

Biogas plant for the industry



Krieg & Fischer Ingenieure GmbH

- ✓ Reduce emissions
- ✓ Produce energy from waste
- ✓ Increase profitability

References since 2007

PRINCE EDWARD ISLAND Biogas Plant, Canada



Input:
Potato raw material, oil, potato sludge

Digester:
Glas coated steel tanks
4 x 5,500 m³

RIO CUARTO II Biogas Plant, Argentina



Input:
Thin stillage, a residual material from bioethanol production

Digester:
Glas coated steel tank
8,000 m³

FUKUOKA Biogas Plant, Japan



Input:
Vegetable waste, residue of shochu, sludge from WWTP, okra, gluten

Digester:
Enamelled steel tank, 2 x 5,000 m³

Lectures / Publications / Videos

THIES, R., LATINOVIC, S. and Dr. K. BACKES 2021
Delving into the integration of biogas and bioethanol production in Argentina with Krieg & Fischer Ingenieure and Bioelectrica: **"A match made in heaven."**
Publication in journal *Bioenergy-Insight*,
Edition Jan/Feb, Volume 12 Issue 1, S. 32 ff (2021)

Bioenergy biogas
Delving into the integration of biogas and bioethanol production in Argentina with Krieg & Fischer Ingenieure and Bioelectrica

A match made in heaven

R In Cuerto biogas plant in Argentina demonstrates that biogas can be successfully included in the bioethanol value chain. Based on this project, anaerobic digestion (AD) offers a proven solution to the stillage from corn-based bioethanol production that, combined with high temperature, acidity, and nitrogen components, such as high proteins, high sulphur content, and other unbalanced nutrients. These disadvantages must be compensated through adequate process design. With 30 years of experience in biogas sector and the team Bioelectrica plant designed to process 130,000 tonnes per annum of thin stillage from corn-based bioethanol production. The reactor tank and equipment needed to be designed according to highly corrosive conditions. A continuous stirred tank reactor system was chosen.



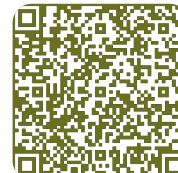
- # Thin stillage / Bioethanol production and biogas
- # Helping to achieve climate goals
- # Biogas World Expo AWARD 2020, Argentina
- # Reducing water, energy, urea etc.

Video made by *Biogas Channel*
Bioethanol: An Interview with Biogas Channel
Rio Cuarto, Argentina: Synergy effects between biogas and bioethanol
Biogas Channel, March 2022



- # Integration of biogas and bioethanol production
- # Project in Argentina, Biogas plant Rio Cuarto II
- # Including anaerobic digestion in bioethanol value chain

Video made by *Deutsche Welle*
Energie aus Abfall - Biogasanlage für Russland
Im russischen Belgorod hat ein deutsches Unternehmen das erste Bio-Heizkraftwerk aufgebaut.
Deutsche Welle, April 2013



- # Energy from waste, Russia, Belgorod
- # Sewage sludge, slaughterhouse sludge
- # Large agriculture, industrial biogas plant

Brochure

Biogas Plants:
Engineering • Construction
Operation • Optimization



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