PLANTS
Efficient. Innovative. Sustainable.

COMPONENTS
Proven. Robust. Reliable.

UTILISATION
CHP. Biomethane. Digestate.

SERVICES
Support. Advice. Expertise.

2025 IMAGE BAROMETER
TOP 10 MARKE
Von Landwirten bewertet
Erneuerbare Energien
dlg-imagebarometer.com

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Member of the German Biogas Association

bestore . Group

agriKomp GmbH: Certified acc. to ISO 9001

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agriKomp
PLANTS
Efficient. Innovative. Sustainable.

Sophisticated biogas plants
Efficient. Innovative. Sustainable.

MANY VARIANTS TO MEET YOUR REQUIREMENTS!

The result of our more than 20 years of experience and development in biogas plant and component engineering: a large and versatile portfolio of components and plants. Whether slurry, manure, agricultural residues, grass or silage - powerful technology and a wide range of specially developed components and plants give you a free hand.

BENEFIT FROM UNTAPPED POTENTIAL

Biogas production from manure and slurry, organic residues and renewable raw materials has become increasingly popular worldwide in recent years. Especially the use of manure, slurry and organic residues makes the operation of a biogas plant profitable for you.

If, for example, livestock housing construction measures become necessary, it is advisable to include biogas in the concept. Often, a significantly more economical and sustainable solution can be found with little additional effort.

CUSTOMISED FOR YOUR BUSINESS

Our consultants are practitioners and know their business. Together with you, they will determine the optimal system configuration for your farm. The various operational conditions and parameters such as crop area, input materials, operational planning and the time you want to invest in the operation of the plant are taken into account in the concept for your biogas plant.

HIGHEST STANDARD

A high degree of standardisation, ISO 9001 certification and CE conformity are quality and safety benchmarks for us. It is not only a matter of fulfilling important safety guidelines and legal requirements. Identical systems and components enable the highest quality in material use and processing. This ensures a long-term reliable supply of the right spare parts and competent service.

OUR INDI PLANT – INDIVIDUAL, LIKE YOU!

Our comprehensive component portfolio enables a wide range of different system configurations. The exclusive use of our proven components ensures model consistency. This gives you a high degree of security and the necessary flexibility. This is how individual biogas plants are created, tailored to the respective operational requirements.

Plant capacities from 55 kW_{el} to 2.5 MW_{el} and more are possible - whether with a CHP or an upgrading to biomethane.

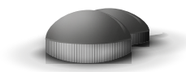
We develop and manufacture an individual and highly economical solution for you that meets your vision and needs; the result is what we call an „Indi“ plant.

YOUR BENEFITS AT A GLANCE!

- Individual plant design
- Standardised technology
- Highest safety standards
- Powerful and proven agriKomp components
- Perfectly coordinated interfaces
- Broad CHP portfolio (agriKomp BGA series) and biogas upgrading (agriPure®) for efficient biogas utilisation
- Competent service and best spare parts supply
- Continuous updates

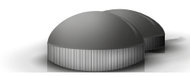
WORLDWIDE

> 700 PLANTS



INDI PLANTS

> 200 PLANTS



AGRISELECT

agriSelect®
– our multi-talented system.

AGRISELECT®
– SELECTED QUALITY

“Select” in the name of our plant system stands for carefully selected components paired with a wide range of options. Branded components intelligently arranged and flexibly combinable. If you wish, also with your own contribution.

The compact biogas plant can be built in just a few weeks. Pre-assembled modules, turnkey technology and CHP container, unique Formprotect® tank construction system and the deployment of an experienced on-site supervisor ensure that the installation of the plant progresses quickly.

SELECT - SOLID PLATFORM AND A WIDE RANGE OF CHOICES

Standardised system configurations equipped with proven agriKomp brand technology are the foundation. You can configure your agriSelect® individually according to your needs with our proven agriKomp brand components and a wide range of additional packages and options:

digester construction in Formprotect® design or conventional, Biolene® single-layer membrane or double membrane roof, CHP containers with various agriKomp CHP units of the BGA series, technical and intermediate space containers as well as submersible or paddle agitator. The visually appealing containers are of concrete construction and prefabricated and are therefore quickly ready for operation.

FREE CHOICE OF FEEDSTOCK

The agriSelect® can be operated with 100 % slurry. By upgrading the agriSelect with Vielfrass® solid feeder and Paddlegigant® paddle agitator, it can also be operated with solids (e.g. energy crops, agricultural residues, etc.) and even with 100 % manure.

HEAT UTILISATION

The efficient use of energy and a sophisticated heat utilisation system create enough valuable heat to heat buildings free of charge and regeneratively.

CAPACITY

The agriSelect® system is available from 55 up to 265 KW_{el}.

Model 55 – 100 kW_{el}
The classic farm biogas plant, of which almost 200 plants are currently in operation. Since 2023 we have been equipping the “small” agriSelect® with our BGA 095 ETA with the latest SCANIA 5-cylinder in-line engine DC09.

Model 100 – 150 kW_{el}
The medium agriSelect® plant with the large model of our BGA 095 ETA. With our BGA095 ETA, a sophisticated biogas plant is joined by a very efficient CHP unit: with an electrical efficiency of up to 40.7 %, our agriSelect® is unparalleled in this power range.

Model 150 – 265 kW_{el}
Our top model, the BGA 136 ETA, utilises the produced biogas reliably and efficiently (electrical efficiency up to 43 %) in our largest agriSelect® model. Over 50 plants are already in operation. For gas purification, an agriClean 150 is used for gas purification.

YOUR BENEFITS AT A GLANCE!

- 3 basic models cover a plant capacity from 55 - 265 kW_{el}
- Equipped with proven agriKomp components
- Wide range of input materials possible
- Individually configurable
- Modular design
- Many additional packages and options
- High degree of standardisation
- Short construction time
- Pre-fabricated containers
- Ready-assembled modules
- Appealing design

akCockpit
– Webapplication

Our all-in-one solution for monitoring and controlling biogas plants, CHPs or biogas upgrading plants.

The application summarises all important information about your plant at a glance. This allows you to carry out extensive analyses and monitoring and save a lot of time.

agriPure® – The system for biogas upgrading.

FROM BIOGAS TO BIOMETHANE

The biogas upgrading process converts biogas produced by anaerobic digestion into biomethane using special membranes. There are several pre-treatment steps to clean and condition the biogas. The biogas is then compressed before entering the membranes which are used to separate the methane (CH_4) and carbon dioxide (CO_2) gases at a molecular level. After this upgrading process, the product biomethane can be sent to the gas grid or further compressed or liquefied for use as transport fuel.

In general, biomethane can be used after biogas upgrading wherever natural gas is also used. Both variants are chemically equivalent and differ only in their either fossil or biogenic origin. This opens up a wide range of possible applications.

FLEXIBILITY

With the agriPure® upgrading process, we can realise a broad spectrum from small to large biogas upgrading plants. Due to the high flexibility of the process, the membrane technology can be easily adapted to changing volume flows and gas compositions. The standard output range of our agriPure® extends from 135 Nm³/h - 2,000 Nm³/h raw gas.

COMPLETE CUTTING EDGE SOLUTION

With agriPure®, we offer a complete solution for anaerobic digestion and biogas upgrading: From the biogas plant and biogas pre-treatment to biogas upgrading / CO_2 recovery and liquefaction and finally processing biomethane into BioLNG or BioCNG - agriKomp is the right partner for your project.

Our service network is well established and international with experienced service engineers and good spare parts availability. Your agriPure® plant will receive a well-coordinated and reliable service support, providing the best opportunity for a long and trouble-free plant lifespan.

HEAT RECOVERY SYSTEM

The extraction of excessive heat from the heat system of the upgrading plant ensures high efficiency of the whole plant. The biogas compressor uses oil to lubricate the compressor. This oil heats up during operation and needs to be cooled. This can be done via emergency coolers or, as in our agriPure®, via integration into a sophisticated heat recovery system. We also have integrated more components (p. ex. the gas cooling) into the heat recovery system to gain even higher efficiency. The heat recovery system is located in the heating system container.

UNSERE AGIRPURE®-MODELLE

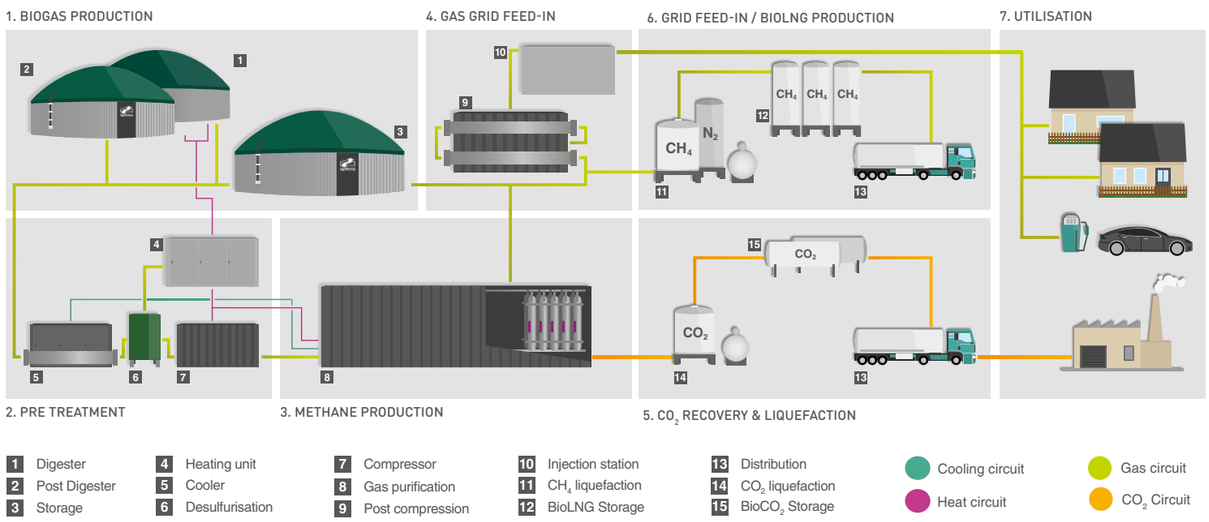
- **agriPure® CUBE**
  The system creates new possibilities in terms of flexibility, modularity and profitability. The redesigned, modular structure allows easy expansion, even if components need to be replaced. Available from 135 to 2,000 Nm³ / h raw gas.
- **agriPure® Smart S + M**
  Focussed on the essentials, it impresses with its compact design, smart price and impressive performance. Available in the Smart S (130 - 295 Nm3/h raw gas) and Smart M (430 - 620 Nm3/h raw gas) versions.

MEMBRANE MODULES FOR OPTIMAL RESULTS

In order to purify the biogas, specially developed membrane modules are used. We equip our agriPure® upgrading system with SEPURAN® Green membranes from EVONIK. The separation membranes operate according to the principle of selective permeation. The membranes are made of several thousand fine hollow fibers, which guarantee very good selectivity. They separate the gases in the raw biogas and produce a methane concentration of up to 99 % in the product gas. The innovative technology consists of three stages and enables optimum treatment efficiency with minimal biogas losses (methane slip), thus achieving maximum biomethane yield.

YOUR BENEFITS AT A GLANCE

- Fully automated system, easy to operate
- ≥ 99.4% methane recovery
- Selected high quality components
- High energy efficiency / low operating costs
- Sophisticated heat recovery
- Modular system: suitable for expansion
- Fast system re-start to grid-quality gas
- Industry leading membrane performance and durability
- No process heat required
- Comprehensive service support
- Critical spare parts in stock for fast supply
- Online control functionality
- Design enables integration of a CHP unit to generate electricity for for own consumption



agriFer® Plus
The next generation of digestate treatment.

OUR INNOVATIVE PROCESS FOR DIGESTATE TREATMENT

The storage and use of slurry and digestate is leading to an increasing financial burden for biogas plant operators. Most of the processes currently available on the market work on volume reduction and concentration of nutrients. So far, however, no process has been able to remove excess nitrogen from agriculture.

The high nitrate levels in the soil and groundwater are due, among other things, to over fertilisation with ammonium-containing slurry, digestate and solid manure. A large part of the ammonium used becomes nitrate in the soil.

EVAPORATION, RECOVERY AND DISCHARGE

The innovative agriKomp complete treatment process offers an economical solution to the nitrate problem with simultaneous volume reduction. In this process, nitrogen-containing digestate is treated by an evaporation process in combination with reverse osmosis.

The nitrogen is converted into marketable ammonia solution that is used in the chemical industry (e.g. in flue gas cleaning).

In the agriFer® Plus process, the input material is separated into approx. 3 % ammonia water (which contains up to 50 % of the total nitrogen from the input), approx. 49 % water, 21 % solid phase from separation and approx. 27 % NPK (nitrogen, phosphate and potassium) concentrate, which can be used as fertiliser.

SUSTAINABLE RESOURCE MANAGEMENT

Compared to existing processes, valuable nutrients are obtained in the form of marketable products. The concept is also characterised by high environmental compatibility, as the addition of chemical additives have been reduced by 90 %.

Our treatment process significantly improves profitability, protects groundwater and offers sustainable resource management.

THE BIG PICTURE CONSISTS OF FOUR SUB-PROCESSES

1. Separation of digestates
The digestate is first mechanically separated into a liquid phase and a solid phase. While the liquid phase, filtered through a sieve, is fed to the evaporators, the separated solid phase can be temporarily stored on a suitable storage area.

2. Fractional evaporation
The agriFer® Plus design is based on a newly developed fractional evaporation process. Fractional evaporation uses the different vapour pressures of ammonia and water to separate them in several stages by evaporation.

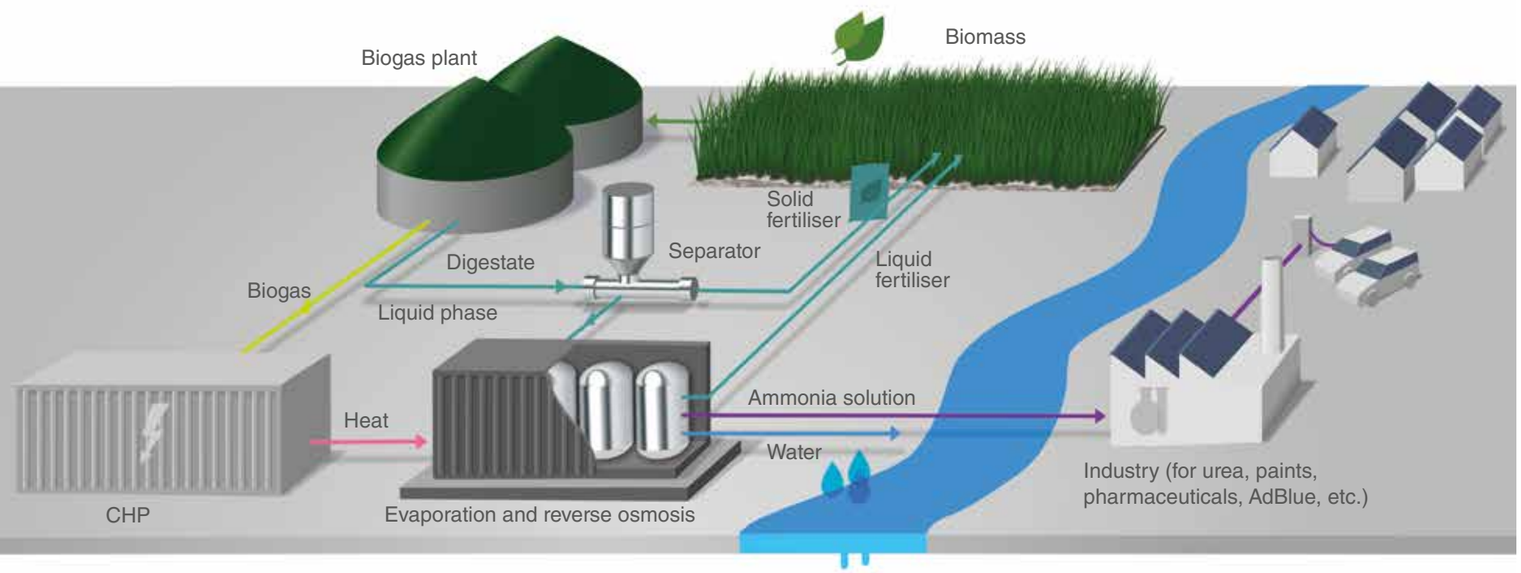
3. Rectification
The task of rectification within the agriFer® Plus plant is to increase the concentration of the ammonia water as required. This reduces storage and transport costs and generates income from the sale of ammonia water.

4. Reverse osmosis
The condensate produced in evaporators is pressed against the semi-permeable reverse osmosis membranes. The resulting permeate (water) can be used for operational purposes or discharged into receiving waters without further treatment.

The retentate (concentrate) is either returned to fractional evaporation or can be applied as a high-quality mineral NPK fertiliser as required.

YOUR BENEFITS AT A GLANCE

- The digestate volume is significantly reduced
- Upgrading of the digestate to concentrated, high-quality liquid fertiliser and ammonia water (basic chemical for industry)
- Minimisation of emissions (ammonia)
- Increasing the economic profitability of your plant
- agriFer® Plus is the only process to date that removes nitrogen from agriculture
- Lower treatment costs
- Stable market demand for process products
- The plant operator changes from a producer of problematic substances to a producer of important basic chemicals



Our references speak for themselves.

A Barthelmess
Dinkelsbühl, Germany

Type:	agriSelect®
Commissioning:	2020
Installed capacity:	75 kW_{el}

FOLLOW THIS LINK TO THE VIDEO OF THE PLANT

B Métha Treil SAS
Le Treil, France

Type:	agriPure®
Commissioning:	2019, Extension 2022
Installed capacity	500 Nm^3/h biogas
Components:	2 x Pre-pit, 2 x Digester, 1 x Post-digester, 1 x Storage, 1 x Vielfraß® LEF 75 m^3 liquid feed, 5 x Paddelgigant®, 3 x agri-Mix, 3 x Double membrane roof, 1 x Quetschprofi®
Specialities:	Recovery and commercialisation of CO_2. Processing of residues from vegetable cultivation.

C GAEC de Raymiluc
Beauvoir, France

Type:	agriSelect®
Commissioning:	2018
Installed capacity:	195 kW_{el}
Components:	2 x Pre-pit, 1 x Digester, 1 x Storage, 1 x BGA 136, 1 x agri-Clean 150, 1 x Vielfraß® BT 50 m^3, 2 x Paddelgigant®, 2 x Biolene®, 2 x Submersible agitator
Specialities:	Valorization of the intermediate crops of the farm and cove red storage with gas recovery

D AVENA spol. s r.o.
Knapovec, Czech Republic

Type:	Indi plant
Commissioning:	2011
Installed capacity:	1.500 kW_{el}
Components:	2 x Digester, 2 x Post-digester, 2 x Storage, 6 x CHP à 250 kW_{el}, 2 x Vielfraß® 50 m^3, 8 x Paddel-gigant®, 3 x Submersible agitator, 4 x Biolene®, 1 x Quetschprofi®

E GTG Biogas Ltd.
Toomebridge, Northern Ireland

Type:	Indi plant
Commissioning:	2011
Installed capacity:	500 kW_{el}
Components:	1 x Pre-pit, 1 x Digester, 1 x Post-digester, 1 x Storage, 2 x BGA 158, 1 x Vielfraß® 40 m^3, 4 x Paddelgigant®, 2 x Biolene®, 1 x Quetschprofi®, 2 x Submersible agitator
Specialities:	1st agriKomp plant in Northern Ireland. It is located on an old military airbase.

F Az. Agr. B.R.
Lombardy, Italy

Type:	Indi plant
Commissioning:	2007
Installed capacity:	1.000 kW_{el}
Components:	2 x Digester, 2 x Post-digester, 2 x Storage, 4 x CHP à 250 kW_{el}, 2 x Vielfraß® 50 m^3, 8 x Paddel-gigant®, 4 x Biolene®