Hitachi Zosen
INOVA

Reference Projects

HZI BioMethan

in chronological order

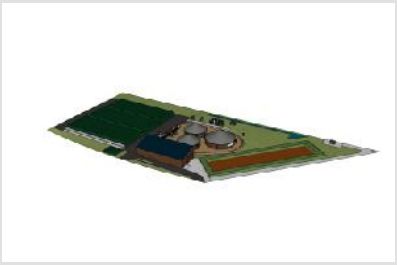
Hitachi Zosen INOVA

FR, Missy-lès-Pierrepont

Start of operation	2022	In planning phase
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

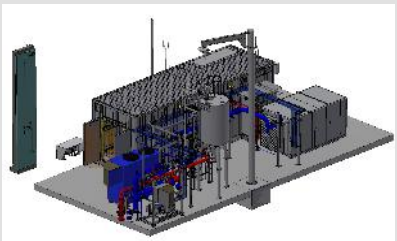
FR, Voulton

Start of operation	2022	In planning phase
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	In planning phase
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	2022	In planning phase
Gas Upgrading	Technology	Amine Scrubbing
	Input Gas	Biogas from Sewage Sludge
	Plant Capacity	1'000 Nm^3/h
	Hourly Biomethane Production	700 Nm^3/h
	Biomethane Usage	Biomethane for gas-grid injection

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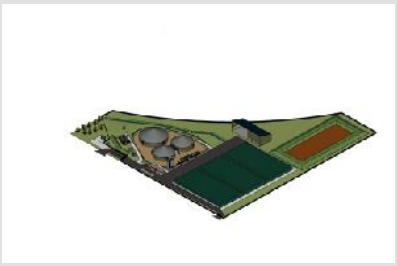
FR, Tremblay-les-Villages

Start of operation	2022	In planning phase
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, Saugnacq-et-Muret

Start of operation	2022	In planning phase
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, Vinantes

Start of operation	2021	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	400 Nm^3/h
	Hourly Biomethane Production	200 Nm^3/h
	Biomethane Usage	Biomethane for gas-grid injection

FR, Réau

Start of operation	2021	In planning phase
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

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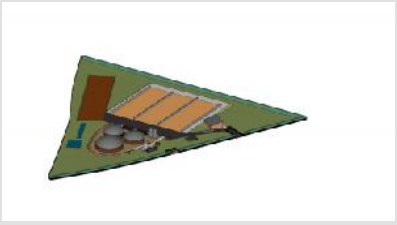
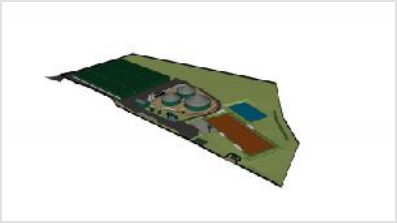


FR, Mont-l'Evêque

Start of operation	2021	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	300 Nm^3/h
	Biomethane Usage	Biomethane for gas-grid injection

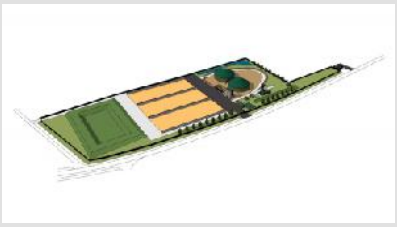


FR, Chauconin-Neufmontiers

Start of operation	2021	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	500 Nm^3/h
	Hourly Biomethane Production	250 Nm^3/h
	Biomethane Usage	Biomethane for gas-grid injection

FR, Boutigny-sur-Essone

Start of operation	2021	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	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	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	500 Nm^3/h
	Hourly Biomethane Production	250 Nm^3/h
	Biomethane Usage	Biomethane for gas-grid injection

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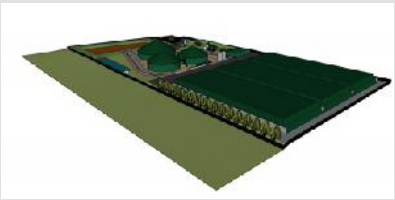
FR, Trancault

Start of operation	2021	In planning phase
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

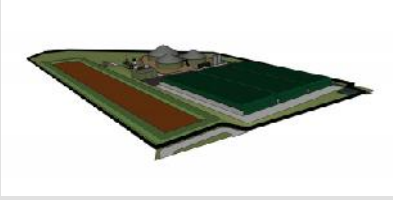
FR, Coulombs-en-Valois

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	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	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	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	300 Nm^3/h
	Biomethane Usage	Biomethane for gas-grid injection

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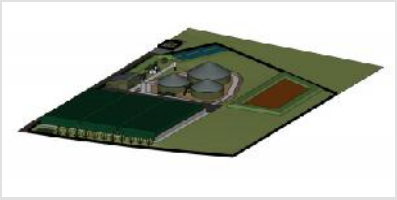
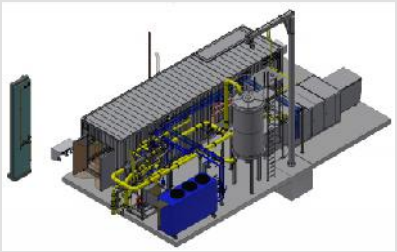


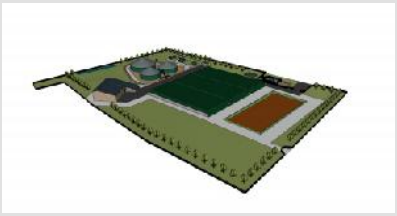
FR, Prémierfait

Start of operation	2021	In construction
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	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	300 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	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	500 Nm^3/h
	Hourly Biomethane Production	250 Nm^3/h
	Biomethane Usage	Biomethane for gas-grid injection

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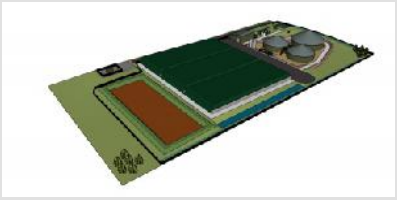
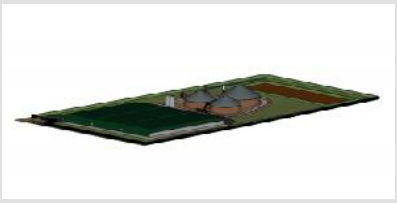


FR, Chapelle-Vallon

Start of operation	2021	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	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

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US, Escondido

Start of operation	2020	In construction
Gas Upgrading	Technology	Membrane Technology
	Plant Capacity	1'000 Nm^3/h
	Hourly Biomethane Production	500 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
	Waste Throughput per Year	40'000 t/a
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	Biomethane Filling Station, CNG

FR, Trouy

Start of operation	2020	
Anaerobic Digestion	Number of Digester(s)	1
	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	300 Nm^3/h
	Hourly Biomethane Production	250 Nm^3/h
	Biomethane Usage	Biomethane for gas-grid injection

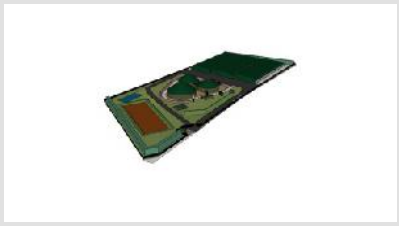
Hitachi Zosen INOVA

FR, Yversay

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, Neuville-Saint-Amand

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, Bucy-le-Long

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-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

Hitachi Zosen INOVA

FR, Messy

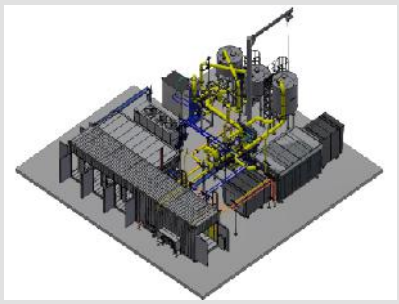
Start of operation	2020	
Anaerobic Digestion	Number of Digester(s)	2
	Net volume per digester	2'300 m^3
	Digester Type	Wet AD
Gas Upgrading	Technology	Membrane Technology
	Input Gas	Biogas from Agricultural Residues
	Plant Capacity	600 Nm^3/h
	Hourly Biomethane Production	430 Nm^3/h
	Biomethane Usage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

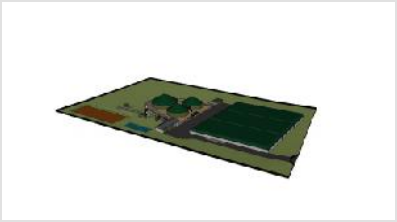
Start of operation	2020	
Gas Upgrading	Technology	Membrane Technology
	Input Gas	Biogas from Agricultural Residues
	Plant Capacity	900 Nm^3/h
	Hourly Biomethane Production	500 Nm^3/h
	Biomethane Usage	Biomethane for gas-grid injection



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

Hitachi Zosen INOVA



FR, Chalandry

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-Laurent-Médoc

Start of operation	2019	
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, Payns

Start of operation	2019	
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

DE, Hamburg

Start of operation	2019	
Gas Upgrading	Technology	Amine Scrubbing
	Input Gas	Biogas from Sewage Sludge
	Plant Capacity	1'500 Nm^3/h
	Hourly Biomethane Production	930 Nm^3/h
	Biomethane Usage	Biomethane for gas-grid injection

Hitachi Zosen INOVA

FR, Audenge

Start of operation	2018	
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, Cernay

Start of operation	2018	
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, Fère-Champenoise

Start of operation	2018	
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

DE, Grabsleben II

Start of operation	2018	In construction
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

Hitachi Zosen INOVA

DE, Parum

Start of operation	2018	
Gas Upgrading	Technology	Amine Scrubbing
	Input Gas	Biogas from Green Waste & Bio Waste
	Plant Capacity	700 Nm^3/h
	Hourly Biomethane Production	400 Nm^3/h
	Biomethane Usage	Biomethane for gas-grid injection

DE, Plaidt

Start of operation	2018	
Gas Upgrading	Technology	Membrane Technology
	Input Gas	Biogas from Green Waste & Bio Waste
	Plant Capacity	500 Nm^3/h
	Hourly Biomethane Production	300 Nm^3/h
	Biomethane Usage	Biomethane for gas-grid injection

FR, Pommeuse

Start of operation	2018	
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, Saconin

Start of operation	2018	
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

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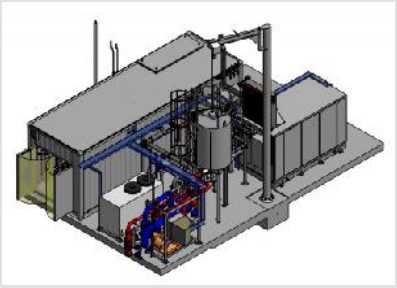

FR, Barberey

Start of operation	2017	
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, Niedergösgen

Start of operation	2017	
Gas Upgrading	Technology	Membrane Technology
	Input Gas	Biogas from Sewage Sludge
	Plant Capacity	400 Nm^3/h
	Hourly Biomethane Production	280 Nm^3/h
	Biomethane Usage	Biomethane for gas-grid injection

FR, Noyen

Start of operation	2017	
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, Saints

Start of operation	2017	
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

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CH, Thun

Start of operation	2017	
Gas Upgrading	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	2016	
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, Meaux

Start of operation	2016	
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

DE, Heinfelde

Start of operation	2015	
Gas Upgrading	Technology	Amine Scrubbing
	Input Gas	Biogas from Source Separated Municipal Waste
	Plant Capacity	1'000 Nm^3/h
	Hourly Biomethane Production	500 Nm^3/h
	Biomethane Usage	Biomethane for gas-grid injection

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FR, Thennelières

Start of operation	2015	
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

DE, Wittenburg

Start of operation	2015	
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

CH, Winterthur Digester

Start of operation	2014	
Anaerobic Digestion	Number of Digester(s)	1
	Net volume per digester	1'500 m^3
	Waste Type	Bio Waste, Food Waste, Green Waste
	Waste Throughput per Year	25'000 t/a
Gas Upgrading	Technology	Amine Scrubbing
	Input Gas	Biogas from Green Waste & Bio Waste
	Plant Capacity	300 Nm^3/h
	Hourly Biomethane Production	122 Nm^3/h
	Biomethane Usage	Biomethane for gas-grid injection

CH, Vétroz

Start of operation	2014	
Anaerobic Digestion	Number of Digester(s)	1
	Net volume per digester	1'300 m^3
	Digester Type	PF1300
	Waste Type	Bio Waste, Green Waste, Liquid Manure, Waste Oil
	Waste Throughput per Year	20'000 t/a
Gas Upgrading	Technology	Amine Scrubbing
	Input Gas	Biogas from Green Waste & Bio Waste
	Plant Capacity	250 Nm^3/h
	Hourly Biomethane Production	130 Nm^3/h
	Biomethane Usage	Biomethane for gas-grid injection

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GB, Saint Nicholas Court Farm

Start of operation	2014	
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

DE, Feldberg

Start of operation	2014	
Gas Upgrading	Technology	Membrane Technology
	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

FR, Méry-sur-Seine

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

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

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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	2014	
Gas Upgrading	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

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DE, Altenhof

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, Gardelegen

Start of operation	2013	
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, Jabel

Start of operation	2013	
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, 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

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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	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

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DE, Klein Wanzleben

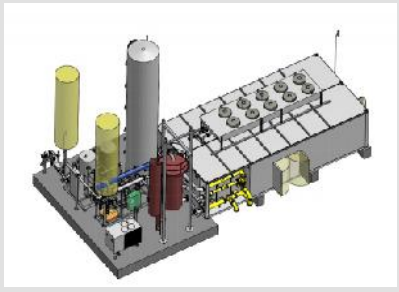
Start of operation	2012	
Gas Upgrading	Technology	Amine Scrubbing
	Input Gas	Biogas from Energy Crops
	Plant Capacity	1'400 Nm^3/h
	Hourly Biomethane Production	700 Nm^3/h
	Biomethane Usage	Biomethane for gas-grid injection

DE, Leizen

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, Marienthal

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, Müden-Aller

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

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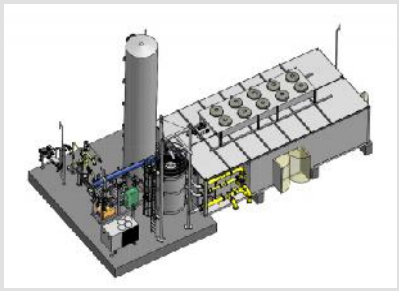
DE, Neudorf-Helle

Start of operation	2012	
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, Rätzlingen

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, Rosche

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, Zeven II

Start of operation	2012	
Gas Upgrading	Technology	Membrane Technology
	Input Gas	Biogas from Energy Crops
	Plant Capacity	250 Nm^3/h
	Hourly Biomethane Production	130 Nm^3/h
	Biomethane Usage	Biomethane for gas-grid injection

Hitachi Zosen INOVA

DE, Altena

Start of operation	2011	
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, Apensen

Start of operation	2011	
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, Bruchhausen-Vilsen

Start of operation	2011	
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, Gross Kelle

Start of operation	2011	
Gas Upgrading	Technology	Amine Scrubbing
	Input Gas	Biogas from Energy Crops
	Plant Capacity	500 Nm^3/h
	Hourly Biomethane Production	250 Nm^3/h
	Biomethane Usage	Biomethane for gas-grid injection

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DE, Jürgenshagen

Start of operation	2011	
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, Karft

Start of operation	2011	
Gas Upgrading	Technology	Amine Scrubbing
	Input Gas	Biogas from Source Separated Municipal Waste
	Plant Capacity	1'000 Nm^3/h
	Hourly Biomethane Production	500 Nm^3/h
	Biomethane Usage	Biomethane for gas-grid injection

DE, Malstedt

Start of operation	2011	
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, Oberriexingen

Start of operation	2011	
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

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DE, Schwedt

Start of operation	2011	
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, Drögennindorf

Start of operation	2010	
Gas Upgrading	Technology	Amine Scrubbing
	Input Gas	Biogas from Energy Crops
	Plant Capacity	500 Nm^3/h
	Hourly Biomethane Production	250 Nm^3/h
	Biomethane Usage	Biomethane for gas-grid injection

DE, Eggertshofen

Start of operation	2010	
Gas Upgrading	Technology	Amine Scrubbing
	Input Gas	Biogas from Energy Crops
	Plant Capacity	400 Nm^3/h
	Hourly Biomethane Production	200 Nm^3/h
	Biomethane Usage	Biomethane for gas-grid injection

DE, Grabsleben

Start of operation	2010	
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

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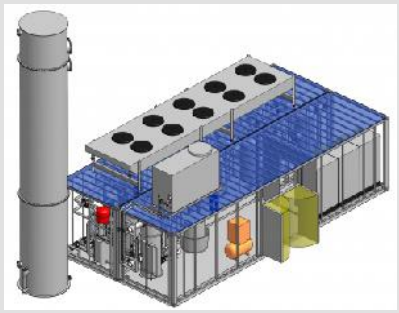
DE, Unsleben

Start of operation	2010	
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

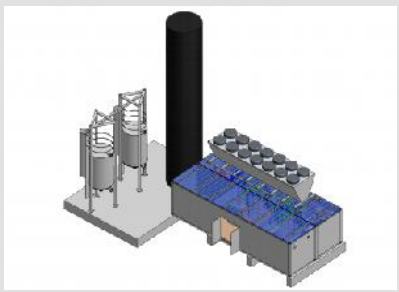
DE, Einbeck

Start of operation	2009	
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, Hardegsen

Start of operation	2009	
Gas Upgrading	Technology	Amine Scrubbing
	Input Gas	Biogas from Energy Crops
	Plant Capacity	1'100 Nm^3/h
	Hourly Biomethane Production	550 Nm^3/h
	Biomethane Usage	Biomethane for gas-grid injection



DE, Horn-Bad Meinberg

Start of operation	2009	
Gas Upgrading	Technology	Amine Scrubbing
	Input Gas	Biogas from Energy Crops
	Plant Capacity	2'000 Nm^3/h
	Hourly Biomethane Production	1'000 Nm^3/h
	Biomethane Usage	Biomethane for gas-grid injection

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DE, Zeven

Start of operation	2009	
Gas Upgrading	Technology	Amine Scrubbing
	Input Gas	Biogas from Energy Crops
	Plant Capacity	250 Nm^3/h
	Hourly Biomethane Production	130 Nm^3/h
	Biomethane Usage	Biomethane for gas-grid injection

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