maxbiogas

End of the „food or fuel" dispute

Biogas plants need not compete with
food production.

- Food on the dinner plate
- Waste from agriculture and forestry to energy

End of the „food or fuel" dispute

Maxbiogas technology allows for the first time the efficient utilization of plant residues in biogas plants, as a result of their near complete fermentation into biogas. The grain of corn, rye or wheat, or the food parts of other crop plants are used to produce foodstuffs, while the plant residues, e.g. straw, are used for biogas production.
This is the solution of the "food or fuel" problem.
For farming the use of maxbiogas technology offers enormous advantages.

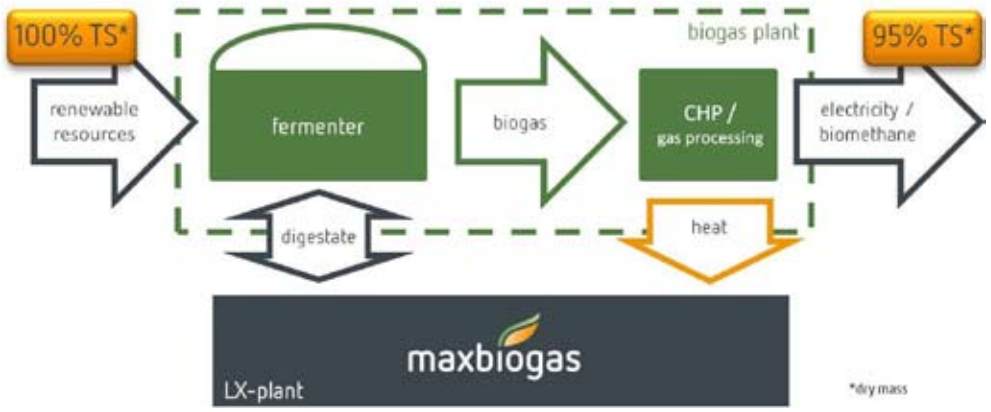
· It permits extra revenues from biogas as a by-product of food production!

· It allows for the highest flexibility in substrate choice! Biogas plant operators may choose substrates according to current economic conditions and employ them in their biogas plants.

· It enables new plants such as Miscanthus and hemp to be used in biogas production. These can be grown on mediocre soil with high biogas yields so that in future good soil can be reserved exclusively for food production.

Technology

Maxbiogas technology is based on known processes from the paper industry. In this processes lignin is separated from cellulose. The main innovation of the maxbiogas process is based on the adaptation to the general thermal conditions of biogas plants as well as the recovery of the hemicelluloses. Processes which originally needed 150 bar and 200°C are now realised at 70°C and at normal pressure. This means, that in the maxbiogas process no additional thermal energy is required beside the waste heat from power generation or from gas purification.



The easiest application is the pre-treatment of biogas digestate. The solid parts of the digestate are mainly composed of cellulose und hemicelluloses which were not available for biogas production. The maxbiogas LX-plant pre-treats the digestate in such a way that it is transformed almost completely into biogas in the biogas plant fermenter. The energy used by the maxbiogas process is supplied by the power generation or by the gas purification of the biogas plant.

About maxbiogas

The company maxbiogas is developing sustainable technologies and plants for renewable energies and plant resourses. For more information please contact Dr. Katrin Streffer (katrin.streffer@maxbiogas.com).