

Food & Beverage Industry

Is biowaste a cost or income for you?



Electrify your biowaste!

FimusKraft Biogas Plant transforms the biowaste cost-effectively into biogas, electricity, heat and more.

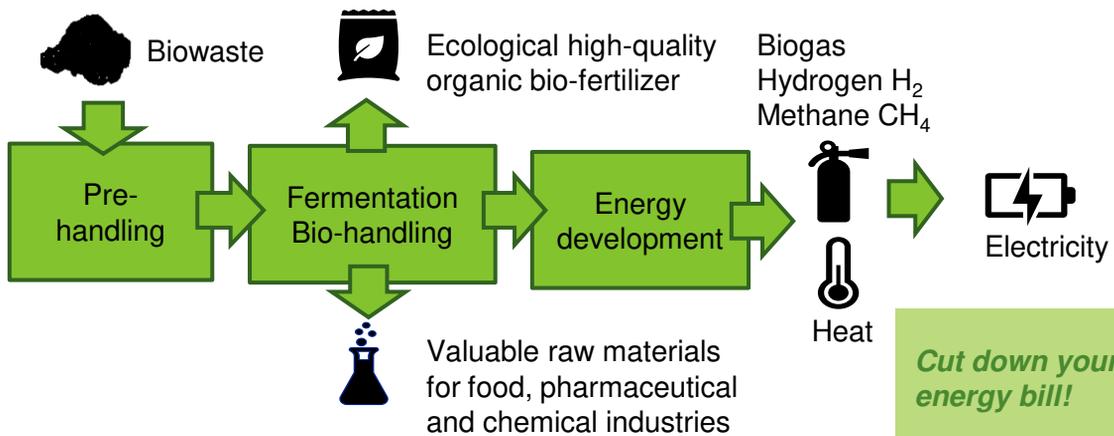
Challenges

Increasing energy prices have an effect on industries which need to find ways to cut the costs. On the same time, they are required to lower their carbon footprint. For Food & Beverage Industry also biowaste handling is a challenge due to high transportation costs and gate fees. To get enough food for all the people in the world, there is a growing need for fertilizers.

FimusKraft has a profitable business solution to all these challenges. FimusKraft's Biogas Plant (FKBP) system converts your biowaste expenditures into incomes and reduces your carbon footprint. The F&B companies would get many benefits of implementing FKBP system.

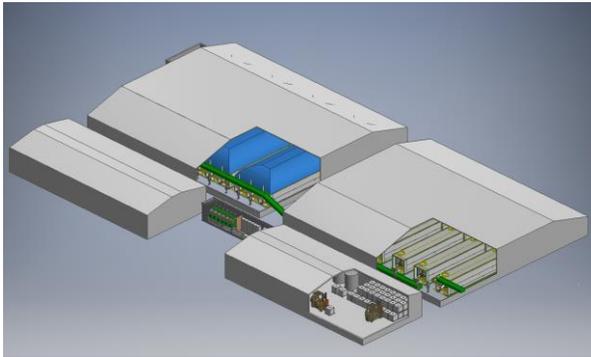
Biowaste towards circular economy!

What do you get from FimusKraft Biogas Plant?



Cut down your energy bill!

FKBP - FimusKraft Biogas Plant



Energy

Energy Production

The soul of the biogas plant is the fermentation. To ensure optimal gas production the biogas will be pre-treated. FKBP combines biogas fermentation with an innovative Microbiological Booster Unit (MBU). MBU allows to obtain biogas with 30-50% higher energetic efficiency than traditional fermentation method Anaerobic digestion (AD). Biogas can be used as itself, for example in heating the ovens in a bakery.

Electricity and Heat

Each FKBP module produces minimum 30 kW electricity from the biogas. FKBP located at the food factory the produced electricity can be used for example for the factory processes and lightning.

Heat can be used in processes and warming the buildings. Each module produces minimum 60 kW heat.

Side Products

Valuable Raw Materials

The food factories have typically dedicated biowaste and continuous flow of the biomass.

From dedicated biowaste FimusKraft Biogas Process can develop valuable raw materials for pharma, F&B and chemical industries. By selling this side product there is an increase of the profitability of the company.

FimusKraft will conduct laboratory test of the biowaste according to request to find out the side stream possibilities of the type of waste.

Bio-fertilizer

The fermentation process is changing the biowaste to nutrient rich fertilizer/compost, high in nitrogen. Further processing after fermentation produces high quality bio-fertilizer, both solid and liquid.

This nutrient rich fertilizer is easy to sell for farmers.

Investment and Operating Cost

Investment

The investment cost with FimusKraft's biogas plant is remarkable (25-40 %) lower than with traditional fermenters based on Anaerobic Digestion (AD).

The payback time of the investment is about 3,5 - 9 years (depending on the local electricity tariff price).

Low investment and fast payback

Installation

The biogas plant is designed to a movable size modular package, module. The modular design of FKBP is very compact and can be installed in 2 - 6 weeks (including FKBP testing and users training).

The modular design enables easy and inexpensive scaling up to meet the different needs. Extra modules are fast to add. Each module produces minimum 30 kW electricity and 60 kW heat, and nutrient-rich fertilizer. .

Fast and easy installation

Operation

Operation

FimusKraft's biogas plant is continuously operated, fully automated, and can be remotely monitored. The process and temperature control are accurate. Automation includes also the automatic on-line gas content analyzer.

Easy to Use Fully automated

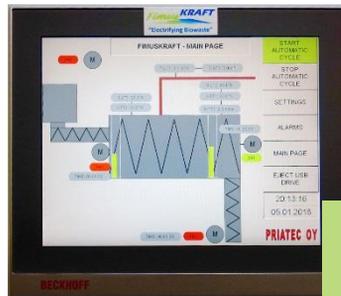
Maintenance

FKBP has a unique design. It is based on constant FIFO-treat for the biowaste.

All maintenance work can be carried out from outside of the reactor → no production breaks for maintenance.



FKBP's daily usage and maintenance require only 30 minutes overall.



No production breaks for maintenance