



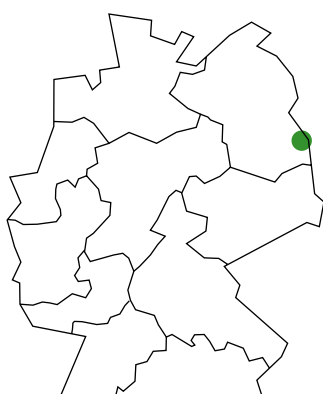
**EnviTec  
Own Plants**

# Gas Upgrading with CO<sub>2</sub> Liquefaction in Forst

REDII-certified Biomethane for the  
CO<sub>2</sub>-neutral Fuel Market



## Overview of the Biogas Plant in Forst



More information about this project:



- Location:** 03149 Forst, Lausitz/Brandenburg, Germany
- Capacity:** Approximately 130,000 MWh/year of green energy (= gas for 8,000 households): 1,400 Nm<sup>3</sup>/h biomethane and approx. 16,000 t/a bio-LCO<sub>2</sub>
- Commissioning:** 2014
- Feedstock:** Poultry litter (approx. 60,000 t), maize silage (approx. 30,000 t)
- Key Features:** Nearly full coverage of the plant's electricity demand through a 750 kWp ground-mounted photovoltaic system and a 600 kW biomethane CHP unit; production of biomethane that qualifies as a CO<sub>2</sub>-neutral fuel thanks to REDII-compliant feedstock selection.

**130 GW**  
biomethane per year

**16,000**  
tons bio-LCO<sub>2</sub>  
per year

»With an investment volume of approximately € 35 million, the Forst plant is part of the largest investment program in our company's history, totaling around € 200 million. By expanding our plants, we are increasing our biomethane production to 400 GW/a, aligning with the EU's current goals. The REPowerEU plan aims to scale up biomethane production in Europe to 35 billion Nm<sup>3</sup> by 2030.«

Olaf von Lehmden, CEO of EnviTec Biogas AG



## Sustainable Technology for a Future-Proof Operation

Our plant produces 76 GWh of REDII-compliant biomethane for fuel use each year. This means that, thanks to sustainable feedstocks and state-of-the-art upgrading technology, it meets the strict requirements for use in the transport sector. Through the natural gas grid, it can be accessed where needed – either as bio-CNG for direct use or further processed into bio-LNG. As part of the GHG quota system, biomethane as a fuel is a key technology for reducing CO<sub>2</sub> emissions and offers attractive economic benefits for companies required to meet regulatory obligations in the transport sector.

In addition to biomethane, the CO<sub>2</sub> separated during gas upgrading is also utilized in Forst. It is compressed, liquefied, purified, and stored until collection. This food-grade CO<sub>2</sub> is an essential raw material, widely used in the beverage industry for carbonation. Furthermore, it serves various applications, including cooling, freezing, and polymer production in the chemical industry. Additionally, bio-LCO<sub>2</sub> plays a crucial role in synthetic fuel production, including kerosene.



The bio-LCO<sub>2</sub> storage tanks (above) have a capacity of approx. 300 m<sup>3</sup>. In the liquefaction hall (left), the separated carbon is converted into liquid CO<sub>2</sub> and then stored in the tanks for further distribution.



- 20+** years experience in building and operating biogas plants
- 700+** biogas plants
- 100+** biomethane plants
- 10+** years experience in EnviThan gas upgrading
- 87** biogas plants in own operation
- 97%** average capacity utilization of own plants
- 700+** employees

#### EnviTec Biogas AG

Industriering 10 a  
D-49393 Lohne  
Tel.: +49 4442 8016 8100  
Fax: +49 4442 8016 98100

Boschstraße 2  
D-48369 Saerbeck  
Tel.: +49 2574 8888-0  
Fax: +49 2574 8888-800

[info@envitec-biogas.com](mailto:info@envitec-biogas.com)  
[www.envitec-biogas.com](http://www.envitec-biogas.com)