

The logo for Verbio, featuring the word "Verbio" in a bold, italicized, green sans-serif font.

*Biofuel and Technology*

A large green rectangular area with two white abstract shapes. The shape on the left is a vertical bar with a rounded top and a pointed bottom. The shape on the right is a diagonal bar that tapers to a point at the bottom right.

**VERBIO Biomethane  
- next generation technology –**

**NER 300 VERBIOStraw**

**VERBIO Vereinigte BioEnergie AG**

**Dr. Schlimbach**

**Bratislava, November 29<sup>th</sup>, 2016**

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# 1. Company Profile

**VERBIO** is one of the leading independent producers of biofuels and the only industrial-scale producer of biodiesel, bioethanol and biomethane in Europe.

We are a **technology based company**, improving our biorefineries with innovative products and technologies developed by us.

## Main products

<b>Verbiodiesel</b>	<b>Verbioethanol</b>	<b>Verbiogas</b>
450.000 t	260.000 t	600 GWh

## Co-products

Pharmaceutical Glycerine, Phytosterol,  
Protein-rich livestock feed, Fertilizer



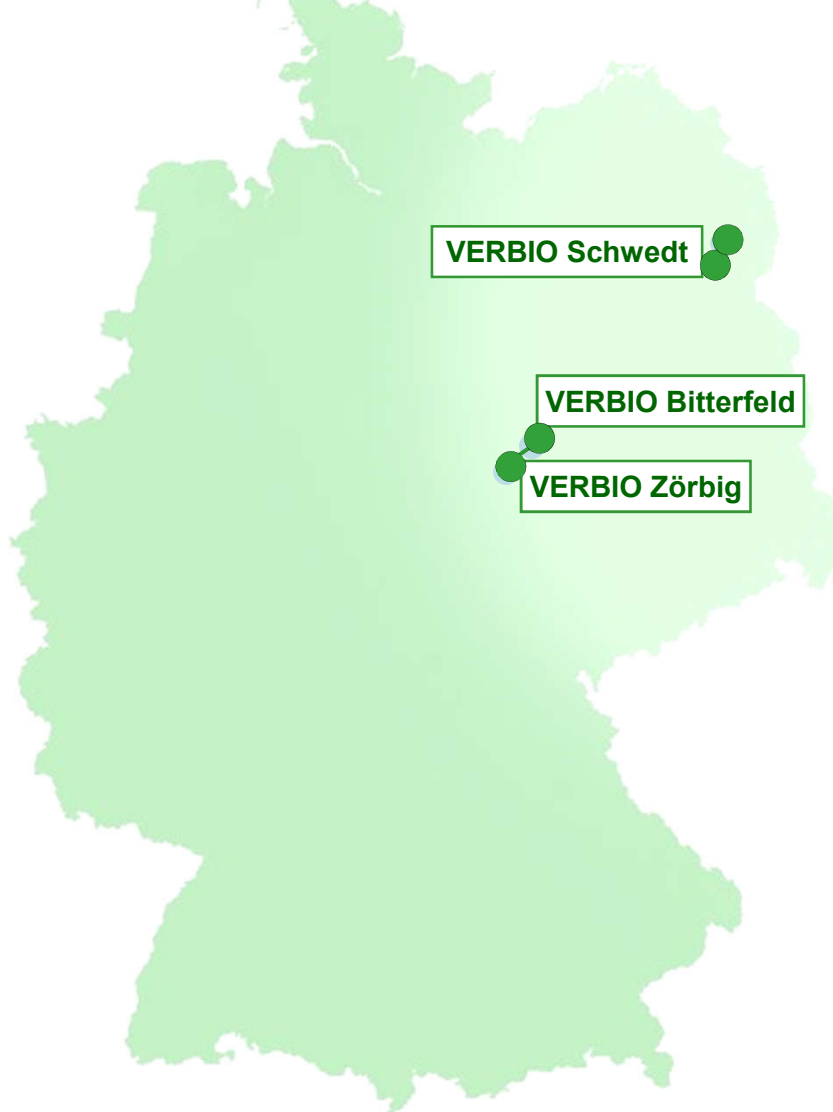
# 1. Company Profile

## Milestones in history

- 2015** sterol production line
- 2014** **100% straw – biomethane plant**
- 2011** **straw processing pilot project**  
for biomethane production
- 2010** biomethane production facilities  
in Zörbig and Schwedt
- 2006** VERBIO AG is founded  
and floated on the **stock exchange**
- 2003/  
2004** biodiesel + bioethanol plant in Schwedt  
bioethanol plant in Zörbig
- 2001** Construction of first biodiesel plant  
in Bitterfeld

# 1. Company Profile

## Production facilities



## Key financials 15/16

Production (mt)	688 362
Sales (EUR mill.)	654.3
EBITDA (EUR mill.)	73.1
EBIT (EUR mill.)	52.0
EPS (EUR/share)	0,77
Equity ratio (%)	78,7
Operating Cash Flow	76,3
Net Cash (EUR mill.)	65,6

***Verbio***

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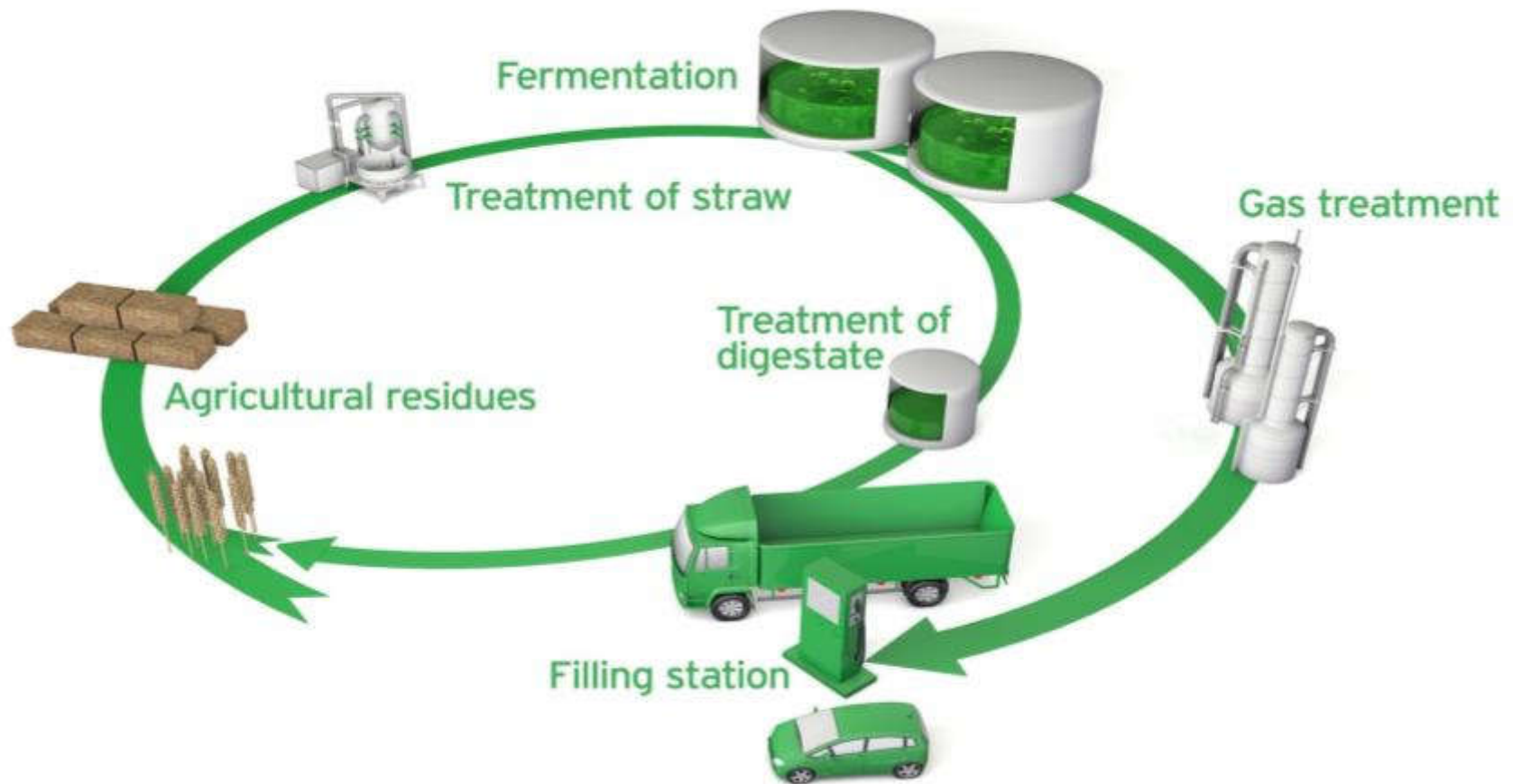
**VERBIOStraw Technology**

**NER 300**

## 2. VERBIOStaw Technology

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### Production Cycle







## 2. VERBIOStraw Technology

### Key Facts of VERBIO's Straw Plant

- ✓ build on our design and by our engineering department
  - ✓ Mono straw technology developed in our R&D department since 2009
  - ✓ All straw types usable
  - ✓ located at our biorefinery in Schwedt
  
- ✓ **Our Straw Plant was awarded by the NER 300 program**
  - ✓ Funding based on our innovative pure straw technology
  - ✓ No up front funding, only support per produced MWh of energy
  
- ✓ plant started at 4<sup>th</sup> of October 2014
  - ✓ Starting capacity 8 MW
  - ✓ Final capacity 16.5 MW in 2019
  
- ✓ Current straw feeding rate
  - ✓ 3 - 4 mt/h (goal 4 mt/h)
  - ✓ final feeding rate 5 - 6 mt/h (2017)





## 2. VERBIOStraw Technology

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**Straw bales needed  
for annual energy demand  
of these cars**





## 2. VERBIOStraw Technology

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### Straw technology by Verbio

„The next generation of biofuels“

- ✓ Highest efficiency
- ✓ Green & sustainable mobility
- ✓ Local supply chain and local employment
- ✓ Lowest Greenhousegas Emissions
- ✓ Energy security
- ✓ 100 % Straw





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**Thank you for  
your attention!**

**VERBIO Vereinigte BioEnergie AG**

Ritterstraße 23 • 04109 Leipzig  
T: +49 (0) 341 308530-0 • F: +49 (0) 341 308530-999  
info@verbio.de • www.verbio.de