

Cow Farms

Electrify your bio-waste!



Cow dung is not waste – it is source of energy!

FimusKraft Biogas Plant FKBP turns the biowaste cost-effectively into electricity, heat and nutrient rich bio-fertilizer.

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 bio-gas 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)

The biogas content of cow dung is about 15-25 m³ / wet weight ton.
The methane content of biogas is 60% and up.

Cut down your energy bill!

Electricity and Heat

Each module produces about 30 kW electricity and 60 kW heat

Fill in the local wind and waterpower grid with bio electricity.

Use the electricity for the use of your own farm ,for lighting and usage and charging of machines and devices.

The process produces heat, that will be used in warming the farmhouses and storages.

Handling of Cow Dung

**No transportation
No gate fee cost
Less smell
Efficient Bio fertilizer**



Transportation of Cow Dung

Place bio-gas plant next to cow house and move the cow dung directly to bio-fermenter from cow house..

Less Smell

The fermented cow dung product is environmentally friendly compost, that has remarkably less smell.



Bio-fertilizer

Fermentation-process is changing the cow dung to nutrient rich fertilizer/compost, high in nitrogen.

Produce high quality fertilizer to your fields!

Further processing after fermentation produces high quality bio fertilizer both solid and liquid.

You can use the fertilizer in food production, feed cultivation or cultivation of vegetables and cereals.

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 4,5...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 30kW electricity and 60kW heat, and nutrient-rich fertilizer

Fast and easy installation

The FKBP System grows according to Needs of the Farm

The minimum inputs to the process are the waste from 150/200 cattle. Different combinations of bio-waste can be used..



Upgrade Existing Plants

MBU can be easily integrated in existing biogas plants to upgrade them with FKBP key technology..

Upgrade your existing fermentation process

As well you can use existing cow dung storages be easily integrated in existing biogas plants to upgrade them with FKBP key technology

Operation

Optimizing the Biogas Production

In addition to cow dung different kinds of bio waste can be used in the process. The bio-waste is pre-treated to ensure optimal gas production. The energy potential of the bio-waste can be tested in laboratory.

FKBP produces 10 % - 15 % more biogas in amount than with traditional fermenters.

Easy to use and fully automated



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.

Maintenance

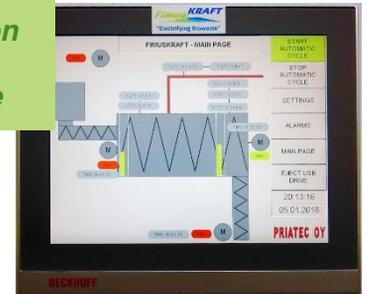
FKBP has unique design. It is based on constant FIFO-treat for the bio-waste.

All maintenance work can be carried out from outside of the reactor-> no production breaks-

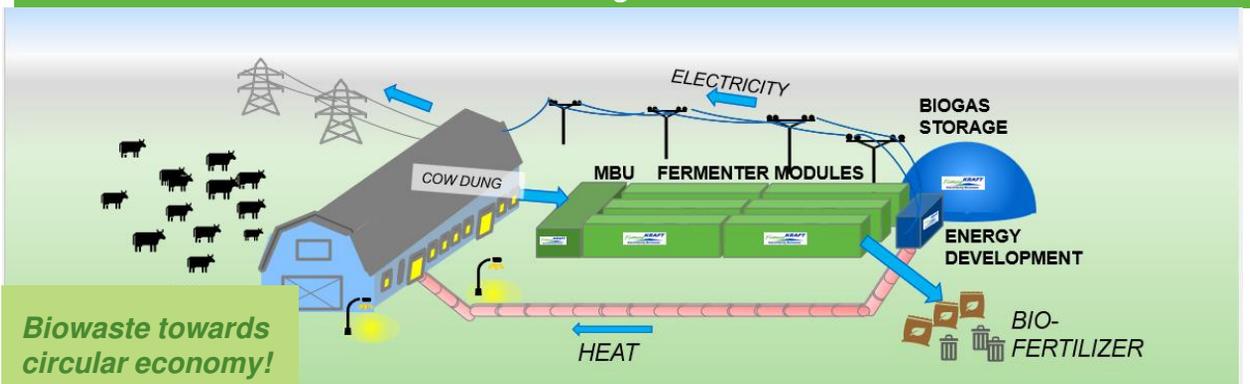


No production breaks for maintenance

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



FimusKraft Biogas Plant at Farm



Biowaste towards circular economy!