

# Biogas plant for waste

- Reduce emissions
- Produce energy from waste
- Increase profitability

## References since 2005

**HUNTSTOWN**  
Biogas Plant, Ireland



# Biowaste: Anaerobic fermentation of 92,000 t/a of waste (42,000 t/a biowaste and 50,000t/a organic waste from supermarkets and restaurants)  
# Thermal pressure hydrolysis process  
# 2018/19: 4 x 4,900 m<sup>3</sup> digester

**QINHUANGDAO**  
Biogas Plant, China



# Kitchen waste, pre-treatment with hydrocyclone, 1 hydrolysis tank  
# Biogas upgrading system, biomethane used as vehicle fuel  
# 2013/14: 2 x 3400 m<sup>3</sup> digester

**IM BRAHM**  
Biogas Plant, Germany



# Food waste, Biogas plant & extensions  
# 2005: 1490 m<sup>3</sup> digester, 760 kW<sub>el</sub>  
# 2011: Additional digester & 2 CHP  
# 2013: Storage tank with gas holder roof (6,000 m<sup>3</sup>)  
# 2016: Digestate separation

## Lectures / Publications / Videos

**FISCHER, T. and Dr. K. Backes 2013**  
**Regenerative Energy from Industrial and Municipal Organic Waste**

The twenty-eight international Conference on solid waste technology and management  
Philadelphia, PA U.S.A. - March 10-13th. 2013  
(www.solid-waste.org)



Regenerative Energy from Industrial and Municipal Organic Waste

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# Collection of municipal organic waste  
# Pre-treatment  
# Type of digestion  
# Contaminants of source separated municipal organic waste

**FISCHER, T., Dr. K. BACKES and KRIEG, A. 2007**  
**Biogas production from gut contents and low value offal**

Ninth International Symposium „Rendering - a flexible resource“, Cairns/North Queensland, Australia  
18-20th July 2007, p. 97-103

**Biogas production from gut contents and low value offal**

Torsten Fischer, Katharina Backes, Krieg & Fischer Ingenieure GmbH, Germany

**Abstract**

Biogas is a regenerative energy source produced from organic material under anaerobic conditions. A biogas plant is a valuable addition to a slaughterhouse because it solves the problem of

the disposal of slaughterhouse by-products like

demand in Germany. In total about 11.8% of electricity was provided by renewable energy sources in 2006 (BMU 2007).

Krieg & Fischer Ingenieure GmbH was founded in 1999 by Andreas Krieg and Torsten Fischer as an engineering office with long experience in bio-



# International Symposium Australia  
# Examples of two different biogas plants using substrates similar to slaughterhouse waste

**Video made by Krieg & Fischer Ingenieure GmbH**  
**Biogas plant tailor-made by Krieg & Fischer Ingenieure GmbH**

February 2019



# Services  
# Planning and construction of tailor-made biogas plants  
# Explanation video with managing director Torsten Fischer

## Brochure

**Biogas Plants:**  
Engineering • Construction  
Operation • Optimization



**Biogas Plants**  
Engineering • Construction  
Operation • Optimization

The sustainable and intelligent way of producing renewable energy and managing waste



# Tailor-made biogas plants  
# Independent engineering office  
# Experience with different feedstock  
# Technical details of biogas plants  
# 160 references worldwide