

Biogas plant for Renewable-Natural-Gas



Krieg & Fischer Ingenieure GmbH

- ✓ Produce regenerative energy
- ✓ Reduce emissions
- ✓ Increase profitability

References since 2009

SEMD

Biogas Plant, Germany



Input: Corn silage
Gas production: 3,2 Mio. m³/a biogas; injection into grid
Digester: Prestressed concrete prefabricated, element tank 2,500 m³

VIERVERLATEN

Biogas Plant, Netherlands



Input: Sugar beet pulp, sugar beet fragments, potato waste
Gas production: 16.7 Mio m³/a biogas, 10.5 Mio m³/a RNG; injection into grid
Digester: Glas coated steel tank 4 x 4,600 m³

JCBE DERBY

Biogas Plant, UK



Input: Hydrolised kitchen Cat. 2, paper & cardboard waste, straw
Gas production: 1,200 m³/h biogas, over 6 Mio. m³/a RNG
Digester: Concrete steel tank 2 x 5,300 m³

Lectures / Publications

FISCHER, T. and LATINOVIC S. 2022

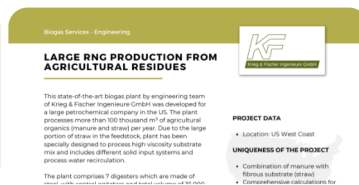
Technical Challenges in Biogas/Biomethane Plants for Production of Biofuels

Advanced Biofuel Forum, Amsterdam 30.11-01.12.2022



- # Biomethane supply chains
- # Expert witness reports
- # Biogas plants common deficiencies
- # RNG plant case study
- # Education of biogas plants operators

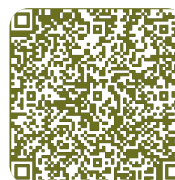
THIES, R; GUENTHER, C. and S. LATINOVIC 2022
Showcase projects by Krieg & Fischer in 2021/2022
 in Biogas World Showcase Report, edition September 2022, S.86
 BIOGASWORLD MEDIA INC
 September 2022



- # Agricultural residues
- # Combination of manure with fibrous substrate (straw)
- # Comprehensive calculations for adapted design for high viscosity substrate mix
- # Biogas production 4.000 m³/h

FISCHER, T. and Dr. K. BACKES 2019

The real engineering challenge when implementing biogas plants with biogas upgrading and mobility
 IBBK-Conference: "Fortschritt bei Biomethan-Mobilität", international conference with exhibition and excursion, 15.-17th October 2019, Akademie Schloss Kirchberg, Schwäbisch-Hall, Baden-Württemberg



- # RNG engineering challenge
- # Concept analysis
- # CNG fueling station
- # Relevant technical regulations
- # Hazardous areas

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