

Biogas Plant	Location	Constr. period	Input	Digester	Biogas utilisation	Features	Responsibility
<b>Biomethane plant MICHIGAN 3</b>	USA	2024-2025	Dairy manure	new construction: 1 x 7100 m <sup>3</sup> steel tank	Biogas upgrading system: 550 Nm <sup>3</sup> /h biogas; Biogasoutput: 2,9 MW	Industrial biogas plant 1 digester, 1 secondary digester, 1 biomethane compressor station with heat recovery, 1 gas treatment plant and gas feed-in. Separation of the fermentation residue using screw separators	Basic evaluation, preliminary, draft, approval and implementation planning, tendering, involvement in awarding contracts, site management, commissioning, training
<b>Biomethane plant MICHIGAN 2</b>	USA	2024-2025	Dairy manure	new construction 2 x 9.200 m <sup>3</sup> steel tanks	Biogas upgrading system: 1.400 Nm <sup>3</sup> /h biogas; Biogasoutput: 7,2 MW	Industrial biogas plant 2 digesters, 1 secondary digester, 1 biomethane compressor station with heat recovery, 1 gas treatment plant and gas feed-in. Separation of the fermentation residue using screw separators	Basic evaluation, preliminary, draft, approval and implementation planning, tendering, involvement in awarding contracts, site management, commissioning, training
<b>Biomethane plant MICHIGAN 1</b>	USA	2024-2025	Dairy manure	new construction: 1 x 9.300 m <sup>3</sup> steel tank	Biogas upgrading system : 700 Nm <sup>3</sup> /h biogas; Biogasoutput: 3,7 MW	Industrial biogas plant 1 digester, 1 secondary fermentation tank, 1 raw gas compressor station, 1 gas treatment plant (DWW) with heat recovery and gas feed-in. Separation of the fermentation residue using a screw separator	Basic evaluation, preliminary, design and implementation planning, tendering, involvement in awarding contracts, site management, commissioning, training

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<b>Biomethane plant NEW YORK STATE 3</b>	USA	2024-2025	Dairy manure	new construction: 1 x 6.700 m <sup>3</sup> steel tank	Biogas upgrading system : 500 Nm <sup>3</sup> /h Biogasoutput: 2,7 MW	Industrial biogas plant 1 digester, 1 secondary fermentation tank, 1 raw gas compressor station, 1 gas treatment plant (DWW) with heat recovery and gas feed-in. Separation of the fermentation residue using a screw separator	Basic evaluation, preliminary, draft, approval and implementation planning, tendering, involvement in awarding contracts, site management, commissioning, training
<b>Biomethane plant NEW YORK STATE 4</b>	USA	2024- 2025	Dairy manure	new construction: 6.700 m <sup>3</sup> steel tank	Biogas upgrading system: 416 Nm <sup>3</sup> /h Biogasoutput: 2,6 MW	Industrial biogas plant with 1 digester, 1 secondary digester, 1 biomethane compressor station with heat recovery, 1 gas treatment plant and gas feed-in. Separation of the fermentation residue using screw separators	Basic evaluation, preliminary, draft, approval and implementation planning, tendering, involvement in awarding contracts, site management, commissioning, training
<b>Biomethane plant VELEN</b>	Germany	2023- 2024	pig-, cattle-, horse-, chicken- and turkey manure and dry chicken manure	new construction: 2 x 9.500m <sup>3</sup> steel tanks	Biogas upgrading system 1860 Nm <sup>3</sup> /h bBiogas, 945 Nm <sup>3</sup> /h biomethane, biomethane is planned for up to 2.000 Nm <sup>3</sup> /h	2 secondary digesters, 2 external gas storage tanks, 2 fermentation residue storage tanks, external desulphurisation, separation of fermentation residue	Implementation planning, preparation and participation in the awarding of contracts, construction supervision (site management), commissioning, as well as: Risk assessment, explosion protection document, operator training

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<b>Biomethane plant HEILIGENGRABE</b>	Germany	2023- 2024	corn silage, chicken manure, dry chicken manure, separated fermentation residue, cattle manure, process water	2 steel tanks	Biogas upgrading system: 905 Nm <sup>3</sup> /h biogas, feed into the gas grid	2 connected fermentation lines: change in substrate quantities and composition, new solids input; construction of a separation unit & biogas upgrading plant	Basic evaluation; preliminary planning; design planning; approval planning, implementation planning
<b>Biomethane plant BIOERDGAS ISENHAGEN</b>	Germany	2023- 2024	energy plants and chicken- and cattle manure	Existing digester	Biogas upgrading system: 1.400 Nm <sup>3</sup> /h biogas	Conversion of 2 existing biogas plants that are fed with energy crops, chicken and cattle manure	Basic evaluation, approval planning, implementation planning, CO <sub>2</sub> liquefaction, dry ice production, heat recovery
<b>Biomethan plant NEW YORK STATE 1</b>	USA	2023 - 2024	Dairy manure	Existing digester	Biogas upgrading system 450 m <sup>3</sup> /h	Extention of existing agricultural biogas plant, virtual gas pipeline (by truck), digestate heat recovery	Basic evaluation, pre-, draft- and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up, training for operator training
<b>Biomethan plant NEW YORK STATE 2</b>	USA	2023 - 2024	Dairy manure	Existing digester	Biogas upgrading system 600 m <sup>3</sup> /h	Extention of existing agricultural biogas plant, digestate heat recovery	Basic evaluation, pre-, draft- and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up, training for operator training

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<b>Biogas Plant XANTHI</b>	Greece	2017/18	Corn silage, cattle manure	Concrete tank 2 x 2,400 m <sup>3</sup>	Gas engine 500 kWel	Agricultural biogas plant: 2 flat digester and secondary digester with gas holder roof, reception pit and solid input device, mesophilic operation, separation of digestate	Draft- and execution planning, tendering, site management/project controlling, start-up, training for operators
<b>Biogas Plant DERBY</b>	Great Britain	2017/18	Kitchen waste solid and liquid, viscera (Cat. 2 waste), paper & cards, straw	Concrete tank 2 x 5,300 m <sup>3</sup>	Biogas upgrading system	Industrial biogas plant for the digestion of hydrolysed waste. Thermal pressure hydrolysis process, buffer tank, cooling tank, mesophilic operation	Basic evaluation, pre-, draft- and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up, training for operators
<b>Biogas Plant RIO CUARTO II</b>	Argentina	2017/18	Corn silage, thin stillage/Vinasse	Glass coated steel tank 8,000 m <sup>3</sup>	Gas engine 2 x 1,200 kWel and boiler for heat production	Biogas plant digesting energy crops and organic waste (expansion): Reception tank for aggressive media (pH, temperature), digester, secondary digester with gas holder roof, solid input device, external desulphurization, heat usage in bioethanol plant	Basic evaluation, pre-, draft- and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up, training for operators
<b>Biogas Plant RIO CUARTO I (Expansion)</b>	Argentina	2017	Corn silage, cattle manure, thin stillage	Glass coated steel tank 4,600 m <sup>3</sup> + 5.500 m <sup>3</sup> (extension)	Gas engine 1,200 kWel + 1.200 kWel (extension)	Biogas plant digesting energy crops and organic waste: 2 digester, 1 secondary digester with gas holder, mesophilic operation, heat utilisation	Basic evaluation, pre-, draft- and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up, training for operators

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<b>Biogas Plant FUKUOKA</b>	Japan	2016/17	Kitchen waste, industrial waste	Glass coated steel tank 2 x 5,000 m <sup>3</sup>	Gas engine 2 x 1,056 kWel	Biogas plant digesting organic waste: 2 digester, 1 secondary digester with gas holder roof, mesophilic operation	Basic evaluation, pre-, draft- and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up, training for operators
<b>Biogas Plant JIAOZUO</b>	China	2016/17	Kitchen waste	Steel tank, welded 2 x 1,500 m <sup>3</sup>	Biogas upgrading system	Biogas plant digesting organic waste: 2 digester, 1 storage tank (by client), 1 hydrolysis tank (by client), oil separation with heat recovery system	Basic evaluation, pre-, draft- and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up, training for operators
<b>Biogas Plant WUHU</b>	China	2016/17	Kitchen waste	Steel tank, welded 2 x 3,400 m <sup>3</sup>	Biogas upgrading system	Biogas plant digesting organic waste: 2 digester, 1 storage tank (by client), 2 hydrolysis tanks (by client), oil separation with heat recovery system	Basic evaluation, pre-, draft- and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up, training for operators
<b>Biogas Plant MCDONNELL (Expansion)</b>	Ireland	2014/15	Kitchen waste, animal by-products (ABP), cattle slurry, poultry manure, corn silage	Concrete tank 3,200 m <sup>3</sup>	Gas engine 250 kWel (existing on site)	Expansion of a biogas plant digesting food waste by 1 digester, gas desulphurisation, pump room and equipment	Basic evaluation, pre-, draft and execution planning, additional consulting services
<b>Biogas Plant SZEPIETOWO</b>	Poland	2014/15	Rye silage, corn silage, silage grass, sugar beet pulp silage, waste pulp potatoes, fruit pomace	Glass coated steel tank 5,000 m <sup>3</sup>	Gas engine 1.2 MWel	Biogas plant digesting organic waste: 1 digester, 1 secondary digester with gas holder roof, 1 storage tank, external heating, thermophilic operation	Basic evaluation, pre-, draft- and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up, training for operators

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<b>Biogas Plant WARLE (Expansion)</b>	Germany	2014	Pig manure, corn silage, turkey dung	Concrete tank 2,500 m <sup>3</sup>	Gas engine 1 x 205 kWel 1 x 400 kWel (existing on site)	Improvement of an existing agricultural biogas plant and expansion by 1 storage tank	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, local construction supervision, start-up, training for operators
<b>Biogas Plant IM BRAHM II (Expansion)</b>	Germany	2014	Kitchen waste, pig manure	Concrete tank 2 x 1,200 m <sup>3</sup>	Gas engine 4 x 190 kWel	Expansion of a biogas plant by 1 storage tank and 1 co-generator	Pre-planning, approval and execution planning, consultancy services, supervision of construction, training for operators
<b>Biogas Plant GUT ALTENHOF (Expansion)</b>	Germany	2014	Corn silage, wheat silage, grass silage	Concrete tank 1,500 m <sup>3</sup>	Gas engine 365 kWel	Expansion of an existing agricultural biogas plant by co-generator, long distance heat pipes, new heat distribution system	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up, training for operators
<b>Biogas Plant DAISEN / PHAROS FARM</b>	Japan	2013/14 expansion in 2017	Pig manure, fats, sewage sludge, industrial kitchen waste	Glass coated steel tank 5,000 m <sup>3</sup>	Gas engine 2 x 370 kWel + 370 kWel (expansion)	Biogas plant digesting kitchen waste: 1 digester, 1 secondary digester with gas holder roof, expansion of an existing biogas plant, mesophilic operation	Basic evaluation, pre-, draft- and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up, training for operators
<b>Biogas Plant QINHUANGDAO</b>	China	2013/14	Kitchen waste	Black steel, welded 2 x 3,400 m <sup>3</sup>	Biogas upgrading system, biomethane used for vehicle fuel	Biogas plant digesting kitchen waste: pre-treatment, hydrocyclone, 1 hydrolysis tank, 2 digester, 1 storage tank, digestate treatment, mesophilic process, external heating and cooling	Basic evaluation, pre-, draft- and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up, training for operators

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<b>Biogas Plant SÖDER (Expansion)</b>	Germany	2013/14	Corn silage, pig manure	Concrete tank 2 x 1,800 m <sup>3</sup>	Gas engine 716 kWel	Expansion of an agricultural biogas plant by 2 digestate storage tanks	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up, training for operators
<b>Biogas Plant DEQINGYAN</b>	China	2012/13	Pretreated chicken manure, biowaste, corn straw, recirculating digestate	Stainless steel 2 x 2,600 m <sup>3</sup>	Biogas upgrading system, biomethane used in households	Biogas plant digesting organic waste: 2 digester, 2 secondary digester, external gas storage, biogas upgrading and utilisation in households	Basic evaluation, pre-planning, draft planning, execution planning, tendering
<b>Biogas Plant RIO CUARTO</b>	Argentina	2013/14	Corn silage, cattle manure	Glass coated steel tank 4,600 m <sup>3</sup>	Gas engine 1,200 kWel	Agricultural biogas plant: 1 digester, 1 secondary digester with gas holder, thermophilic operation, heat utilisation, first biogas plant using energy crops in Argentina	Basic evaluation, pre-, draft- and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up, training for operators
<b>Biogas Plant RIHA</b>	Germany	2012	Cattle manure, corn silage	Glass coated steel tank 1,500 m <sup>3</sup>	Gas engine 2 x 252 kWel	Agricultural biogas plant: 1 digester, 1 secondary digester with gas holder, 1 storage tank, mesophilic operation, heat utilisation	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up
<b>Biogas Plant BASILIANO</b>	Italy	2012	Triticale silage and corn silage	Concrete tank 2,500 m <sup>3</sup>	Gas engine 625 kWel	Agricultural biogas plant: 1 digester, 1 secondary digester with gas holder, 1 storage tank, thermophilic operation, heat utilisation	Execution planning, tendering, participating in contract awarding process, site management/project controlling

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<b>Biogas Plant DIETZ</b>	Germany	2012	Cattle manure, cattle dung, grass-, triticale- and corn silage	Concrete tank 2,600 m <sup>3</sup>	Gas engine 191 kWel	Agricultural biogas plant: 1 digester, 2 secondary digester with gas holder, 1 storage tank, mesophilic operation, heat utilisation	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up
<b>Biogas Plant TORRES DE SEGRE</b>	Spain	2012	Sludge from slaughterhouse, water treatment muds, glycerin or vegetable oil, corn silage	Concrete tank 2 x 4,400 m <sup>3</sup>	Gas engine 2 x 1.2 MWel	Biogas plant digesting organic waste: 2 digester, 1 secondary digester, reception hall, separator, mesophilic operation, heat utilisation	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up
<b>Biogas Plant VIERVERLATEN</b>	The Netherlands	2012	Sugar beets and potato waste	Glass coated steel tanks 4 x 4,600 m <sup>3</sup>	Biogas upgrading system, injektion into the grid	Industrial biogas plant: 4 digester, 1 secondary digester with gas holder, digestate treatment, gas cooling system, mesophilic operation, biogas upgrading system and injection into grid	Basic evaluation, pre-, draft- and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up, training for operators
<b>Biogas Plant RUDA</b>	Italy	2012	Triticale- und corn silage	Concrete tank 5,000 m <sup>3</sup>	Gas engine 999 kWel	Agricultural biogas plant: 1 digester, 1 secondary digester with gas holder, 1 storage tank, thermophilic operation, heat utilisation	Execution planning, tendering, participating in contract awarding process, site management/project controlling
<b>Biogas Plant HOTTELN (Expansion)</b>	Germany	2012	Corn silage	Concrete tanks 1 x 2,200 m <sup>3</sup> 1 x 3,000 m <sup>3</sup>	Gas engine 536 kWel Gas engine 2 x 250 kWel	Expansion of an agricultural biogas plant by 1 digester, 2 gas engines, conversion of a secondary digester in a digester, bigger size solid input device	Basic evaluation, pre-, draft- and approval planning, additional consulting services



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<b>Biogas Plant ANKLAM</b>	Germany	2012	Sugar beet, vinasse	Glass coated steel tank 4 x 4,600 m <sup>3</sup>	Biogas upgrading system, injektion into grid	Industrial biogas plant: 4 digester, 1 secondary digester, gas holder above secondary digester, digestate treatment, mesophilic operation, biogas upgrading and injection into grid	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up, training for operators
<b>Biogas Plant MEZDRA</b>	Bulgaria	2012	Cattle manure, corn silage	Glass coated steel tank 2 x 4,600 m <sup>3</sup>	Gas engine 3 x 800 kWel	Agricultural biogas plant: 2 digester and 1 secondary digester with gas holder, thermophile operation	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process
<b>Biogas Plant EICKHOFF (Expansion)</b>	Germany	2011	Corn silage	Concrete tank 2,200 m <sup>3</sup>	Gas engine 526 kWel 350 kWel	Expansion of an agricultural biogas plant by digester storage, satellite CHP	Basic evaluation, pre-, draft- and approval planning, additional consulting services
<b>Biogas Plant DECKER (Expansion)</b>	Germany	2011	Corn silage, whole-crop-silage	Concrete tank 1,400 m <sup>3</sup>	Gas engine 360 kWel 800 kWel	Expansion of an agricultural biogas plant: digester, storage tank, satellite CHP	Basic evaluation, pre-, draft- and approval planning, additional consulting services
<b>Biogas Plant WALLRAPP (Expansion)</b>	Germany	2011	Pig manure, expired foodstuff (food, bread )	Lipp-Digester 1,100 m <sup>3</sup>	Dual fuel co-generator 100 kWel Gas engine 185 kWel	Expansion of a biogas plant for digesting food waste by 1 secondary digester	Basic evaluation, pre-, draft-, approval and execution planning, additional consulting services
<b>Biogas Plant TORRE SANTAMARIA</b>	Spain	2011	Cattle manure, corn silage	Concrete tank 2,100 m <sup>3</sup>	Gas engine 190 kWel	Agricultural biogas plant, gas holder above first digester, mesophilic operation	Basic evaluation, pre-, draft- and execution planning, tendering, participating in contract awarding process, start-up

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<b>Biogas Plant OTTERBEIN</b>	Germany	2011	Pig manure, cattle dung, gras silage, corn silage, corn crop, whole crop silage, fodder mixture	Concrete tank 1,200 m <sup>3</sup>	Dual fuel co-generator 265 kWel (inkluding 30 kWel additional power of gas turbine)	Agricultural biogas plant: digester, secondary digester, digestate storage, dual fuel engine with additional power of gas turbine, heat utilisation	Approval planning, technical advice for execution planning, final construction plans
<b>Biogas Plant DINTELOORD</b>	The Netherlands	2011	Sugar beet, vegetable waste (potato, chicoree)	Glass coated steel tanks 4 x 4,600 m <sup>3</sup>	Biogas upgrading system, injection into grid	Industrial biogas plant: 4 digester, 1 secondary digester, digestate treatment, gas cooling system, mesophilic operation, biogas upgrading and injection into grid	Basic evaluation, consultancy services for approval planning, pre-, draft- and execution planning, tendering, participating in contract awarding process, site management/project controlling, local construction supervision, start-up, training for operators
<b>Biogas Plant BELGOROD</b>	Russia	2011	Corn silage, sewage sludge, slaughterhouse sludge, pig manure	Glass coated steel tanks 2 x 3,000 m <sup>3</sup>	Gas engine 2 x 1.2 MWel	Industrial biogas plant: 2 digester, 2 secondary digester with gas holder, mesophilic operation, heat utilisation	Basic evaluation, pre-, draft- and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up, training for operators
<b>Biogas Plant NEIBETAL</b>	Germany	2010/11	Pig manure, pig dung, cattle dung, lucerne silage, corn silage, sugar beet	Glass coated steel tank 3,000 m <sup>3</sup>	Gas engine 716 kWel	Agricultural biogas plant: 1 digester, 1 secondary digester with gas holder, 1 storage tank, mesophilic operation, heat utilisation	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up
<b>Biogas Plant IM BRAHM (Expansion)</b>	Germany	2010	Pig manure, horse dung, kitchen waste	Concrete tank 1,200 m <sup>3</sup>	Gas engine 3 x 190 kWel	Expansion of a biogas plant by co-generator, digester and storage tank	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling

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<b>Biogas Plant ADENSEN (Expansion)</b>	Germany	2010	Corn silage	Concrete tank 2,400 m <sup>3</sup>	Gas engine 400 kWel	Expansion of a biogas plant: co-generator, digester and secondary digester	Basic evaluation, approval planning, additional consulting services
<b>Biogas Plant FORCATE</b>	Italy	2010	Grass-, corn silage	Concrete tank 1,700 m <sup>3</sup>	Gas engine 365 kWel	Agricultural biogas plant: 1 digester, 1 secondary digester, separation, thermophilic operation	Basic evaluation, pre-, draft- and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up
<b>Biogas Plant OS DE BALAGUER</b>	Spain	2009	Pig manure, sludge of slaughterhouses, fats	Concrete tank 2 x 1,200 m <sup>3</sup>	Gas engine 370 kWel	Biogas plant digesting organic waste: 2 digester, 1 secondary digester, mesophilic operation	Basic evaluation, pre-, draft- and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up
<b>Biogas Plant MCDONNELL</b>	Ireland	2009	Cattle manure, poultry dung, animal by-products (ABP)	Steel tank 1,300 m <sup>3</sup>	Gas engine 250 kWel	Biogas plant digesting organic waste: 1 digester, 1 secondary digester, mesophilic operation, separation, pasteurisation	Basic evaluation, pre-, draft- and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up, training for operators
<b>Biogas Plant SEMD</b>	Germany	2009/10	Corn silage	Prestressed concrete, prefabricated element tank 2,500 m <sup>3</sup>	Biogas upgrading system, injektion into grid	Agricultural biogas plant: gas holder above digester, secondary digester and digestate storage tank, mesophilic operation, biogas upgrading and injection into grid	Basic evaluation, pre-, draft- and execution planning, tendering, participating in contract awarding process, site management/project controlling
<b>Biogas Plant CASSA DE LA SELVA</b>	Spain	2008	Pig manure, sludge of slaughterhouses, fats	Concrete tank 1,700 m <sup>3</sup>	Gas engine 370 kWel	Biogas plant digesting organic waste: 1 digester, 1 secondary digester with gas holder, mesophilic operation	Basic evaluation, pre-, draft- and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up

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<b>Biogas Plant TORREGROSSA</b>	Spain	2008	Pig manure, sludge of slaughterhouses, fats	Concrete tank 1,400 m <sup>3</sup>	Gas engine 191 kWel	Biogas plant digesting organic waste: 1 digester, 1 secondary digester, mesophilic operation	Basic evaluation, pre-, draft- and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up
<b>Biogas Plant FALKENSTEIN</b>	Germany	2008	Corn silage, wheat silage, sweet sorghum	Glass coated steel tank 2 x 3,100 m <sup>3</sup>	Gas engine 2 x 716 kWel	Agricultural biogas plant: 2 digester, 2 secondary digester, thermophilic operation, heat utilisation	Basic evaluation, pre-, draft- and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up
<b>Biogas Plant BRETAGNE</b>	France	2008	Pig manure, sewage sludge, fats, food residuals	Concrete tanks 2 x 1,100 m <sup>3</sup>	Gas engine 400 kWel	Industrial biogas plant: 2 digester, 1 secondary digester with gas holder, digestate treatment with separation, mesophilic operation, heat utilisation	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up
<b>Biogas Plant LORSCH</b>	Germany	2008	Corn silage, cattle manure	Concrete tank 1,600 m <sup>3</sup>	Gas engine 370 kWel	Agricultural biogas plant: gas 1 digester, 1 secondary digester, 1 digestate storage tank, thermophilic operation, heat utilisation	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up
<b>Biogas Plant PRINCE EDWARD ISLAND</b>	Canada	2007	Potato raw material, oil, potato sludge	Glass coated steel tanks 4 x 5,500 m <sup>3</sup>	Heat utilisation	Industrial biogas plant: 1 Hydrolysis tank, 4 digester, 2 secondary digester, mesophilic operation, separation, heat utilisation	Basic evaluation, pre-, draft- and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up
<b>Biogas Plant PORTA (Expansion)</b>	Spain	2007	Pig manure, food waste	Concrete tank 1,400 m <sup>3</sup>	Gas engine 2 x 191 kWel	Expansion of a biogas plant digesting food waste by co-generator and gas cooling	Basic evaluation, pre-, draft- and execution planning, additional consulting services

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<b>Biogas Plant GUT ALTENHOF</b>	Germany	2007	Corn silage, wheat silage, grass silage	Concrete tank 1,500 m <sup>3</sup>	Gas engine 365 kWel	Agricultural biogas plant: 1 digester, 1 secondary digester, 1 digestate storage tank, thermophilic operation, heat utilisation	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up
<b>Biogas Plant MONTARGULL</b>	Spain	2007	Pig manure, fats, sludge from slaughterhouse	Concrete tank 2,100 m <sup>3</sup>	Gas engine 364 kWel	Biogas plant digesting organic waste: 1 digester, 1 secondary digester, separation, mesophilic operation, heat utilisation	Basic evaluation, pre-, draft- and execution planning, tendering, additional consulting services, site management/project controlling, start-up
<b>Biogas Plant GÖTTINGEN</b>	Germany	2007	Percolate of compost	Concrete tank 1,900 m <sup>3</sup>	Gas engine 254 kWel	Integration of a biogas plant in an existing compost plant incl. heat utilisation	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up
<b>Biogas Plant NOYON</b>	France	2007	Sewage sludge, fats, food residuals, process water	Glass coated steel tank 3,500 m <sup>3</sup>	Gas engine 716 kWel	Industrial biogas plant: 1 digester, 1 secondary digester with gas holder, digestate treatment with separation and drying of solid phase, mesophilic operation, heat utilisation	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up
<b>Biogas Plant WIESENAU II</b>	Germany	2007	Cattle manure, dung, wheat, corn silage	Glass coated steel tank 4,300 m <sup>3</sup>	Gas engine 2 x 526 kWel	Agricultural biogas plant: 1 digester, 1 secondary digester, 1 digestate storage tank, mesophilic operation	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up

Biogas Plant	Location	Constr. period	Input	Digester	Biogas utilisation	Features	Responsibility
<b>Biogas Plant RIEDLINGEN</b>	Germany	2007	Cattle manure, corn silage, grass silage, crop silage	Glass coated steel tank 4,300 m <sup>3</sup>	Gas engine 2 x 526 kWel	Agricultural biogas plant: 1 digester, 1 secondary digester, heat recovery, thermophilic operation	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up
<b>Biogas Plant SECHZEHN-EICHEN</b>	Germany	2007	Corn silage, grass silage, wheat silage	Concrete tank 2,200 m <sup>3</sup>	Gas engine 536 kWel	Agricultural biogas plant: 1 digester and gas holder above secondary digester, thermophilic operation	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up
<b>Biogas Plant WEIß (Expansion)</b>	Germany	2006/07	Corn silage, grass silage, pig manure, cattle dung	Concrete tank 1,100 m <sup>3</sup>	Dual fuel co-generator, 250 kW	Expansion of the biogas plant	Basic evaluation, pre-, draft- and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up
<b>Biogas Plant INLAND EMPIRE</b>	USA	2006	Manure, organic waste	Epoxy/Glass coated steel tanks 2 x 4,500 m <sup>3</sup>	Feeding into gas distribution system	Industrial biogas plant: 2 digester, storage tank, feeding into gas distribution system (20,000 m <sup>3</sup> /d)	Basic evaluation, pre-, draft- and execution planning, start-up, consultancy service on site
<b>Biogas Plant PORTA</b>	Spain	2006	Pig manure, food waste	Concrete tank 1,400 m <sup>3</sup>	Gas engine 191 kWel	First agricultural biogas plant in Spain	Basic evaluation, pre-, draft- and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up
<b>Biogas Plant AMELN</b>	Germany	2006	Corn silage, wheat silage	Glass coated steel tank 2,600 m <sup>3</sup>	Gas engine 650 kWel	Agricultural biogas plant: 1 digester, 1 secondary digester, heat utilisation, thermophilic operation	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up

Biogas Plant	Location	Constr. period	Input	Digester	Biogas utilisation	Features	Responsibility
<b>Biogas Plant SCHENK</b>	Germany	2006	Corn silage, grass silage, wheat silage	Concrete tank 800 m <sup>3</sup>	Gas engine 190 kWel	Agricultural biogas plant: 1 digester, 1 secondary digester, 1 digestate storage tank, heat utilisation, thermophilic operation	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up
<b>Biogas Plant THANNER</b>	Germany	2006	Corn silage, grass silage, wheat silage	Concrete tank 1,400 m <sup>3</sup>	Gas engine 350 kWel	Agricultural biogas plant: 1 digester, 1 secondary digester, 1 digestate storage tank, thermophilic operation	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up
<b>Biogas Plant BAILER</b>	Germany	2006	Corn silage, wheat silage	Concrete tank 800 m <sup>3</sup>	Gas engine 191 kWel	Agricultural biogas plant: 1 digester, 1 secondary digester, heat utilisation, thermophilic operation	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up
<b>Biogas Plant HOTTELN</b>	Germany	2006	Corn silage	Concrete tank 2,200 m <sup>3</sup>	Gas engine 536 kWel	Agricultural biogas plant: 1 digester, 1 secondary digester, heat utilisation, thermophilic operation	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up
<b>Biogas Plant BUCHLOE</b>	Germany	2006	Corn silage, grass silage, wheat silage	Concrete tank 4,600 m <sup>3</sup>	Gas engine 2 x 526 kWel	Agricultural biogas plant: 1 digester, 1 secondary digester, 1 digestate storage tank, heat utilisation, thermophilic operation	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up



Biogas Plant	Location	Constr. period	Input	Digester	Biogas utilisation	Features	Responsibility
<b>Biogas Plant EICKHOFF</b>	Germany	2006	Corn silage	Concrete tank 2,200 m <sup>3</sup>	Gas engine 526 kWel	Agricultural biogas plant: 1 digester and gas holder above secondary digester, heat utilisation, thermophilic operation	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up
<b>Biogas Plant BAESWEILER</b>	Germany	2006	Corn silage, wheat silage	Concrete tank 2,200 m <sup>3</sup>	Gas engine 536 kWel	Agricultural biogas plant: 1 digester and gas holder above secondary digester, 1 digestate storage tank, heat utilisation, thermophilic operation	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up
<b>Biogas Plant ADENSEN</b>	Germany	2006	Corn silage	Concrete tank 1,400 m <sup>3</sup>	Gas engine 370 kWel	Agricultural biogas plant: 1 digester, 1 secondary digester, mesophilic operation	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up
<b>Biogas Plant HORGAU</b>	Germany	2006	Corn silage, grass silage, wheat silage	Concrete tank 2,700 m <sup>3</sup>	Gas engine 536 kWel	Agricultural biogas plant: 1 digester, 1 secondary digester, 1 digestate storage tank, heat utilisation, thermophilic operation	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up
<b>Biogas Plant STÖLZLE</b>	Germany	2006	Corn silage, grass silage, wheat silage	Concrete tank 1,100 m <sup>3</sup>	Dual fuel co- generator 250 kWel	Agricultural biogas plant: 1 digester, 1 secondary digester, heat utilisation, thermophilic operation	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up



Biogas Plant	Location	Constr. period	Input	Digester	Biogas utilisation	Features	Responsibility
<b>Biogas Plant WANGEN</b>	Germany	2006	Cattle manure, corn silage, grass silage	Concrete tank 2,600 m <sup>3</sup>	Gas engine 370 kWel dual fuel co-generator 250 kWel	Agricultural biogas plant: 1 digester, 1 secondary digester, 1 digestate storage tank, heat utilisation, thermophilic operation	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up
<b>Biogas Plant PFEIFFER</b>	Germany	2005	Corn silage, grass silage, crop silage	Concrete tank 1,400 m <sup>3</sup>	Dual fuel co-generator 2 x 180 kWel	Agricultural biogas plant: 1 digester, 1 secondary digester, heat utilisation, thermophilic operation	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up
<b>Biogas Plant HÖRNLE</b>	Germany	2005	Corn silage, grass silage, wheat silage	Concrete tank 700 m <sup>3</sup>	Gas engine 180 kWel	Agricultural biogas plant: 1 digester, 1 secondary digester, heat utilisation, thermophilic operation	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up
<b>Biogas Plant DECKER</b>	Germany	2005	Corn silage, wheat silage	Concrete tank 1,400 m <sup>3</sup>	Gas engine 360 kWel	Agricultural biogas plant: 1 digester, 1 secondary digester, heat utilisation, thermophilic operation	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up
<b>Biogas Plant BUCHMANN</b>	Germany	2005	Corn silage, grass silage, wheat silage, pig manure	Concrete tank 600 m <sup>3</sup>	Gas engine 110 kWel	Agricultural biogas plant: 1 digester, 1 secondary digester, heat utilisation, mesophilic operation	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up

Biogas Plant	Location	Constr. period	Input	Digester	Biogas utilisation	Features	Responsibility
<b>Biogas Plant MILLER</b>	Germany	2005	Clovergrass silage, corn silage	Concrete tank 1,500 m <sup>3</sup>	Gas engine 360 kWel	Agricultural biogas plant: 1 digester, 1 secondary digester, heat utilisation, thermophilic operation	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up
<b>Biogas Plant NOOTBAAR</b>	Germany	2005	Corn silage	Concrete tank 1,000 m <sup>3</sup>	Dual fuel co-generator 2 x 110 kWel	Agricultural biogas plant: 1 digester, 1 secondary digester, heat utilisation, thermophilic operation	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up
<b>Biogas Plant WEBER</b>	Germany	2005	Corn silage, grass silage, wheat silage	Concrete tank 800 m <sup>3</sup>	Gas engine 2 x 90 kWel	Agricultural biogas plant: 1 digester, 1 secondary digester, heat utilisation, thermophilic operation	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up
<b>Biogas Plant EICHENHOFER</b>	Germany	2004/05	Corn silage, grass silage	Concrete tank 500 m <sup>3</sup>	Gas engine 125 kWel	Agricultural biogas plant: 1 digester, 1 secondary digester, heat utilisation, thermophilic operation	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up
<b>Biogas Plant IM BRAHM</b>	Germany	2004/5	Pig manure, kitchen waste, horse manure	Concrete tank 1,200 m <sup>3</sup>	Dual fuel co-generator 2 x 190 kWel	Biogas plant digesting organic waste: 1 digester, 1 secondary digester, mesophilic operation, heat utilisation (pasteurisation kitchen waste, heating of buildings)	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up

Biogas Plant	Location	Constr. period	Input	Digester	Biogas utilisation	Features	Responsibility
<b>Biogas Plant WIESENAU</b>	Germany	2004/05	Cattle manure, cattle dung, corn silage, grass silage	Concrete tank 2,600 m <sup>3</sup>	Gas engine 526 kWel	Agricultural biogas plant: 1 digester and gas holder above secondary digester, heat utilisation, mesophilic operation	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up
<b>Biogas Plant BÖCKERMANN II</b>	Germany	2004/05	Pig manure, corn silage	Glass coated steel tank 4,100 m <sup>3</sup>	Gas engine 2 x 536 kWel	Agricultural biogas plant: 1 digester, 1 secondary digester, heat utilisation, thermophilic operation	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up
<b>Biogas Plant FAKLER</b>	Germany	2004/05	Corn silage, grass silage, wheat silage	Concrete tank 1,100 m <sup>3</sup>	Gas engine 250 kWel	Agricultural biogas plant: 1 digester, 1 secondary digester, heat utilisation, thermophilic operation	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up
<b>Biogas Plant FREY</b>	Germany	2004/05	Corn silage, grass silage, wheat silage	Concrete tank 1,500 m <sup>3</sup>	Gas engine 330 kWel	Agricultural biogas plant: 1 digester, 1 secondary digester, heat utilisation, thermophilic operation	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up
<b>Biogas Plant DOBLER</b>	Germany	2004/05	Corn silage, grass silage	Concrete tank 800 m <sup>3</sup>	Gas engine 2 x 90 kWel	Agricultural biogas plant: 1 digester, 1 secondary digester, heat utilisation, thermophilic operation	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up

Biogas Plant	Location	Constr. period	Input	Digester	Biogas utilisation	Features	Responsibility
<b>Biogas Plant KORNMAYER</b>	Germany	2004/05	Cattle manure, cattle dung, corn silage and grass cut	Concrete tank 600 m <sup>3</sup>	Dual fuel co-generator 40 kWel	Agricultural biogas plant: 1 digester, 1 secondary digester, heat utilisation, mesophilic operation	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up
<b>Biogas Plant MENZ</b>	Germany	2004/05	Pig manure, cattle manure, corn and grass silage	Concrete tank 1,000 m <sup>3</sup>	Gas engine 250 kWel	Agricultural biogas plant: 1 digester, 1 secondary digester, heat utilisation, thermophilic operation	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up
<b>Biogas Plant LEUTER</b>	Germany	2004/05	Pig manure, pig dung, corn and crop silage	Concrete tank 400 m <sup>3</sup>	Dual fuel co-generator 100 kWel	Agricultural biogas plant: 1 digester, 1 secondary digester, heat utilisation, thermophilic operation	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up
<b>Biogas Plant BIOENERGIE HEHLEN</b>	Germany	2004/05	Corn silage	Concrete tank, 2,000 m <sup>3</sup>	Gas engine 536 kWel	Agricultural biogas plant: 1 digester, 1 secondary digester, heat utilisation, thermophilic operation	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up
<b>Biogas Plant NATURGAS HEHLEN</b>	Germany	2004/05	Corn silage	Concrete tank 2,000 m <sup>3</sup>	Gas engine 536 kWel	Agricultural biogas plant: 1 digester, 1 secondary digester, heat utilisation, thermophilic operation	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up

Biogas Plant	Location	Constr. period	Input	Digester	Biogas utilisation	Features	Responsibility
<b>Biogas Plant GRIMM + SCHÖNDIENST</b>	Germany	2004/05	Pig manure, energy crops, dung	Concrete tank 900 m <sup>3</sup>	Gas engine 2 x 100 kWel	Agricultural biogas plant: 1 digester, 1 secondary digester, heat utilisation, thermophilic operation	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up
<b>Biogas Plant HOLLANDHOF</b>	Germany	2004	Pig dung, turkey dung, energy crops	Concrete tank 400 m <sup>3</sup>	Gas engine, 60 kWel	Agricultural biogas plant: 1 digester, 1 secondary digester, heat utilisation, thermophilic operation	Basic evaluation, pre-, draft- and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up
<b>Biogas Plant BIOENERGIE-DORF JÜHNDE</b>	Germany	2004	Manure, energy crops	Concrete tank 2,800 m <sup>3</sup>	Gas engine, 500 kWel	Agricultural biogas plant: 1 digester, 1 secondary digester, supply of local heat network	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process
<b>Biogas Plant CUDWORTH PORK</b>	Saskatoon, Canada	2003	Manure, potatoes	Steel tank, 2,000 m <sup>3</sup>	Microgas turbine 4 x 30 kWel	Biogas plant digesting organic waste: 1 digester, 1 secondary digester	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up
<b>Biogas Plant GROSS MUEHLINGEN (Expansion)</b>	Germany	2003	Manure, organic waste	Steel tanks, 2 x 800 m <sup>3</sup>	Gas engine, 730 kWel	Expansion of an existing biogas plant by pasteurisation, storage tanks, hydrolysis tank, process control system for the whole plant	Basic evaluation, pre-, draft- and approval planning, additional consulting services
<b>Biogas Plant SCHORN-BUSCHER BIOGAS GmbH</b>	Germany	2003	Corn, organic industrial waste	Concrete tank with stainless steel roof, 1,500 m <sup>3</sup>	Gas engine, 520 kWel	Biogas plant digesting organic waste: 1 digester, 1 secondary digester, pasteurisation, thermophilic operation, process water recycling	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up, operation

Biogas Plant	Location	Constr. period	Input	Digester	Biogas utilisation	Features	Responsibility
<b>Biogas Plant VAN GENNIP</b>	Germany	2003	Pig manure, fats, corn silage, dung	Steel tank, 4,300 m <sup>3</sup>	Gas engines 167 kWel 2 x 344 kWel	Agricultural biogas plant: 1 digester, 1 secondary digester, heat utilisation	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up
<b>Biogas Plant MILCHHOF WEINHEIM</b>	Germany	2002	Manure, corn	Stainless steel tank, 800 m <sup>3</sup>	Dual fuel co-generator, 110 kWel	Agricultural biogas plant: 1 digester, 1 secondary digester	Basic evaluation, pre-, draft-, approval and execution planning
<b>Biogas Plant JOHANESBURG (Expansion)</b>	Germany	2002	Pig and cattle manure, fats	Steel tank, 1,500 m <sup>3</sup> (Expansion)	Gas engine, 630 kWel (Expansion)	Expansion of an existing 10 years old biogas plant by a new pasteurisation, digester, CHP and process control system for the whole plant	Basic evaluation, pre-, draft- and approval planning completely; execution planning, tendering, participating in contract awarding process for gas system, piping and electrical/process control system, site management/project controlling, start-up (for Hese Umwelt GmbH)
<b>Biogas Plant WERLTE</b>	Germany	2002	Pig and cattle manure, fats	Steel tanks, 2 x 3,200 m <sup>3</sup>	Gas engines, 2 x 1,3 MWel	Biogas plant for digesting organic waste: reception hall, pasteurisation, 2 digester, 2 secondary digester, 50.000 m <sup>3</sup> storage capacity	Basic evaluation, pre-, draft- and approval planning completely; execution planning, tendering, participating in contract awarding process for gas system, piping and electrical/process control system, site management/project controlling, start-up (for Hese Umwelt GmbH)
<b>Biogas Plant KOERBER-HARRIEHAUSEN</b>	Germany	2002	Gras, energy crops in general	Concrete tank, 600 m <sup>3</sup>	Dual fuel co-generator, 110 kWel	Agricultural biogas plant: 1 digester, 1 secondary digester, heat utilisation	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up

Biogas Plant	Location	Constr. period	Input	Digester	Biogas utilisation	Features	Responsibility
<b>Biogas Plant TODENDORF</b>	Germany	2002	Manure, grass silage	Steel tank, 2,400 m <sup>3</sup>	Dual fuel co-generator, 2 x 180 kWel	Agricultural biogas plant: 1 digester, 1 secondary digester, heat utilisation	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up
<b>Biogas Plant SCHMITZ</b>	Germany	2002	Manure, agricultural organic waste	Concrete tank, 600 m <sup>3</sup>	Gas engine, 100 kWel + 70 kWel	Biogas plant for digesting organic waste: 1 digester, 1 secondary digester, pasteurisation	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up
<b>Biogas Plant HEILIGENKREUZ</b>	Heiligenkreuz am Waasen, Austria	2002	Manure, fats, corn, glycerine, kitchen waste, grass, concentrate of fruits, waste of bakeries	Concrete tank, 1,100 m <sup>3</sup>	Gas engines, 511 kWel	Biogas plant for digesting organic waste: 1 hydrolysis tank, 1 digester, 1 secondary digester, heat utilisation in the village	Basic evaluation, pre-, draft-, approval and execution planning of main components, measurement and process technology, start-up
<b>Biogas Plant HAUS RISWICK</b>	Germany	2002	Manure, agricultural organic waste	Concrete tank 600 m <sup>3</sup>	Dual fuel co-generator, 65 kWel	Agricultural biogas plant: 1 digester with gas holder, external heat exchanger	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up
<b>Biogas Plant EICHHOF</b>	Germany	2001/2002	Manure, other organic waste	Concrete tank, 600 m <sup>3</sup>	Dual fuel co-generator, 22 kWel, gas engine, 15 kWel	Improvement of an 18 year old biogas plant, gas holder above manure storage tank, demonstration biogas plant for education of farmers	Basic evaluation, pre-, draft- and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up

Biogas Plant	Location	Constr. period	Input	Digester	Biogas utilisation	Features	Responsibility
<b>Biogas Plant UELZEN GMBH</b>	Germany	2001/ 2002	Manure, corn, onions, potatoes, agricultural residues	Concrete tank, 1,300 m <sup>3</sup>	Dual fuel co-generator, 2 x 100 kWel	Agricultural biogas plant: 1 digester, 1 secondary digester, 1 digestate storage tank	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up
<b>Biogas Plant BOECKERMANN I</b>	Germany	2001/ 2002	Manure, corn silage, grass silage, dung	Glass coated steel tank, 2,500 m <sup>3</sup>	Dual fuel co-generator, 2 x 160 kWel	Agricultural biogas plant: 1 digester, 1 secondary digester, heat utilisation in the stables	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up, operation
<b>Biogas Plant EGGERT</b>	Germany	2001	Manure, fats, corn	Stainless steel tank, 800 m <sup>3</sup>	Dual fuel co-generator, 100 kWel	Agricultural biogas plant: 1 digester, 1 secondary digester	Basic evaluation, pre-, draft-, approval and execution planning
<b>Biogas Plant MADER</b>	Germany	2001	Manure, corn, grass, bakery residues	Stainless steel tank, 800 m <sup>3</sup>	Dual fuel co-generator, 100 kWel	Agricultural biogas plant: 1 digester, 1 secondary digester	Basic evaluation, pre-, draft-, approval and execution planning
<b>Biogas Plant THODE</b>	Germany	2001	Manure, corn silage	Stainless steel tank, 600 m <sup>3</sup>	Dual fuel co-generator, 65 kWel	Agricultural biogas plant: 1 digester, 1 secondary digester	Basic evaluation, pre-, draft-, approval and execution planning
<b>Biogas Plant ECKERTZ</b>	Germany	2001	Manure, energy crops	Stainless steel tank, 600 m <sup>3</sup>	Dual fuel co-generator, 100 kWel	Agricultural biogas plant: 1 digester, 1 secondary digester	Basic evaluation, pre-, draft-, approval and execution planning
<b>Biogas Plant HOFFMANN</b>	Germany	2001	Cattle manure, dung	Stainless steel tank, 600 m <sup>3</sup>	Dual fuel co-generator, 100 kWel	Agricultural biogas plant: 1 digester, 1 secondary digester	Basic evaluation, pre-, draft-, approval and execution planning
<b>Biogas Plant HINNEMANN</b>	Germany	2001	Manure, dung, corn, other organic waste	Stainless steel tank, 1,000 m <sup>3</sup>	Dual fuel co-generator, 160 kWel	Agricultural biogas plant: 1 digester, 1 secondary digester	Basic evaluation, pre-, draft-, approval and execution planning
<b>Biogas Plant FELDMANN</b>	Germany	2001	Manure, corn	Stainless steel tank, 1,100 m <sup>3</sup>	Dual fuel co-generator, 160 kWel	Agricultural biogas plant: 1 digester, 1 secondary digester	Basic evaluation, pre-, draft-, approval and execution planning



Biogas Plant	Location	Constr. period	Input	Digester	Biogas utilisation	Features	Responsibility
<b>Biogas Plant FABEL</b>	Germany	2001	Manure, corn, potato starch residues, agricultural residues	Concrete tank, 1,000 m <sup>3</sup>	Dual fuel co-generator, 2 x 110 kWel	Agricultural biogas plant: 1 digester, 1 secondary digester	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up, operation
<b>Biogas Plant PRATO allo STELVIO</b>	Italy	2001	Manure, straw, other organic waste	Concrete tanks, 2 x 750 m <sup>3</sup>	Integration in central energy system for electricity and heat production	Biogas plant digesting organic waste: 2 digester, biogas plant of 53 farmers	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, site management/project controlling, start-up, operation
<b>Biogas Plant DICKHOVEN</b>	Germany	2001	Cattle manure, other organic waste	Concrete tank, 900 m <sup>3</sup>	Dual fuel co-generators, 2 x 65 kWel	Biogas plant digesting organic waste: 1 digester, gas holder above 1,500 m <sup>3</sup> manure storage tank, pasteurisation	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, conception for measurement system
<b>Biogas Plant SCHLEUPEN</b>	Germany	2001	Manure, other organic waste	Concrete tank, 900 m <sup>3</sup>	Dual fuel co-generators, 2 x 75 kWel	Biogas plant digesting organic waste: 1 digester, gas holder above 3,000 m <sup>3</sup> manure storage tank	Basic evaluation, pre-, draft-, approval and execution planning, tendering, participating in contract awarding process, conception for measurement system
<b>Biogas Plant SCHULTE-SPECHTEL</b>	Germany	2001	Manure, other organic waste	Concrete tank, 500 m <sup>3</sup>	Dual fuel co-generator, 40 kWel	Biogas plant digesting organic waste: 1 digester, gas holder above 1,000 m <sup>3</sup> manure storage tank	Basic evaluation, pre-, draft- and execution planning, tendering, participating in contract awarding process, conception for measurement system
<b>Biogas Plant PETRUSHEIM</b>	Germany	2001	Manure, other organic waste	Concrete tank, 1,000 m <sup>3</sup>	Dual fuel co-generators, 2 x 100 kWel	Biogas plant digesting organic waste: 1 digester, gas holder above 1,000 m <sup>3</sup> manure storage tank, heat utilisation	Basic evaluation, pre-, draft- and execution planning, tendering, participating in contract awarding process, conception for measurement system, site management/project controlling

Biogas Plant	Location	Constr. period	Input	Digester	Biogas utilisation	Features	Responsibility
<b>Biogas Plant BEKKAI</b>	Japan	2000-2001	Manure, other organic substrates	Steel tank, 1,500 m <sup>3</sup>	Dual fuel engine, 3 x 67 kWel	Biogas plant digesting organic waste: 1 digester, gas holder above 450 m <sup>3</sup> manure storage tank and 1 extra gasholder	Basic evaluation, pre-, draft and execution planning for digester, gas holder/storage tank, gas system, piping system (for Hese Umwelt GmbH)
<b>Anaerobic Waste Water Treatment Plant WIETZENDORF</b>	Germany	2000-2002	Waste water of a starch-producing plant (potato-starch), potato residues	Glass coated steel tank 4 x 2,500 m <sup>3</sup>	Gas engine, 4 x 2.1 MWel	Industrial biogas plant: 4 digester, biomass recovery, external gas storage tank, protein recovery, ammonia stripping, reverse osmosis, composting/curing	Basic evaluation, pre-, draft and execution planning of complete biological treatment, gas holder, dewatering, safety + measuring + controlling devices
<b>Biogas Plant NIJ BOSMA ZATHE</b>	The Netherlands	2000	Manure, grass	Steeltanks, 2 x 80 m <sup>3</sup>	Dual fuel co-generator, 37 kWel	Agricultural biogas plant: 2 horizontal digester	Basic evaluation, pre-, draft and execution planning
<b>Biogas Plant THIESSEN</b>	Germany	2000	Manure, energy crops	Stainless steel tank, 600 m <sup>3</sup>	Dual fuel co-generator, 45 kWel	Agricultural biogas plant: 1 digester, 1 secondary digester	Basic evaluation, pre-, draft and execution planning, start-up
<b>Biogas Plant BERLIN-MARIENFELDE</b>	Germany	1999-2000	Kitchen waste, fats, packaged food	Stainless steel tanks 4 x 60 m <sup>3</sup>	Gas engine, 2 x 90 kWel	Biogas plant digesting organic waste: 1 digester, 1 secondary digester	Basic evaluation, pre-, draft and execution planning for buffer- and hydrolises tank, digesters
<b>Biogas Plant TOTTORI</b>	Japan	1999-2000	Manure	Steel tank, 3,100 m <sup>3</sup>	Dual fuel engine, 2 x 100 kWel	Agricultural biogas plant: 1 digester, gas holder above 350 m <sup>3</sup> manure storage tank	Basic evaluation, pre-, draft and execution planning for main equipment
<b>Biogas Plant STANGE</b>	Germany	1999-2000	Chicken manure, pig manure, turkey dung	Concrete tank, 450 m <sup>3</sup>	Gas engine, 45 kWel	Agricultural biogas plant: 1 digester, gas holder above 1,000 m <sup>3</sup> manure storage tank	Basic evaluation, pre-, draft- and execution planning, tendering, site management/project controlling, start-up
<b>Biogas Plant GASTRO STAR</b>	Switzerland	1998	Fruit and vegetable residues	Steel tank, 300 m <sup>3</sup>		Biogas plant digesting food waste: 1 hydrolysis tank, 1 digester	Basic evaluation, pre-, draft- and execution planning for digester and hydrolysis tank

Biogas Plant	Location	Constr. period	Input	Digester	Biogas utilisation	Features	Responsibility
<b>Biogas Plant AGROKOMPLEX KOLINANY</b>	Slowacia	1996-1999	Manure, straw	Steel tank, 100 m <sup>3</sup>	Gas engine, 15 kWel	Agricultural biogas plant: 1 digester, gas holder above 300 m <sup>3</sup> manure storage tank, research and development plant	Basic evaluation, pre-, draft- and execution planning for mixer, heating system, site management/project controlling, start-up (for TBW GmbH)
<b>Small digestion Plant W&amp;A</b>	Germany	1997-1999	Black water, kitchen waste	6 m <sup>3</sup>	Gas oven	Biogas plant digesting organic waste (blackwater of several houses, vacuum toilets, kitchen waste) by one 6 m <sup>3</sup> digester, modular system	Basic evaluation, pre-, draft- and execution planning incl. pre-fabrication and final assembly, site management/project controlling, start-up (for TBW GmbH)
<b>Digestion Plant BEG BIOENERGIE GMBH</b>	Germany	1997/1998	Biowaste, separately collected in households, sewage sludge	Steel tanks, 3 x 350 m <sup>3</sup>		Biogas plant digesting organic waste: IMK-process, two-stage with aerobic hydrolysis, sedimentation tank, external gas storage tank	Basic evaluation, pre-, draft- and execution planning for digesters, sedimentation tank, gas holder, process optimisation after start-up
<b>Biogas Plant GAERTEC</b>	Germany	1997	Kitchen waste, organic industrial residues	Steel tank, 150 m <sup>3</sup>	Dual fuel co-generator, 27 kWel	Biogas plant digesting organic waste: Pilot plant, Freese system	Basic evaluation, pre-, draft- and execution planning, tendering and construction of digester
<b>Biogas Plant BARZ</b>	Germany	1996-1998	Manure, kitchen waste	Concrete tanks, 20 m <sup>3</sup> and 250 m <sup>3</sup>	Dual fuel co-generator, 45 kWel	Biogas plant digesting organic waste: 2 digester, pasteurisation	Basic evaluation, pre-, draft-, approval and execution planning, site management/project controlling, start-up (for TBW GmbH)
<b>Biogas Plant ROHE</b>	Germany	1996/1997	Manure	Concrete tank, 400 m <sup>3</sup>	Dual fuel co-generator, 45 kWel	Agricultural biogas plant: diversion of existing tanks, gas holder in container	Basic evaluation, pre-, draft-, approval and execution planning, site management/project controlling, start-up (for TBW GmbH)

Biogas Plant	Location	Constr. period	Input	Digester	Biogas utilisation	Features	Responsibility
<b>Biogas Plant RoRo-ENERGIE</b>	Germany	1996-1998	Biowaste, separately collected in households, residues from breweries	Concrete tank, 1,000 m <sup>3</sup>	Dual fuel co-generators, 2 x 95 kWel	Biogas plant digesting organic waste: pre-treatment for all input substrates, pasteurisation, 1 central located digester, 1 storage tank, other digester decentralized	Basic evaluation, pre-, draft-, approval and execution planning (for TBW GmbH)
<b>Biogas Plant HOLZ</b>	Germany	1996	Manure, other organic waste	Steel tanks, 2 x 100 m <sup>3</sup>	Dual fuel co-generator, 45 kWel	Biogas plant digesting organic waste: 2 digester, gas bag	Basic evaluation, pre-, draft-, approval and execution planning, start-up (for TBW GmbH)
<b>Biogas Plant DIPPEL</b>	Germany	1996	Manure, straw, other organic waste	Steel tanks, 2 x 100 m <sup>3</sup>	Dual fuel co-generator, 45 kWel, container	Biogas plant digesting organic waste: 2 digester, gas bag, separation	Basic evaluation, pre-, draft-, approval and execution planning, site management/project controlling, start-up (for TBW GmbH)
<b>Biogas Plant WERNE v., AANSE BOUDIN; PRASLIN</b>	Seychelles	1996	Pig manure	Digestion channel, 200 m <sup>3</sup>		Agricultural biogas plant: 1 digestion channel (non-heated system) with gas holder above, gas cooling system	Basic evaluation, pre-, draft-, approval and execution planning (for TBW GmbH)
<b>Biogas Plant MARTENS</b>	Germany	1995/1996	Manure, other organic waste	Concrete tanks, 400 m <sup>3</sup> and 800 m <sup>3</sup>	Dual fuel co-generators in containers	Biogas plant digesting organic waste: 2 digester, development of especially light roofs for digester, modular system for farms with about 100 bis 200 cattle	Basic evaluation, pre-, draft and execution planning for zero series (6 systems): start-up of biogas plants Lau, Wuelpern, Gerken, Hobbie, Albers, Martens (for TBW GmbH)
<b>Biogas Plant GROEDEN</b>	Germany	1995/1996	Manure, other organic waste	Steel tanks, 2 x 3,500 m <sup>3</sup>		Industrial biogas plant: 2 digester, external gas storage tank, pasteurisation	Advisor for final plannings (for Haase Energietechnik GmbH)
<b>Biogas Plant SCHAEFER</b>	Germany	1995	Manure, straw, other organic waste	Concrete tank, 500 m <sup>3</sup>	Dual fuel co-generator, 35 kWel	Biogas plant digesting organic waste: 1 digester, feed batch system	Basic evaluation, pre-, draft- and approval planning, advisor for construction

Biogas Plant	Location	Constr. period	Input	Digester	Biogas utilisation	Features	Responsibility
<b>Biogas Plant BLUEMEL (Kompostbetrieb)</b>	Germany	1994/ 1995	Biowaste, separately collected in households	Concrete tanks, 2 x 800 m <sup>3</sup>	Dual fuel go- generators, 2 x 160 kWel	Biogas plant digesting organic waste: 2 digester	Basic evaluation, pre-, draft-, approval and execution planning, site management/project controlling, start- up (for TBW GmbH)
<b>Biogas Plant SCHNEIDER</b>	Germany	1994/ 1995	Manure, other organic waste	Steel tanks, 2 x 100 m <sup>3</sup>	Dual fuel go- generator, 45 kWel	Biogas plant digesting organic waste: 2 digester, gas bag	Basic evaluation, pre-, draft-, approval and execution planning, site management/project controlling, start- up (for TBW GmbH)
<b>Biogas Plant KRAFT</b>	Germany	1994/ 1995	Manure, fats, distillery residues	Concrete tanks, 800 m <sup>3</sup> and 1,000 m <sup>3</sup>	Gas engines 90 kWel, 200 kWel	Biogas plant digesting organic waste: 2 digester	Basic evaluation, pre-, draft-, approval and execution planning, site management/project controlling, start- up (for TBW GmbH)
<b>Biogas Plant WEISS</b>	Germany	1994/ 1995	Manure, other organic waste	Concrete tank, 350 m <sup>3</sup>	Dual fuel co- generator, 45 kWel	Biogas plant digesting organic waste: 1 digester, gas holder above 600 m <sup>3</sup> manure storage tank	Basic evaluation, pre-, draft-, approval and execution planning, site management/project controlling, start- up (for TBW GmbH)
<b>Biogas Plant HUSSENETHER</b>	Germany	1994/ 1995	Manure, other organic waste	Concrete tank, 500 m <sup>3</sup>	Dual fuel co- generator, 27 kWel	Biogas plant digesting organic waste: 1 digester, gas bag	Basic evaluation, pre-, draft-, approval and execution planning, site management/project controlling, start- up (for TBW GmbH)
<b>Biogas Plant SCHULTES</b>	Germany	1994	Manure, other organic waste	Concrete tank, 200 m <sup>3</sup>	Dual fuel co- generator, 45 kWel	Biogas plant digesting organic waste: 1 digester, freese system, gas holder above 1,500 m <sup>3</sup> -manure storage tank	Basic evaluation, pre-, draft-, approval and execution planning, site management/project controlling, assembly of mixer and gas holder, start-up (for TBW GmbH)
<b>Digestion Plant Technical University of HAMBURG- HARBURG</b>	Germany	1993/ 1994	Biowaste, separately collected in households	Steel tank, 100 m <sup>3</sup>		Pilot biogas plant: 1 digester, ATF-dry fermentation	Basic evaluation, pre-, draft-, approval and execution planning, site management/project controlling, start- up (for TBW GmbH)

Biogas Plant	Location	Constr. period	Input	Digester	Biogas utilisation	Features	Responsibility
<b>AGROKOMPLEX SIRVINTOS</b>	Lithuania	1993	Liquid phase after separation of manure	Basin, 1,000 m <sup>3</sup> , covered with gas holder membrane		Agricultural biogas plant: 1 digester, psychrophilic digestion, mixing by gas, heating for green houses	Basic evaluation, pre-, draft-, approval and execution planning, assembly of mixing device, heating and gas systems
<b>Biogas Plant SCHLÖTTER</b>	Germany	1992/ 1993	Manure, other organic waste	Glass fiber tank, 100 m <sup>3</sup>	Dual fuel co-generator, 27 kWel	Biogas plant digesting organic waste: 1 digester, Baader system, gas holder above 400 m <sup>3</sup> manure storage tank	Pre-, draft-, approval and execution planning, site management/project controlling, start-up
<b>Biogas Plant v. BODELSCHWING' SCHE ANSTALTEN</b>	Germany	1991	Manure, kitchen waste	Steel tank, 100 m <sup>3</sup>	Dual fuel co-generator, 27 kWel	Biogas plant digesting organic waste: 1 digester, gas bag	Assembly of tubes, pumps, mixers, heating and gas systems
<b>Biogas Plant BLANC</b>	Germany	1991	Manure, straw	Concrete tank, 300 m <sup>3</sup>	Gas engine, 15 kWel	Agricultural biogas plant: 1 digester, gas bag	Assembly of tubes, pumps, mixers, heating and gas systems
<b>Biogas Plant RETZBACH</b>	Germany	1991	Manure, straw, other organic substrates	Steel tanks, 2 x 100 m <sup>3</sup>	Gas engine, 15 kWel	Biogas plant digesting organic waste: 2 digester, gas bag, separation	Basic evaluation, pre-, draft- and execution planning, site management/project controlling, start-up
<b>Biogas Plant ZIPPER</b>	Germany	1990	Manure, straw	Steel tanks, 2 x 60 m <sup>3</sup>	Gas engine, 15 kWel	Agricultural biogas plant: 2 digester, gas holder above 400 m <sup>3</sup> manure storage tank, separation	Basic evaluation, pre-, draft- and execution planning, site management/project controlling, start-up
<b>Biogas Plant GANSLOSER</b>	Germany	1990	Manure, straw, other organic substrates	Steel tank, 50 m <sup>3</sup>	Dual fuel co-generator, 27 kWel	Biogas plant digesting organic waste: 1 digester	Assembly of mixers, heating system and gas system
<b>Biogas Plant HEYNOLD</b>	Germany	1986	Manure, straw	Steel tank, 60 m <sup>3</sup>	Gas engine, 15 kWel	Agricultural biogas plant: 1 digester, gas holder above 400 m <sup>3</sup> manure storage tank	Construction, installation, start-up