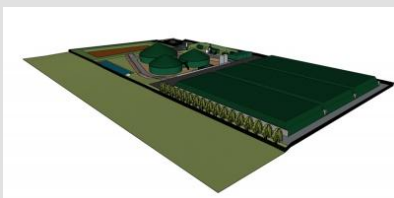
FR, Trancault

Start of operation	2021	
Anaerobic Digestion	Number of Digester(s)	2
	Net volume per digester	2'300 m ³
	Digester Type	Wet AD
Gas Upgrading	Technology	Membrane Technology
	Input Gas	Biogas from Agricultural Residues
	Plant Capacity	600 Nm ³ /h
	Hourly Biomethane Production	300 Nm ³ /h
	Biomethane Usage	Biomethane for gas-grid injection



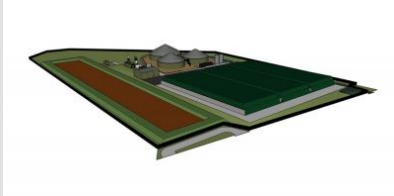
FR, Coulombs-en-Valois

Start of operation	2021	
Anaerobic Digestion	Number of Digester(s)	2
	Net volume per digester	2'300 m ³
	Digester Type	Wet AD
Gas Upgrading	Technology	Membrane Technology
	Input Gas	Biogas from Agricultural Residues
	Plant Capacity	500 Nm ³ /h
	Hourly Biomethane Production	250 Nm ³ /h
	Biomethane Usage	Biomethane for gas-grid injection



FR, Avon-la-Pèze

Start of operation	2021	
Anaerobic Digestion	Number of Digester(s)	2
	Net volume per digester	2'300 m ³
	Digester Type	Wet AD
Gas Upgrading	Technology	Membrane Technology
	Input Gas	Biogas from Agricultural Residues
	Plant Capacity	500 Nm ³ /h
	Hourly Biomethane Production	250 Nm ³ /h
	Biomethane Usage	Biomethane for gas-grid injection



FR, Saint-Jean-d'Illac

Start of operation	2021	
Anaerobic Digestion	Number of Digester(s)	2
	Net volume per digester	2'300 m ³
	Digester Type	Wet AD
Gas Upgrading	Technology	Membrane Technology
	Input Gas	Biogas from Agricultural Residues
	Plant Capacity	600 Nm ³ /h
	Hourly Biomethane Production	300 Nm ³ /h
	Biomethane Usage	Biomethane for gas-grid injection



FR, Prémierfait

Start of operation	2021	
Anaerobic Digestion	Number of Digester(s)	2
	Net volume per digester	2'300 m ³
Gas Upgrading	Technology	Membrane Technology
	Input Gas	Biogas from Agricultural Residues
	Plant Capacity	600 Nm ³ /h
	Hourly Biomethane Production	300 Nm ³ /h
	Biomethane Usage	Biomethane for gas-grid injection



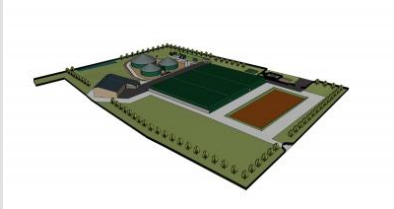
FR, Saint-Laurent-Médoc II

Start of operation	2021	
Anaerobic Digestion	Number of Digester(s)	2
	Net volume per digester	2'300 m ³
	Digester Type	Wet AD
Gas Upgrading	Technology	Membrane Technology
	Input Gas	Biogas from Agricultural Residues
	Plant Capacity	600 Nm ³ /h
	Hourly Biomethane Production	300 Nm ³ /h
	Biomethane Usage	Biomethane for gas-grid injection



US, Escondido

Start of operation	2021	
Anaerobic Digestion	Number of Digester(s)	2
	Net volume per digester	2'100 m ³
	Waste Type	Food Waste, Green Waste
Gas Upgrading	Technology	Membrane Technology
	Input Gas	Biogas from Green Waste & Bio Waste, Biogas from Energy Crops, Biogas from Agricultural Residues, Biogas from Source Separated Municipal Waste
	Plant Capacity	447 Nm ³ /h
	Biomethane Usage	Biomethane for gas-grid injection



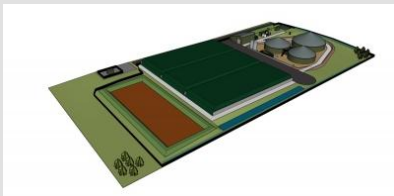
FR, Bar-sur-Seine

Start of operation	2021	
Anaerobic Digestion	Number of Digester(s)	2
	Net volume per digester	2'300 m ³
	Digester Type	Wet AD
Gas Upgrading	Technology	Membrane Technology
	Input Gas	Biogas from Agricultural Residues
	Plant Capacity	500 Nm ³ /h
	Hourly Biomethane Production	250 Nm ³ /h
	Biomethane Usage	Biomethane for gas-grid injection



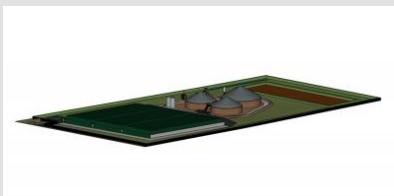
FR, Saint-Mesmin

Start of operation	2021	
Anaerobic Digestion	Number of Digester(s)	2
	Net volume per digester	2'300 m ³
	Digester Type	Wet AD
Gas Upgrading	Technology	Membrane Technology
	Input Gas	Biogas from Agricultural Residues
	Plant Capacity	500 Nm ³ /h
	Hourly Biomethane Production	250 Nm ³ /h
	Biomethane Usage	Biomethane for gas-grid injection



FR, Chapelle-Vallon

Start of operation	2021	
Anaerobic Digestion	Number of Digester(s)	2
	Net volume per digester	2'300 m ³
	Digester Type	Wet AD
Gas Upgrading	Technology	Membrane Technology
	Input Gas	Biogas from Agricultural Residues
	Plant Capacity	600 Nm ³ /h
	Hourly Biomethane Production	300 Nm ³ /h
	Biomethane Usage	Biomethane for gas-grid injection



FR, Charny

Start of operation	2020	
Anaerobic Digestion	Number of Digester(s)	2
	Net volume per digester	2'300 m ³
	Digester Type	Wet AD
Gas Upgrading	Technology	Membrane Technology
	Input Gas	Biogas from Agricultural Residues
	Plant Capacity	500 Nm ³ /h
	Hourly Biomethane Production	250 Nm ³ /h
	Biomethane Usage	Biomethane for gas-grid injection



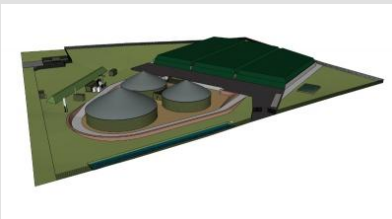
FR, Saint-Germain

Start of operation	2020	
Anaerobic Digestion	Number of Digester(s)	2
	Net volume per digester	2'300 m ³
	Digester Type	Wet AD
Gas Upgrading	Technology	Membrane Technology
	Input Gas	Biogas from Agricultural Residues
	Plant Capacity	400 Nm ³ /h
	Hourly Biomethane Production	200 Nm ³ /h
	Biomethane Usage	Biomethane for gas-grid injection



FR, Les-Grandes-Chapelles

Start of operation	2020	
Anaerobic Digestion	Number of Digester(s)	2
	Net volume per digester	2'300 m ³
	Digester Type	Wet AD
Gas Upgrading	Technology	Membrane Technology
	Input Gas	Biogas from Agricultural Residues
	Plant Capacity	600 Nm ³ /h
	Hourly Biomethane Production	300 Nm ³ /h
	Biomethane Usage	Biomethane for gas-grid injection



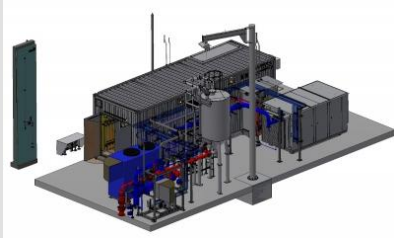
FR, Herpy-l'Arlésienne

Start of operation	2020	
Anaerobic Digestion	Number of Digester(s)	2
	Net volume per digester	2'300 m ³
	Digester Type	Wet AD
Gas Upgrading	Technology	Membrane Technology
	Input Gas	Biogas from Agricultural Residues
	Plant Capacity	600 Nm ³ /h
	Hourly Biomethane Production	300 Nm ³ /h
	Biomethane Usage	Biomethane for gas-grid injection



SE, Jönköping

Start of operation	2020	
Anaerobic Digestion	Number of Digester(s)	2
	Net volume per digester	1'500 m ³
	Waste Type	Bio Waste, Food Waste, Grease sludge, Green Waste, Production Waste
Gas Upgrading	Technology	Membrane Technology
	Input Gas	Biogas from Green Waste & Bio Waste
	Plant Capacity	717 Nm ³ /h
	Hourly Biomethane Production	430 Nm ³ /h
	Biomethane Usage	Compression Bio-CNG



FR, Trouy

Start of operation
Anaerobic Digestion

2020
Number of Digester(s)
Net volume per digester
Digester Type
Technology
Input Gas
Plant Capacity
Hourly Biomethane Production
Biomethane Usage

1
2'300 m³
Wet AD
Membrane Technology
Biogas from Agricultural Residues
300 Nm³/h
250 Nm³/h
Biomethane for gas-grid injection

Gas Upgrading



FR, Yversay

Start of operation
Anaerobic Digestion

2020
Number of Digester(s)
Net volume per digester
Digester Type
Technology
Input Gas
Plant Capacity
Hourly Biomethane Production
Biomethane Usage

2
2'300 m³
Wet AD
Membrane Technology
Biogas from Agricultural Residues
500 Nm³/h
250 Nm³/h
Biomethane for gas-grid injection

Gas Upgrading



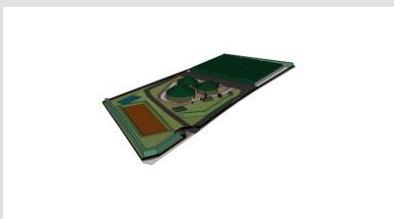
FR, Neuville-Saint-Amand

Start of operation
Anaerobic Digestion

2020
Number of Digester(s)
Net volume per digester
Digester Type
Technology
Input Gas
Plant Capacity
Hourly Biomethane Production
Biomethane Usage

2
2'300 m³
Wet AD
Membrane Technology
Biogas from Agricultural Residues
500 Nm³/h
250 Nm³/h
Biomethane for gas-grid injection

Gas Upgrading



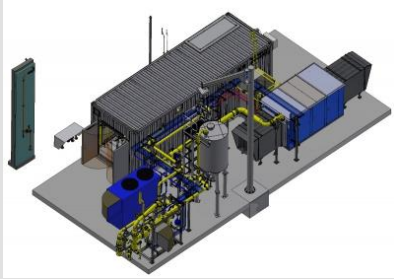
FR, Bucy-le-Long

Start of operation
Anaerobic Digestion

2020
Number of Digester(s)
Net volume per digester
Digester Type
Technology
Input Gas
Plant Capacity
Hourly Biomethane Production
Biomethane Usage

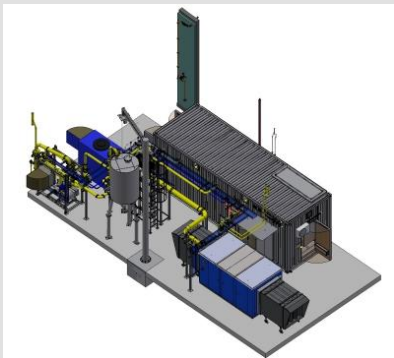
2
2'300 m³
Wet AD
Membrane Technology
Biogas from Agricultural Residues
500 Nm³/h
250 Nm³/h
Biomethane for gas-grid injection

Gas Upgrading



FR, Saint-Aubin

Start of operation	2020	
Anaerobic Digestion	Number of Digester(s)	2
	Net volume per digester	2'300 m ³
	Digester Type	Wet AD
Gas Upgrading	Technology	Membrane Technology
	Input Gas	Biogas from Agricultural Residues
	Plant Capacity	500 Nm ³ /h
	Hourly Biomethane Production	250 Nm ³ /h
	Biomethane Usage	Biomethane for gas-grid injection



FR, Messy

Start of operation	2020	
Anaerobic Digestion	Number of Digester(s)	2
	Net volume per digester	2'300 m ³
	Digester Type	Wet AD
Gas Upgrading	Technology	Membrane Technology
	Input Gas	Biogas from Agricultural Residues
	Plant Capacity	600 Nm ³ /h
	Hourly Biomethane Production	430 Nm ³ /h
	Biomethane Usage	Biomethane for gas-grid injection



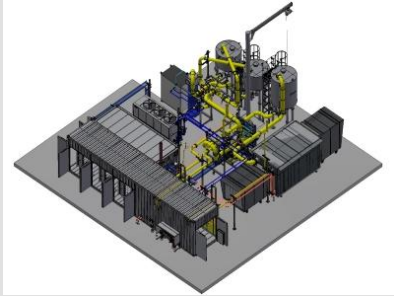
CA, London

Start of operation	2020	
Gas Upgrading	Technology	Membrane Technology
	Input Gas	Biogas from Green Waste & Bio Waste
	Plant Capacity	1'200 Nm ³ /h
	Hourly Biomethane Production	800 Nm ³ /h
	Biomethane Usage	Biomethane for gas-grid injection



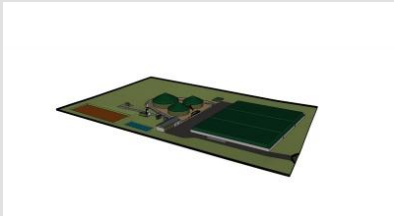
DK, Vrå

Start of operation	2020	
Gas Upgrading	Technology	Membrane Technology
	Input Gas	Biogas from Agricultural Residues
	Plant Capacity	900 Nm ³ /h
	Hourly Biomethane Production	500 Nm ³ /h
	Biomethane Usage	Biomethane for gas-grid injection



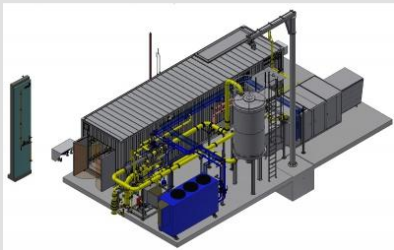
GB, Aberdeenshire

Start of operation	2020	
Gas Upgrading	Technology	Membrane Technology
	Input Gas	Biogas from Green Waste & Bio Waste
Plant Capacity	1'200 Nm ³ /h	
Hourly Biomethane Production	680 Nm ³ /h	
Biomethane Usage		Biomethane for gas-grid injection



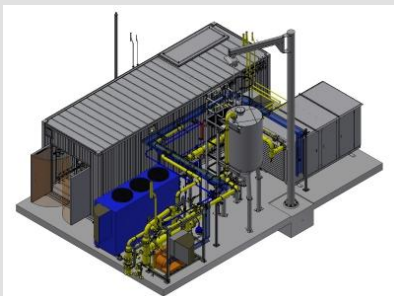
FR, Chalandry

Start of operation	2020	
Anaerobic Digestion	Number of Digester(s)	2
	Net volume per digester	2'300 m ³
Gas Upgrading	Digester Type	Wet AD
	Technology	Membrane Technology
Input Gas		Biogas from Agricultural Residues
Plant Capacity	500 Nm ³ /h	
Hourly Biomethane Production	250 Nm ³ /h	
Biomethane Usage		Biomethane for gas-grid injection



FR, Saint-Laurent-Médoc

Start of operation	2019	
Anaerobic Digestion	Number of Digester(s)	2
	Net volume per digester	2'300 m ³
Gas Upgrading	Digester Type	Wet AD
	Technology	Membrane Technology
Input Gas		Biogas from Agricultural Residues
Plant Capacity	500 Nm ³ /h	
Hourly Biomethane Production	250 Nm ³ /h	
Biomethane Usage		Biomethane for gas-grid injection



FR, Payns

Start of operation	2019	
Anaerobic Digestion	Number of Digester(s)	2
	Net volume per digester	2'300 m ³
Gas Upgrading	Digester Type	Wet AD
	Technology	Membrane Technology
Input Gas		Biogas from Agricultural Residues
Plant Capacity	500 Nm ³ /h	
Hourly Biomethane Production	250 Nm ³ /h	
Biomethane Usage		Biomethane for gas-grid injection



DE, Hamburg

Start of operation
Gas Upgrading

2019
Technology
Input Gas
Plant Capacity
Hourly Biomethane Production
Biomethane Usage

Amine Scrubbing
Biogas from Sewage Sludge
1'500 Nm³/h
930 Nm³/h
Biomethane for gas-grid injection



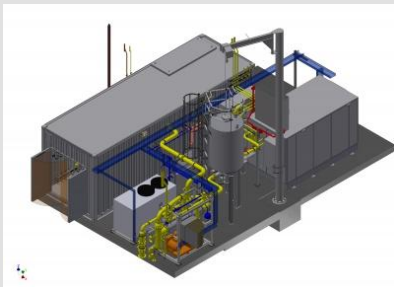
FR, Audenge

Start of operation
Anaerobic Digestion

Gas Upgrading

2018
Number of Digester(s)
Net volume per digester
Digester Type
Technology
Input Gas
Plant Capacity
Hourly Biomethane Production
Biomethane Usage

2
2'300 m³
Wet AD
Membrane Technology
Biogas from Agricultural Residues
500 Nm³/h
250 Nm³/h
Biomethane for gas-grid injection



FR, Cernay

Start of operation
Anaerobic Digestion

Gas Upgrading

2018
Number of Digester(s)
Net volume per digester
Digester Type
Technology
Input Gas
Plant Capacity
Hourly Biomethane Production
Biomethane Usage

2
2'300 m³
Wet AD
Membrane Technology
Biogas from Agricultural Residues
500 Nm³/h
250 Nm³/h
Biomethane for gas-grid injection



FR, Fère-Champenoise

Start of operation
Anaerobic Digestion

Gas Upgrading

2018
Number of Digester(s)
Net volume per digester
Digester Type
Technology
Input Gas
Plant Capacity
Hourly Biomethane Production
Biomethane Usage

2
2'300 m³
Wet AD
Membrane Technology
Biogas from Agricultural Residues
500 Nm³/h
250 Nm³/h
Biomethane for gas-grid injection



DE, Grabsleben II

Start of operation
Gas Upgrading

2018
Technology
Input Gas
Plant Capacity
Hourly Biomethane Production
Biomethane Usage

In construction
Amine Scrubbing
Biogas from Energy Crops
700 Nm³/h
350 Nm³/h
Biomethane for gas-grid injection



DE, Parum

Start of operation
Gas Upgrading

2018
Technology
Input Gas

Plant Capacity
Hourly Biomethane Production
Biomethane Usage

Amine Scrubbing
Biogas from Green Waste & Bio Waste
700 Nm³/h
400 Nm³/h
Biomethane for gas-grid injection



DE, Plaidt

Start of operation
Gas Upgrading

2018
Technology
Input Gas

Plant Capacity
Hourly Biomethane Production
Biomethane Usage

Membrane Technology
Biogas from Green Waste & Bio Waste
500 Nm³/h
300 Nm³/h
Biomethane for gas-grid injection



FR, Pommeuse

Start of operation
Anaerobic Digestion

2018
Number of Digester(s)
Net volume per digester
Digester Type
Technology
Input Gas
Plant Capacity
Hourly Biomethane Production
Biomethane Usage

2
2'300 m³
Wet AD
Membrane Technology
Biogas from Agricultural Residues
500 Nm³/h
250 Nm³/h
Biomethane for gas-grid injection

Gas Upgrading



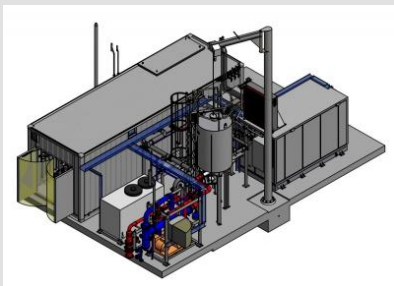
FR, Saconin

Start of operation
Anaerobic Digestion

2018
Number of Digester(s)
Net volume per digester
Digester Type
Technology
Input Gas
Plant Capacity
Hourly Biomethane Production
Biomethane Usage

2
2'300 m³
Wet AD
Membrane Technology
Biogas from Agricultural Residues
500 Nm³/h
250 Nm³/h
Biomethane for gas-grid injection

Gas Upgrading



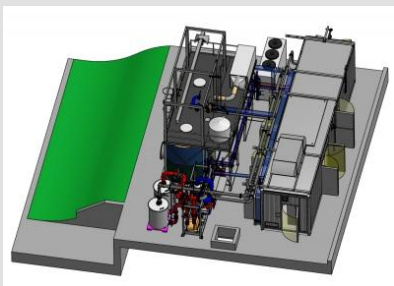
FR, Barberey

Start of operation
Anaerobic Digestion

2017
Number of Digester(s)
Net volume per digester
Digester Type
Technology
Input Gas
Plant Capacity
Hourly Biomethane Production
Biomethane Usage

2
2'300 m³
Wet AD
Membrane Technology
Biogas from Agricultural Residues
500 Nm³/h
250 Nm³/h
Biomethane for gas-grid injection

Gas Upgrading



CH, Niedergösgen

Start of operation
Gas Upgrading

2017
Technology
Input Gas
Plant Capacity
Hourly Biomethane Production
Biomethane Usage

Membrane Technology
Biogas from Sewage Sludge
400 Nm³/h
280 Nm³/h
Biomethane for gas-grid injection



FR, Noyen

Start of operation
Anaerobic Digestion

2017
Number of Digester(s)
Net volume per digester
Digester Type
Technology
Input Gas
Plant Capacity
Hourly Biomethane Production
Biomethane Usage

2
2'300 m³
Wet AD
Membrane Technology
Biogas from Agricultural Residues
500 Nm³/h
250 Nm³/h
Biomethane for gas-grid injection

Gas Upgrading



FR, Saints

Start of operation
Anaerobic Digestion

Gas Upgrading

2017	
Number of Digester(s)	2
Net volume per digester	2'300 m ³
Digester Type	Wet AD
Technology	Membrane Technology
Input Gas	Biogas from Agricultural Residues
Plant Capacity	500 Nm ³ /h
Hourly Biomethane Production	250 Nm ³ /h
Biomethane Usage	Biomethane for gas-grid injection



CH, Thun

Start of operation
Gas Upgrading

2017	
Technology	Membrane Technology
Input Gas	Biogas from Sewage Sludge
Plant Capacity	250 Nm ³ /h
Hourly Biomethane Production	130 Nm ³ /h
Biomethane Usage	Biomethane for gas-grid injection



FR, Brie

Start of operation
Anaerobic Digestion

Gas Upgrading

2016	
Number of Digester(s)	2
Net volume per digester	2'300 m ³
Digester Type	Wet AD
Technology	Membrane Technology
Input Gas	Biogas from Agricultural Residues
Plant Capacity	500 Nm ³ /h
Hourly Biomethane Production	250 Nm ³ /h
Biomethane Usage	Biomethane for gas-grid injection



FR, Meaux

Start of operation
Anaerobic Digestion

Gas Upgrading

2016	
Number of Digester(s)	2
Net volume per digester	2'300 m ³
Digester Type	Wet AD
Technology	Membrane Technology
Input Gas	Biogas from Agricultural Residues
Plant Capacity	500 Nm ³ /h
Hourly Biomethane Production	250 Nm ³ /h
Biomethane Usage	Biomethane for gas-grid injection



DE, Heinfelde

Start of operation
Gas Upgrading

2015
Technology
Input Gas

Plant Capacity
Hourly Biomethane Production
Biomethane Usage

Amine Scrubbing
Biogas from Source Separated
Municipal Waste
1'000 Nm³/h
500 Nm³/h
Biomethane for gas-grid injection



FR, Thennelières

Start of operation
Anaerobic Digestion

2015
Number of Digester(s)
Net volume per digester
Digester Type

Gas Upgrading

Technology
Input Gas
Plant Capacity
Hourly Biomethane Production
Biomethane Usage

2
2'300 m³
Wet AD
Membrane Technology
Biogas from Agricultural Residues
500 Nm³/h
250 Nm³/h
Biomethane for gas-grid injection



DE, Wittenburg

Start of operation
Gas Upgrading

2015
Technology
Input Gas
Plant Capacity
Hourly Biomethane Production
Biomethane Usage

Membrane Technology
Biogas from Agricultural Residues
700 Nm³/h
350 Nm³/h
Biomethane for gas-grid injection



CH, Winterthur

Start of operation
Anaerobic Digestion

2014
Number of Digester(s)
Net volume per digester
Waste Type

Gas Upgrading

Technology
Input Gas
Plant Capacity
Hourly Biomethane Production
Biomethane Usage

1
1'500 m³
Bio Waste, Food Waste, Green
Waste
Amine Scrubbing
Biogas from Green Waste & Bio
Waste
300 Nm³/h
122 Nm³/h
Biomethane for gas-grid injection



CH, Vétroz

Start of operation
Anaerobic Digestion

2014
Number of Digester(s) 1
Net volume per digester 1'300 m³
Digester Type PF1300
Waste Type Bio Waste, Green Waste, Liquid Manure, Waste Oil

Gas Upgrading

Technology Amine Scrubbing
Input Gas Biogas from Green Waste & Bio Waste
Plant Capacity 250 Nm³/h
Hourly Biomethane Production 130 Nm³/h
Biomethane Usage Biomethane for gas-grid injection



GB, Saint Nicholas Court Farm

Start of operation
Gas Upgrading

2014
Technology Membrane Technology
Input Gas Biogas from Agricultural Residues
Plant Capacity 700 Nm³/h
Hourly Biomethane Production 350 Nm³/h
Biomethane Usage Biomethane for gas-grid injection

Membrane Technology
Biogas from Agricultural Residues
700 Nm³/h
350 Nm³/h
Biomethane for gas-grid injection



DE, Feldberg

Start of operation
Gas Upgrading

2014
Technology Membrane Technology
Input Gas Biogas from Energy Crops
Plant Capacity 700 Nm³/h
Hourly Biomethane Production 350 Nm³/h
Biomethane Usage Biomethane for gas-grid injection

Membrane Technology
Biogas from Energy Crops
700 Nm³/h
350 Nm³/h
Biomethane for gas-grid injection



FR, Méry-sur-Seine

Start of operation
Anaerobic Digestion

2014
Number of Digester(s) 2
Net volume per digester 2'300 m³
Digester Type Wet AD

Gas Upgrading

Technology Membrane Technology
Input Gas Biogas from Agricultural Residues
Plant Capacity 500 Nm³/h
Hourly Biomethane Production 250 Nm³/h
Biomethane Usage Biomethane for gas-grid injection

2
2'300 m³
Wet AD
Membrane Technology
Biogas from Agricultural Residues
500 Nm³/h
250 Nm³/h
Biomethane for gas-grid injection



DE, Niederröblingen

Start of operation	2014	
Gas Upgrading	Technology	Amine Scrubbing
	Input Gas	Biogas from Agricultural Residues
	Plant Capacity	700 Nm ³ /h
	Hourly Biomethane Production	350 Nm ³ /h
	Biomethane Usage	Biomethane for gas-grid injection



DE, Rackwitz

Start of operation	2014	
Gas Upgrading	Technology	Amine Scrubbing
	Input Gas	Biogas from Agricultural Residues
	Plant Capacity	1'400 Nm ³ /h
	Hourly Biomethane Production	700 Nm ³ /h
	Biomethane Usage	Biomethane for gas-grid injection



FR, Sourdun

Start of operation	2014	
Anaerobic Digestion	Number of Digester(s)	2
	Net volume per digester	2'300 m ³
	Digester Type	Wet AD
Gas Upgrading	Technology	Membrane Technology
	Input Gas	Biogas from Agricultural Residues
	Plant Capacity	500 Nm ³ /h
	Hourly Biomethane Production	250 Nm ³ /h
	Biomethane Usage	Biomethane for gas-grid injection



FR, Ussy-sur-Marne

Start of operation	2014	
Anaerobic Digestion	Number of Digester(s)	2
	Net volume per digester	2'300 m ³
	Digester Type	Wet AD
Gas Upgrading	Technology	Membrane Technology
	Input Gas	Biogas from Agricultural Residues
	Plant Capacity	500 Nm ³ /h
	Hourly Biomethane Production	250 Nm ³ /h
	Biomethane Usage	Biomethane for gas-grid injection



CH, Zuchwil

Start of operation
Gas Upgrading

2014
Technology
Input Gas
Plant Capacity
Hourly Biomethane Production
Biomethane Usage

Membrane Technology
Biogas from Sewage Sludge
250 Nm³/h
130 Nm³/h
Biomethane for gas-grid injection



DE, Altenhof

Start of operation
Gas Upgrading

2013
Technology
Input Gas
Plant Capacity
Hourly Biomethane Production
Biomethane Usage

Amine Scrubbing
Biogas from Energy Crops
1'400 Nm³/h
700 Nm³/h
Biomethane for gas-grid injection



DE, Gardelegen

Start of operation
Gas Upgrading

2013
Technology
Input Gas
Plant Capacity
Hourly Biomethane Production
Biomethane Usage

Amine Scrubbing
Biogas from Energy Crops
700 Nm³/h
350 Nm³/h
Biomethane for gas-grid injection



DE, Jabel

Start of operation
Gas Upgrading

2013
Technology
Input Gas
Plant Capacity
Hourly Biomethane Production
Biomethane Usage

Amine Scrubbing
Biogas from Energy Crops
700 Nm³/h
350 Nm³/h
Biomethane for gas-grid injection



DE, Kirchgellersen

Start of operation	2013	
Gas Upgrading	Technology	Amine Scrubbing
	Input Gas	Biogas from Energy Crops
	Plant Capacity	700 Nm ³ /h
	Hourly Biomethane Production	250 Nm ³ /h
	Biomethane Usage	Biomethane for gas-grid injection



DE, Kroppenstedt

Start of operation	2013	
Gas Upgrading	Technology	Amine Scrubbing
	Input Gas	Biogas from Energy Crops
	Plant Capacity	1'400 Nm ³ /h
	Hourly Biomethane Production	700 Nm ³ /h
	Biomethane Usage	Biomethane for gas-grid injection



DE, Werlte

Start of operation	2013	
Gas Upgrading	Technology	Amine Scrubbing
	Input Gas	Biogas from Energy Crops
	Plant Capacity	1'000 Nm ³ /h
	Hourly Biomethane Production	500 Nm ³ /h
	Biomethane Usage	Biomethane for gas-grid injection



DE, Heidenau

Start of operation	2012	
Gas Upgrading	Technology	Amine Scrubbing
	Input Gas	Biogas from Energy Crops
	Plant Capacity	700 Nm ³ /h
	Hourly Biomethane Production	350 Nm ³ /h
	Biomethane Usage	Biomethane for gas-grid injection



DE, Karben

Start of operation
Gas Upgrading

2012
Technology
Input Gas
Plant Capacity
Hourly Biomethane Production
Biomethane Usage

Amine Scrubbing
Biogas from Energy Crops
700 Nm³/h
350 Nm³/h
Biomethane for gas-grid injection



DE, Klein Wanzleben

Start of operation
Gas Upgrading

2012
Technology
Input Gas
Plant Capacity
Hourly Biomethane Production
Biomethane Usage

Amine Scrubbing
Biogas from Energy Crops
1'400 Nm³/h
700 Nm³/h
Biomethane for gas-grid injection



DE, Leizen

Start of operation
Gas Upgrading

2012
Technology
Input Gas
Plant Capacity
Hourly Biomethane Production
Biomethane Usage

Amine Scrubbing
Biogas from Energy Crops
700 Nm³/h
350 Nm³/h
Biomethane for gas-grid injection

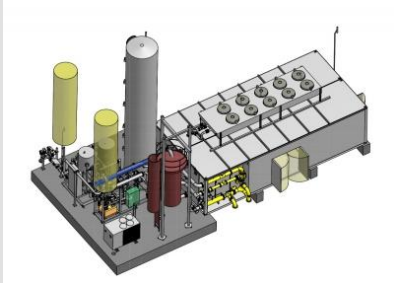


DE, Marienthal

Start of operation
Gas Upgrading

2012
Technology
Input Gas
Plant Capacity
Hourly Biomethane Production
Biomethane Usage

Amine Scrubbing
Biogas from Energy Crops
700 Nm³/h
350 Nm³/h
Biomethane for gas-grid injection



DE, Müden-Aller

Start of operation
Gas Upgrading

2012
Technology
Input Gas
Plant Capacity
Hourly Biomethane Production
Biomethane Usage

Amine Scrubbing
Biogas from Energy Crops
700 Nm³/h
350 Nm³/h
Biomethane for gas-grid injection

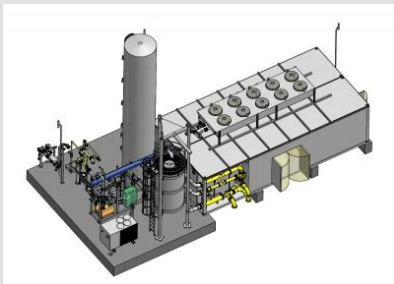


DE, Neudorf-Helle

Start of operation
Gas Upgrading

2012
Technology
Input Gas
Plant Capacity
Hourly Biomethane Production
Biomethane Usage

Amine Scrubbing
Biogas from Energy Crops
1'400 Nm³/h
700 Nm³/h
Biomethane for gas-grid injection



DE, Rätzlingen

Start of operation
Gas Upgrading

2012
Technology
Input Gas
Plant Capacity
Hourly Biomethane Production
Biomethane Usage

Amine Scrubbing
Biogas from Energy Crops
700 Nm³/h
350 Nm³/h
Biomethane for gas-grid injection



DE, Rosche

Start of operation
Gas Upgrading

2012
Technology
Input Gas
Plant Capacity
Hourly Biomethane Production
Biomethane Usage

Amine Scrubbing
Biogas from Energy Crops
700 Nm³/h
350 Nm³/h
Biomethane for gas-grid injection



DE, Zeven II

Start of operation
Gas Upgrading

2012
Technology
Input Gas
Plant Capacity
Hourly Biomethane Production
Biomethane Usage

Membrane Technology
Biogas from Energy Crops
250 Nm³/h
130 Nm³/h
Biomethane for gas-grid injection



DE, Altena

Start of operation
Gas Upgrading

2011
Technology
Input Gas
Plant Capacity
Hourly Biomethane Production
Biomethane Usage

Amine Scrubbing
Biogas from Energy Crops
700 Nm³/h
350 Nm³/h
Biomethane for gas-grid injection



DE, Apensen

Start of operation
Gas Upgrading

2011
Technology
Input Gas
Plant Capacity
Hourly Biomethane Production
Biomethane Usage

Amine Scrubbing
Biogas from Energy Crops
700 Nm³/h
350 Nm³/h
Biomethane for gas-grid injection



DE, Bruchhausen-Vilsen

Start of operation
Gas Upgrading

2011
Technology
Input Gas
Plant Capacity
Hourly Biomethane Production
Biomethane Usage

Amine Scrubbing
Biogas from Energy Crops
700 Nm³/h
350 Nm³/h
Biomethane for gas-grid injection



DE, Gross Kelle

Start of operation
Gas Upgrading

2011
Technology
Input Gas
Plant Capacity
Hourly Biomethane Production
Biomethane Usage

Amine Scrubbing
Biogas from Energy Crops
500 Nm³/h
250 Nm³/h
Biomethane for gas-grid injection



DE, Jürgenshagen

Start of operation
Gas Upgrading

2011
Technology
Input Gas
Plant Capacity
Hourly Biomethane Production
Biomethane Usage

Amine Scrubbing
Biogas from Energy Crops
700 Nm³/h
350 Nm³/h
Biomethane for gas-grid injection



DE, Karft

Start of operation
Gas Upgrading

2011
Technology
Input Gas

Plant Capacity
Hourly Biomethane Production
Biomethane Usage

Amine Scrubbing
Biogas from Source Separated
Municipal Waste
1'000 Nm³/h
500 Nm³/h
Biomethane for gas-grid injection



DE, Malstedt

Start of operation
Gas Upgrading

2011
Technology
Input Gas
Plant Capacity
Hourly Biomethane Production
Biomethane Usage

Amine Scrubbing
Biogas from Energy Crops
700 Nm³/h
350 Nm³/h
Biomethane for gas-grid injection



DE, Oberriexingen

Start of operation
Gas Upgrading

2011
Technology
Input Gas
Plant Capacity
Hourly Biomethane Production
Biomethane Usage

Amine Scrubbing
Biogas from Energy Crops
700 Nm³/h
350 Nm³/h
Biomethane for gas-grid injection



DE, Schwedt

Start of operation
Gas Upgrading

2011
Technology
Input Gas
Plant Capacity
Hourly Biomethane Production
Biomethane Usage

Amine Scrubbing
Biogas from Energy Crops
1'400 Nm³/h
700 Nm³/h
Biomethane for gas-grid injection



DE, Drögennindorf

Start of operation
Gas Upgrading

2010
Technology
Input Gas
Plant Capacity
Hourly Biomethane Production
Biomethane Usage

Amine Scrubbing
Biogas from Energy Crops
500 Nm³/h
250 Nm³/h
Biomethane for gas-grid injection



DE, Eggertshofen

Start of operation
Gas Upgrading

2010
Technology
Input Gas
Plant Capacity
Hourly Biomethane Production
Biomethane Usage

Amine Scrubbing
Biogas from Energy Crops
400 Nm³/h
200 Nm³/h
Biomethane for gas-grid injection



DE, Grabsleben

Start of operation
Gas Upgrading

2010
Technology
Input Gas
Plant Capacity
Hourly Biomethane Production
Biomethane Usage

Amine Scrubbing
Biogas from Energy Crops
700 Nm³/h
350 Nm³/h
Biomethane for gas-grid injection



DE, Unsleben

Start of operation
Gas Upgrading

2010
Technology
Input Gas
Plant Capacity
Hourly Biomethane Production
Biomethane Usage

Amine Scrubbing
Biogas from Energy Crops
700 Nm³/h
350 Nm³/h
Biomethane for gas-grid injection

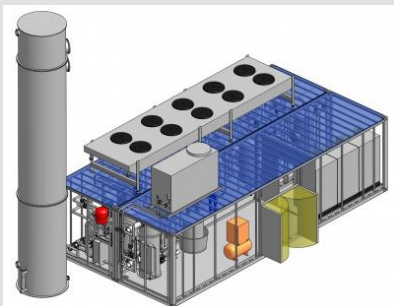


DE, Einbeck

Start of operation
Gas Upgrading

2009
Technology
Input Gas
Plant Capacity
Hourly Biomethane Production
Biomethane Usage

Amine Scrubbing
Biogas from Energy Crops
1'000 Nm³/h
500 Nm³/h
Biomethane for gas-grid injection

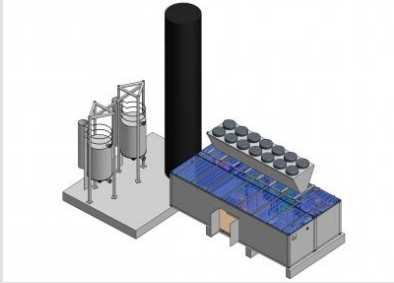


DE, Hardeggen

Start of operation
Gas Upgrading

2009
Technology
Input Gas
Plant Capacity
Hourly Biomethane Production
Biomethane Usage

Amine Scrubbing
Biogas from Energy Crops
1'100 Nm³/h
550 Nm³/h
Biomethane for gas-grid injection



DE, Horn-Bad Meinberg

Start of operation
Gas Upgrading

2009
Technology
Input Gas
Plant Capacity
Hourly Biomethane Production
Biomethane Usage

Amine Scrubbing
Biogas from Energy Crops
2'000 Nm³/h
1'000 Nm³/h
Biomethane for gas-grid injection



DE, Zeven

Start of operation
Gas Upgrading

2009
Technology
Input Gas
Plant Capacity
Hourly Biomethane Production
Biomethane Usage

Amine Scrubbing
Biogas from Energy Crops
250 Nm³/h
130 Nm³/h
Biomethane for gas-grid injection

Hitachi Zosen Inova AG

Hardturmstrasse 127
8005 Zurich
Switzerland
P +41 44 277 11 11
F +41 44 277 13 13
info@hz-inova.com

Hitachi Zosen Inova U.S.A. LLC

10100 Global Way Suite 210
Knoxville, TN 37932
United States
P +1 678 987 25 00
F +1 678 987 25 99
info@hz-inova.com

Hitachi Zosen KRB AG

Industriestrasse 6
9470 Buchs/SG
Switzerland
P +41 81 750 45 00
F +41 81 750 45 01
info-krb@hz-inova.com

Hitachi Zosen Inova Australia Pty Ltd

Level 17 40 Mount Street
North Sydney, NSW 2060
Australia
P +61 (02) 8003 4110
info@hz-inova.com