

The KOMPOFERM[®] System.

Biogas plants for cost-effective and
efficient energy extraction



With its innovative dry fermentation concepts,
Eggersmann Anlagenbau offers efficient plants for
the productive extraction of biogas.



Eggersmann
Plant Construction



The KOMPOFERM® Systems. The approved concept.



The initial situation

The international waste management industry works with highly efficient technologies and complex plants. In recent years, the requirements placed on these plants have become more complex. At the same time, the awareness of regenerative energies has grown considerably. We have developed a concept which reduces operating costs and improves performance: the KOMPOFERM® biogas plants offer the possibility of modern and efficient biogas extraction utilising the technologies of dry fermentation. The principle has proven itself: in the KOMPOFERM® dry fermentation plant, the fermentation of solid substrates (e.g. biowaste, garden waste) produces biogas at a uniformly high level.

Maximum gas production, with a high methane content, is achieved with low energy requirements. This means: low investment costs – high biogas yield.

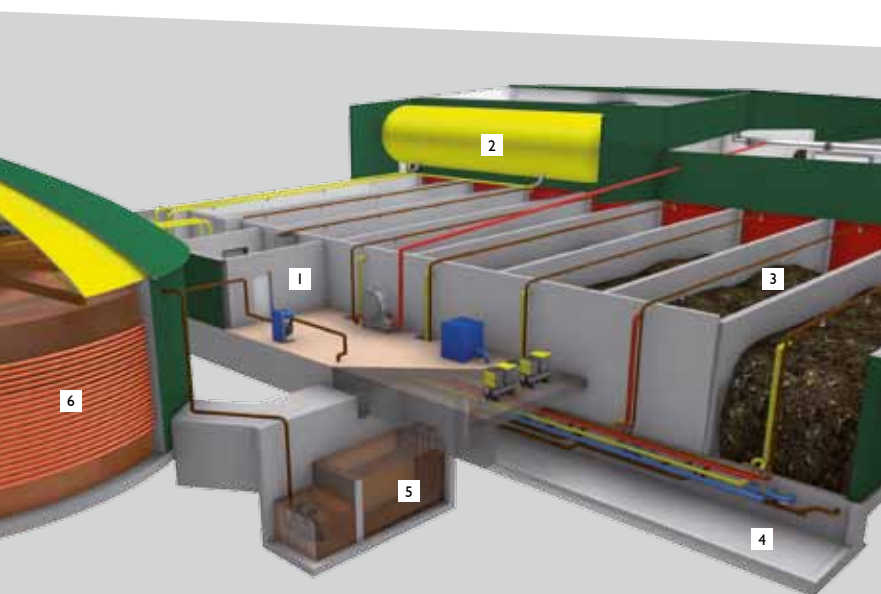
KOMPOFERM®:

- » Highest quality standards
- » Minimal susceptance to failure
- » Continuous production
- » Highly cost-effective
- » Simple operation
- » High safety standards

The established plant concept

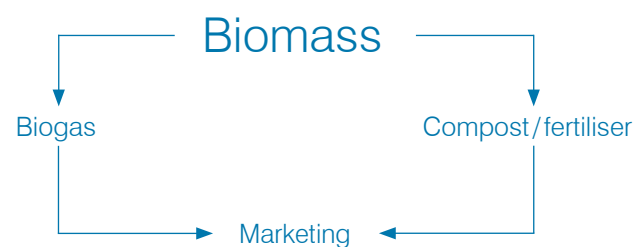
The KOMPOFERM® dry fermentation plant in proven design

Dry fermentation is a well controlled biologically stable process. Based on the utilisation of the KOMPOFERM® process, Eggersmann plants are known for their outstanding cost-effectiveness and simple operation. Our decades of experience and continuous further development of these processes have convinced customers around the world of the quality of our solutions, both for the expansion of conventional plants and as new installations.



- Air Handling
- Biogas
- Percolate
- Exhaust air

- 1 room for pumps, blowers and compressors
- 2 biogas storage
- 3 fermenter tunnel with gastight gate
- 4 accessible pipework channel
- 5 sandtrap and pumps
- 6 percolate fermenter



The efficient operation

KOMPOFERM® plants are distinguished by their reliability, low investment and operating costs, and outstanding efficiency: with the Eggersmann Anlagenbau process, the energy consumed by the plants themselves is less than 5% of the electrical energy derived from operation. Yet the quality of the final products of treatment is so high that further conditioning can take place following gas extraction. KOMPOFERM® plants thus set standards for biogas extraction.



Your advantages:

- » High biogas production
- » Very low plant energy requirements
- » Maximum system availability
- » High level of automation
- » Low investment costs



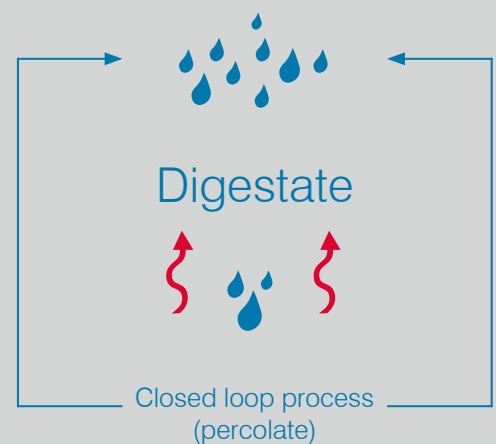
The new KOMPOFERM® plus concept.
The next generation of biogas plant technology.



The expanded plant concept

The KOMPOFERM® dry fermentation plant in a new look

With the intelligent design of the percolate cycle, our dry fermentation plants operate with particularly high efficiency. Eggersmann Anlagenbau, as one of Germany's leading innovators, has contributed decisively to the development of this process. Developers and engineers with vast practical insight have now further optimised the proven KOMPOFERM® process and again improved its efficiency. The double use of valuable thermal energy supports the fermentation process. The innovative layout shortens the percolate path to a minimum and significantly reduces the area required.



KOMPOFERM® plus:

- » Optimal utilisation of heat
- » Accelerated fermentation process
- » Reduced start-up phases
- » Shortened cycle paths
- » Minimal area requirements
- » Maximum efficiencies

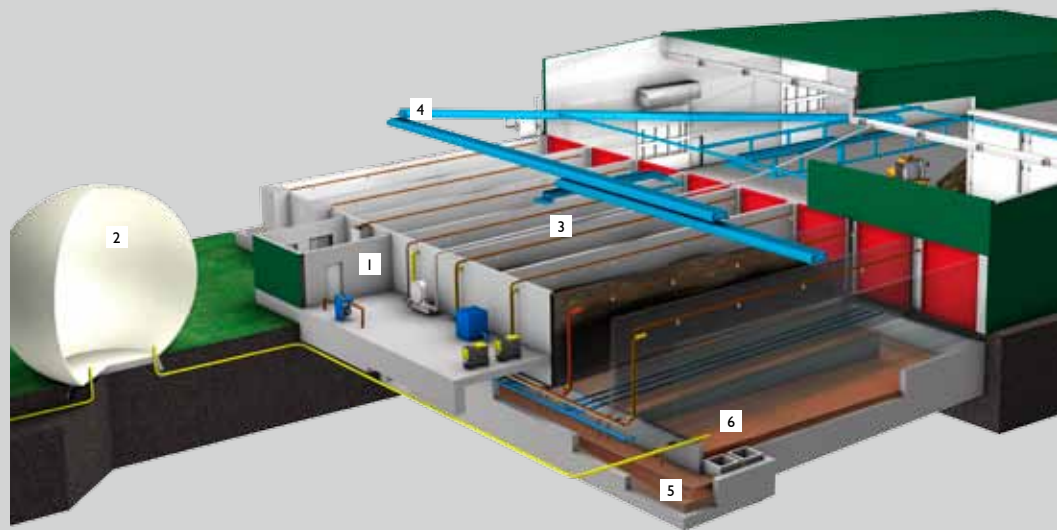
The new energy concept

Enhanced efficiency by the intelligent utilisation of heat

By contrast with the established KOMPOFERM® design, with KOMPOFERM® plus the percolate reservoir is integrated in the plant concept. The percolate cycles are shortened and energy losses reduced to a minimum. Utilising the heat emitted from the percolate reservoirs allows the production of gas to set in much sooner. The fermentation process is optimised by the constant heat influx, increasing the amount of gas production – two factors for even greater cost-effectiveness. The compact design makes this innovative process an attractive alternative with minimal area requirements.

- Air Handling
- Biogas
- Percolate
- Exhaust air

- 1 room for pumps, blowers and compressors
- 2 biogas storage
- 3 fermenter tunnel with gastight gate
- 4 automatic loading (option)
- 5 sandtrap
- 6 percolate fermenter



Decisive arguments

The use of KOMPOFERM® plants brings many valuable advantages. For the choice of the optimal plant, several decision factors play an important role. Therefore, for example, the existing site conditions, such as the ground works, the available space plus the level of automation etc., must be considered in this decision. Both plants offer convincing high-value material quality and high efficiency. We shall be pleased to consult with you personally to help you decide in favour of the right KOMPOFERM® plant.



Additional advantages:

- » Increased biogas production
- » Further reductions in energy requirements
- » Low investment costs
- » Further minimisation of maintenance and operating costs
- » Possibility of thermophilic operation with hygienised end products
- » Partially redundant system
- » Possibility of automatic filling

 **Eggersmann**
Construction

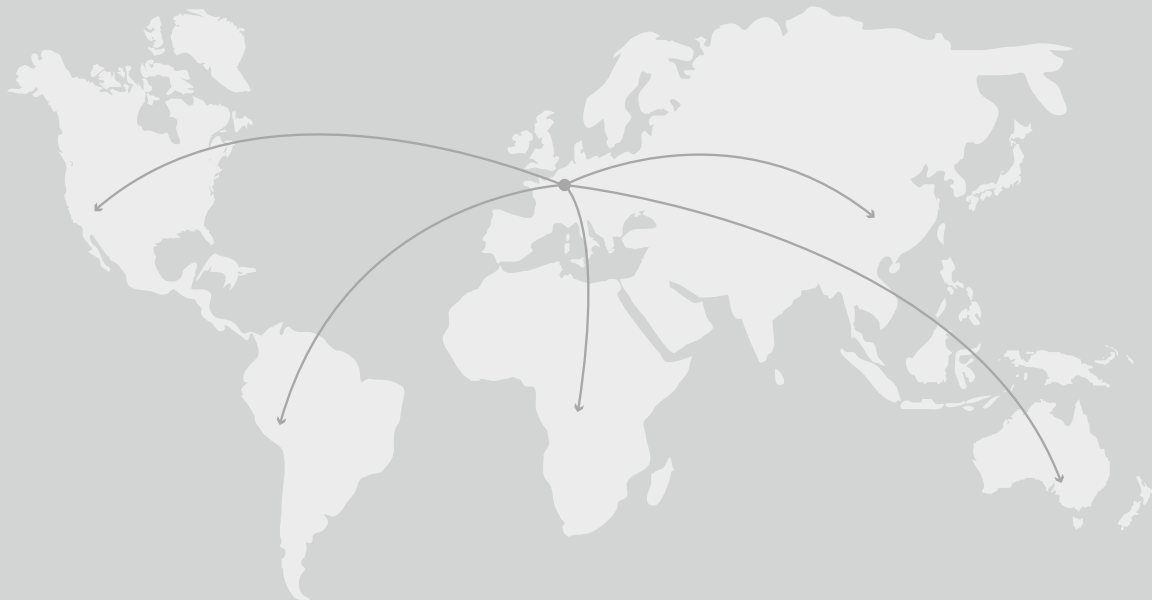
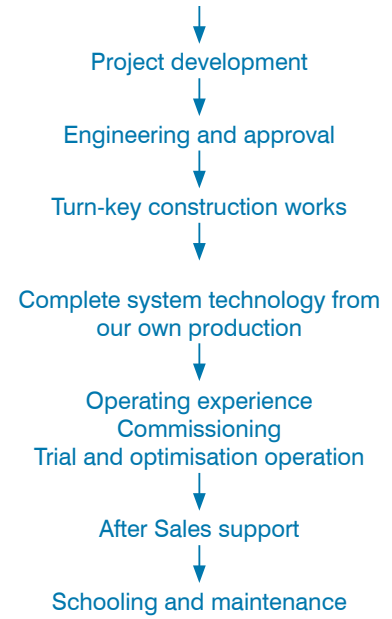
 **Eggersmann**
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 **Eggersmann**
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Making use of synergies



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