

References Biogas Plants

Project	Location	Substrat	Gas Utilization	Technical Data	UTECH Services	Customer	Year
Biogasanlage Rucapequén	Pequén Chile	pig manure	heat utilization with optional cogeneration	Digester 1 x 6.000 m ³ CSTR, 1 x 10.000 m ³ lagoon	Planning Technical support	Fondo de Inversión	2016 -2017
Engagement of Biogas Plant Schröder	LK OHZ Niedersachsen	cow manure maize silage	cogeneration 2,3 MW peakload	additional modul of 1,0 MW; gas-purification,	conception, draft- and permission planning, detail planning	Schröder Biogas GbR	2016 -2017
Biogas Plant Fangmeier	Düversbruch	NaWaRo	cogeneration and biomethane	Installation of a dryer for digestates	Planning Technical support	Fangmeier Biogas GmbH	2015 -2016
Engagement of Biogas Pant Rauschenberg	LK Marburg Hessen	cow manure maize silage	CHP 1 x 500 kWel 1 x 900 kW district heating	additional modul of 0,5 MW; additional digester, enlargement of gasholders	conception, draft- and permission planning, detail planning	TRI-S GmbH & Co. KG	2016
Biogas plant Molina	Molina Chile	waste of wine; fruits and vegetables	cogeneration	1,0 MWel 2 fermenter	Technical support for planning, tendering and commissioning	Fondo de Inversión	2013 -2016
Biogas Plant Fangmeier	Düversbruch	renewable raw materials	cogeneration and biomethan	Adding a digestate	Planning Technical support	Fangmeier Biogas GmbH	2013 -2014
Biogas Plant Las Pampas	Pichidegua Chile	pig manure organic wastes	cogeneration	420 kWel fermenter 1x 6.000m ³	Technical support for planning, tendering and commissioning	Fondo de Inversión	2013 -2014
Biogas Plant Santa Irene	San Vincente Chile	pig manure	cogeneration	420 kWel conversion lagoon system	Technical support for planning, tendering and commissioning	Fondo de Inversión	2013 -2014
Biogas Plant Oakdene	Oakdene North Irland	Manure Grass-silage	cogeneration 500 kWel	digester, post digester, storage tank	concept, detail planning, consulting until realisation	B.H.	2013
Pilot Plant dairy	Zeven Niedersachsen	Acid whey	no (only torch)	Pilot-plant, Hydrolysis 10 m ³ digester 20 m ³ and post-digester 5 m ³	Concept, engineering, realisation, experiment program	Deutsches Milchkontor AG	2012 -2013

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Power to Gas Plant Werlte	Werlte Niedersachsen	wind energy CO ₂ from bio- methanisation	natural-gas-substitute into the gas distribution system	Plant for the conversion of excess electricity produced by wind energy into a natural gas substitute due to hydrolysis and methanisation with CO ₂ of a biogas plant	Permission plannings according to BImSchG (federal pollution control act) into two sub-licenses with public participation	SolarFuel / Audi AG	2011 -2012
BGEA Leese	Leese Niedersachsen	--	Plant for injection to grid of biomethane 750 Nm ³ /h	Injection to the grid of BGA Leese	concept, detail planning, consultancy	GWN GmbH	2011 -2012
BGEA Elsteraue	Elsteraue, Sachsen	--	Plant for injection to grid of biomethane 700 Nm ³ /h	Injection to the grid of BGA Elsteraue	consultancy	REDINET GmbH	2011 -2012
BGEA Uchte	LK Nienburg Weser Niedersachsen	--	Plant for injection to grid of biomethane 750 Nm ³ /h	Injection to the grid of BGA Uchte	concept, detail planning, consulting until realisation	GWN GmbH	2011 -2013
Biogas Plant São Mauricio	Santa Catarina Brasil	pig manure organic wastes from slaughter- house and food industry	Biomethane as fuel, 450 m ³ /h	Digesters 2 x 6.500 m ³ , post-digestion 4.000 m ³ Separation, storage of digestate	Concept, dimensioning, detail-planning, bids for tender, consultancy of brasilien partner	Biogastec Deutschland GmbH	2011 -2013
Biogas Plant Wüsthof	Soltau Niedersachsen	organic wastes	cogeneration 1 x 626 kW _{el} , 2 x 1.021kW _{el} , torch	3 digesters, post digester, storage tanks, Fermenter, Hygienisation, Pretreatment of substrate	Permisson plannings according to BImSchG, Technical documentation	Wüsthof Biogas GmbH	2004 -2013
Biogas Plant Ganderkesee	Ganderkesee Niedersachsen	cow manure maize silage	cogeneration 1 x 500 kW _{el} Gas-Otto	digester, second digester, manure storage; silage area; 500 kW _{el} , ENVITEC-Plant	permission planing according to BImSchG	Envitec Biogas AG	2011

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Enlargement of Biogas Plant	LK Oldenburg Niedersachsen	pigs manure maize silage	cogeneration 2 x 250 kWel; stables, houses	digester 2500 m ³ ; post digester 2900 m ³ , manure storage 6.400, 2900 und 1500 m ³ , silage area 5000 m ²	permission planning for enlargement to 500 kWel	LO Naturenergie	2011
Enlargement of Biogas Plant	LK OHZ Niedersachsen	cow manure maize silage	cogeneration 3 x 365 kWel; district heating	digester 2500 m ³ ; post digester 2900 m ³ , manure storage 2.900 and 6.400 m ³ , silage area 5000 m ²	permission planning for enlargement to 1,0 MWel	Schröder Biogas GbR	2011
Biogas Plant Tinguiririca	Región VI Chile	cow manure fruit, vegetables	cogeneration 1 x 200 kWel Gas-Otto	digester 1 x 2.000 m ³ gas storage as a double membrane roof, external heat exchanger	concept, detail planning, consulting until realisation	Genera4 S.A. Santiago	2010 -2013
Biogas Plant Vehlgest	LK Havelberg Sachsen-Anhalt	cow manure maize silage	cogeneration 1 x 500 kWel Gas-Otto; 100% heat utilization in substrate drying	ENVITEC-Biogas Plant 500 kWel	permission planning according to BImSchG	RGS GmbH Wetterzeube	2010 -2011
Biogas Plant Quitzow	LK Prignitz Brandenburg	cow manure maize silage	cogeneration 1 x 500 kWel Gas-Otto; 100% heat utilization in slaughter house	silage area, digester, second digester, manure storage tank, 500 kWel ENVITEC-Biogas Plant	bids for tender Biogas plant and cogeneration, permission planning, commissioning incl. district heating, integration of slaughter house	Agrargenossen- schaft eG Quitzow	2010 -2011
Biogas plant: changing from organic waste to energy crops	Amt Neuhaus Niedersachsen	energy crops, cow manure, solid manure	cogeneration 1 x 500 kWel Gas-Otto; 100% heat utilization in substrate drying	digester 2 x 1.000 m ³ ; second digester and manure storage 2650 m ³ ; separation, manure drying, composting of solids	detail- und permission planning	Hanseatische Humus GmbH	2009 -2010

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Enlagement of Biogas Plant	LK OHZ Niedersachsen	cow manure maize silage	cogeneration 2 x 365 kWel; district heating	digester 2500 m ³ ; post digester 2900 m ³ , manure tank 2900 and 1500 m ³ , silage area 5000 m ²	permission planning for enlargement to 500 kWel	Schröder Biogas GbR	2009
Biogas feed Zeven	Zeven Niedersachsen	--	feeding of biomethane 150 Nm ³ /h in the natural gas pipeline	biomethane feed from MT- Aminwasher	detail planning, commissioning	Stadtwerke Zeven	2009 2010
Enlagement of Biogas Plant	LK Diepholz Niedersachsen	cow manure maize silage solid manure	cogeneration 2 x 250 kWel, gas treatment to biomerthane	digester 2 x 2.500 m ³ ; second digester 2000 m ³ ; manure storage tanks 1x3000 und 2x4000 m ³ ; separation, extern utilatin of solids, gas drying, 7 km gas pipeline	detail planning of gas pipeline and enlagement, permission planning, commissioning	Fangmeier Biogas GmbH & Co KG	2009 -2010
Biogas Plant Pohl'sche Heide	Kreis Minden- Lübbecke, NRW	organic waste fraction	biogas treatment and feed into the public natural gas pipeline; utilization in decentral cogeneration plants	solid waste digestion, biogas treatment to NG-quality, flare, gas storage , capacity 500 m ³ biogas per hour, combination with compost plant	concept, draft- and permission planning, bids for tender, supervision, commissioning of the gas treatment plant, feed into the gas pipeline, cogeneration plants	AML-Immo	2008
Biogas Plant Liebenburg	LK Goslar Niedersachsen	pigs manure maize silage gras silage	cogeneration 1x500 kWel Gas Otto waste heat utilization in a hospital	digester 2x1500 m ³ , central agitator, manure storage tank with gas storage, 2.500 m ³ ; manure storage tank 2.500 m ³ ; flare, mechanical drying of biogas, silage area 5.000 m ² ; gas- and district heating, pipe 800 m	concept, permission planning, detail planning, supervision, commissioning	Bioenergie Lewe GmbH & Co.KG	2008

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Biogas Plant Negrete	Region VIII Chile	cow manure Rindergülle, food scraps silage	cogeneration 1 x 35 kWel Gas-Otto waste heat utilization in boarding school	digester 200 m ³ manure storage lagoon, buildings, district heating, ppp-sponsored project of BMZ first biogas plant in chile with gas utilization	concept, permission planning, detail planning, supervision, commissioning, training	UTECH	2008
Biogas Plant Schröder	LK OHZ Niedersachsen	cow manure maize silage gras silage	cogeneration 1 x 365 kWel Gas-Otto	digester 2500 m ³ ; second digester 2.900 m ³ , manure storage tank 1.500 m ³ , silage area 5.000 m ²	concept, permission planning, detail planning, supervision, commissioning	Farmer	2008
Biogas Plant Banja Luka	Banja Luka Bosnien	cow manure straw	cogeneration 1 x 35 kW Gas-Otto	financed by Deutschen Bundesstiftung Umwelt (dbu)	concept, permission planning, detail planning, supervision, commissioning	Caritas Banja Luka	2008
Biogas Plant Lüchow	LK Lüneburg Niedersachsen	cow manure maize silage cereals others	cogeneration	digester, second digester with gas storage, building for substrat handling, treatment and separation, flare	concept, accompanying laboratory tests to solve digestion problems	BioWend Lüchow	2008
Biogas Plant Wahrenholz	LK Gifhorn Niedersachsen	cow manure maize silage	cogeneration 1 x 500 kWel Gas-Otto	digester 2.000 m ³ , central agitator; post digester 1.500 m ³ with gas storage, manure storage tank, gas flare, buildings, silage area	concept, draft- and permission planning	e3 Bioenergie GmbH&Co KG	2007
Biogas Plant Voitze	LK Gifhorn Niedersachsen	cow manure maize silage	cogeneration 1 x 500 kWel Gas-Otto	digester 2.000 m ³ , central agitator; post digester 1.500 m ³ with gas storage, manure storage tank, gas flare, buildings, silage area	concept, draft- and permission planning	e3 Bioenergie GmbH&Co KG	2007

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Biogas Plant Hude	LK Diepholz Niedersachsen	cow manure poultry manure maize silage gras silage	cogeneration 1 x 265 kW diesel engine waste heat utilization in farm dairy	digester 1.500 m ³ with gas storage; second digester 2.500 m ³ with gas storage, building	concept, permission planning, detail planning, supervision, commissioning	Farmer	2007
Biogas Plant Rauschenberg	LK Marburg Hessen	cow manure maize silage	cogeneration 1 x 500 kWel Gas-Otto waste heat utilization on the farm	digester 2.000 m ³ , central agitator; post digester 1.500 m ³ with gas storage, manure storage tank, gas flare, buildings, silage area	concept, permission planning, detail planning, supervision, commissioning	TRI-S GmH & Co KG	2007
Biogas Plant Neetze	Neetze Niedersachsen	cow manure maize silage	cogeneration 1 x 500 kWel Gas-Otto	digester 2.000 m ³ , central agitator; post digester 1.500 m ³ with gas storage, manure storage tank, gas flare, buildings, silage area	concept, permission planning, detail planning, supervision, commissioning	e3 Bioenergie GmbH&Co KG	2007
Biogas Plant Staffel	LK Marburg Hessen	cow manure maize silage gras silage	cogeneration 1x265 kWel diesel engine waste heat utilization on the farm	first and second digester, buildings	draft planning, feasibility study, technical consultancy and electrical connection to the grid	Biogas Staffel GbR	2007
Biogas Plant Neu Wendischthun	Amt Neuhaus Niedersachsen	organic waste	cogeneration 1 x 330 kWel Gas-Otto waste heat utilization for compost produc- tion and aquaculture	digester 2 x 100 m ³ , central agitator hygienisation, manure storage, buildings	concept, permission planning, detail planning, supervision, commissioning, operation, training	Hanseatische Humus GmbH	2006
Biogas Plant Minden	LK Minden NRW	vinasse from chemical prod. plant	cogeneration 350 kWel	fixed bed digester 1.200 m ³ heat exchanger, gas storage	concept, continuous labora- tory tests, draft- and detail planning	BASF	2006

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Biogas Plant Düversbruch	LK Diepholz Niedersachsen	cow manure pig manure maize silage gras silage	cogeneration 2x250 kWel diesel engine waste heat utilization for potatoe treatment	first and second digester 2500 m ³ with gas stager, manure storage tank 3.700 m ³ ; silage area 3.500 m ²	feasibility study, concept, draft- and permission planning	Fangmeier Biogas GmbH & Co KG	2005
Biogas Plant Gülze	Gülze Meckl.-Vorp.	cow manure, waste food	cogeneration 500 kWel waste heat utilization on the farm	digester 2 x 1.850 m ³ , 2x 4.600 m ³ , gas storage , gas flare, buildings, electricity supply to the grid	concept, draft- and permission planning, consultations	Biogas Teldau GmbH & Co KG	2005
Biogas Plant Wüsthof	Niedersachsen	organic waste	cogeneration 1 x 650 kWel, Gas- Otto cogeneration 2 x 1.020 kWel Gas-Otto	substrate handling and treat- ment, hygienisation, digesters 1x700 , 1x2.000, 2x3000, 2x5000 m ³ , manure storage tank 12.000 m ³ , buildings, gas storage, gas flare	concept for diverse extensions, draft- and permission planning, extension plannings, amendment applications, consultations	Wüsthof Biogas GmbH	2005
Biogas Plant Grüne Energie	Unterstedt LK Rotenburg Niedersachsen	pig manure maize silage	cogeneration 2 x 350 kW Gas-Otto waste heat utilization for heating and drying process	first and post digester 2.500 m ³ with gas storage, solid substrate input, pre-tank, technical buildings	Concept, permission planning, detail planning, supervision, commissioning	Grüne Energie GmbH & Co KG	2004
Biogas Plant Elm	Evessen LK Wolfenbüttel Niedersachsen	maize silage	cogeneration 1 x 500 kWel Gas-Otto waste heat utilization 100% Neuerkeroder Anstalten	digester 2150 m ³ , central agitator, second digester 1.075 m ³ with gas storage, manure storage tank 5.000 m ³ ; gas flare, buildings	Concept, permission planning, detail planning, supervision, commissioning	Bioenergie Elm Betriebs Gmbh	2004

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Biogas Plant Medan	Sumatra Indonesien	wastewater oil mills	none	fixed bed digester, R&D with BMBF und IOPRI	concept, permission planning, detail planning, supervision, commissioning, operation	TÜV Rheinland	2001
Biogas Plant Ganderkesee	LK Oldenburg Niedersachsen	organic waste fraction	gas boiler 100 kW, process energy, heating system	fixed bed digester 80 m ³ , hydrolysis tank 4 x 10 m ³ , storage tank, gas washer, gas flare	concept, draft planning, commissioning, scientific works	Landkreis Oldenburg	1995 -1997
Biogas Plant Wüsthof/Soltau	Stadt Soltau Niedersachsen	organic waste, cow manure	cogeneration 200 kWel Gas-Otto	substrat handling and treatment, hygienisation, digester 700 m ³ , manure storage lagoon, buildings, gas storage, gas flare	concept, responsible planning, installation and commissioning	Wüsthof Biogas GmbH	1997
Biogas Plant Jakarta	Jakarta Indonesia	slaughterhouse wastewater	Cogeneration 40 kWel Gas-Otto	mechanical pre-treatment, fixed bed digester, gas storage, gas utilization, combination with compost plant, financed by BMBF,	concept, responsible planning, installation and commissioning, training	TÜV Rheinland	1997
Biogas Plant Gut Tannholz	LK Celle Niedersachsen	organic waste, manure	Cogeneration 72 kWel Gas-Otto	digester 500 m ³ , manure storage 2000 m ³ , gas storage, gas flare	concept, permission planning, detail planning according to BlmSchG	Ventimola Gut Tannholz GmbH & Co KG	1996
Biogas Plant VFZ Hamburg	Hamburg	flotat, rumen press water; screenings	gas boiler 100 kW, process energy, heating system	digester 300 m ³ , gas storage, gas flare, Buildings, mixing tanks	concept, permission planning, detail planning, supervision, commissioning, operation	Stadt Hamburg	1986
Biogas Plant VFZ Hamburg	Hamburg	rumn content wastewater	none	pilot plant with 2-stage-digestion with hydrolysis; digester and seperation of sludge; R&D together with FH Bremerhaven	responsible for the tests, analytics, reports, plant adaptations and technical improvements	FH Bremerhaven	1986

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<i>Biogas Plant Quickborn</i>	LK Lüneburg Niedersachsen	pig and cow manure	gas pipeline to decentral gas boilers	decentral biogas plants (lying digester and totally mixed systems, various producers), gas pipeline with central gas storage	inventory analysis and restructuring plan, list of deficiencies, preparation of a detailed catalog of measures for the technical renovation	BMBF Bonn	1985
<i>Biogas Plant Bremen-Strom</i>	Bremen	cow manure	gas boiler for house heating	digester underneath the stable, 80 m ³ , second digester 90m ³ , integrated gas storage, sponsored from Bundesministerium für Landwirtschaft (BML) and Bremer Wirtschaftssenator	concept, permission planning, detail planning, supervision, commissioning	Farmer	1983
<i>Biogas Plant Wohlenhausen</i>	LK Hildesheim Niedersachsen	pigs manure	gas boiler	psycrophile biogas plant, digester 300 m ³ , gastight top with plastic film, gas storage, sponsored by Niedersachsen	concept, permission planning, detail planning, supervision, commissioning	Farmer	1981