Pioneering green solutions



Verbios Bioraffinerien als Quelle für erneuerbaren Kohlenstoff für die Chemische Industrie

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Dr. Andreas Kohl VCI Innovationskongress 01.09.2025 Halle

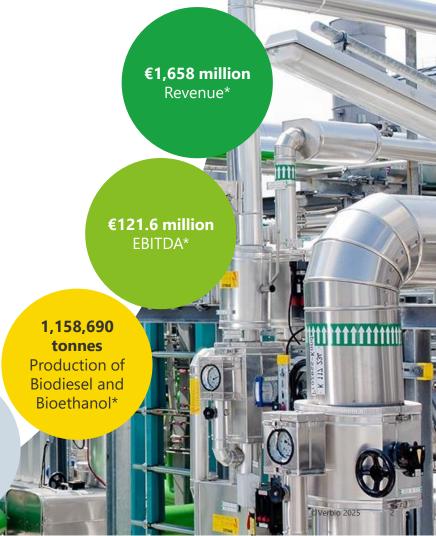
# **Pioneering green solutions**We are shaping a sustainable future

In our biorefineries, we process raw materials and residues from regional agriculture into climate-friendly fuels, green energy, and renewable products for the chemical and agricultural industries. We also supply high-quality components made from sustainably produced biomass for the feed and food industries.

Verbio shares (ISIN DE000A0JL9W6 / WKN A0JL9W) have been listed in the Prime Standard segment of the Frankfurt Stock Exchange since October 2006.

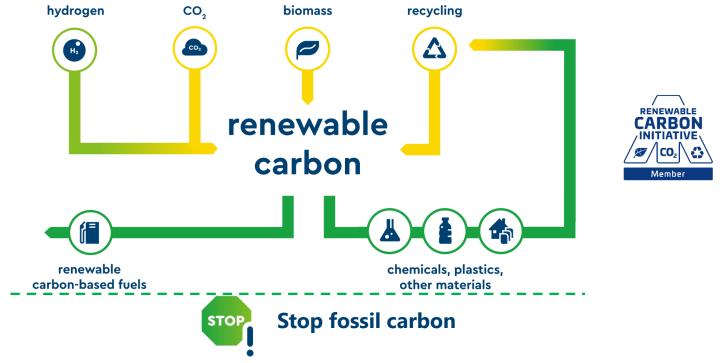
Our headquarters are located in Zörbig, Germany.

**1,100 GWh**Production of
Biomethane
(RNG)\*



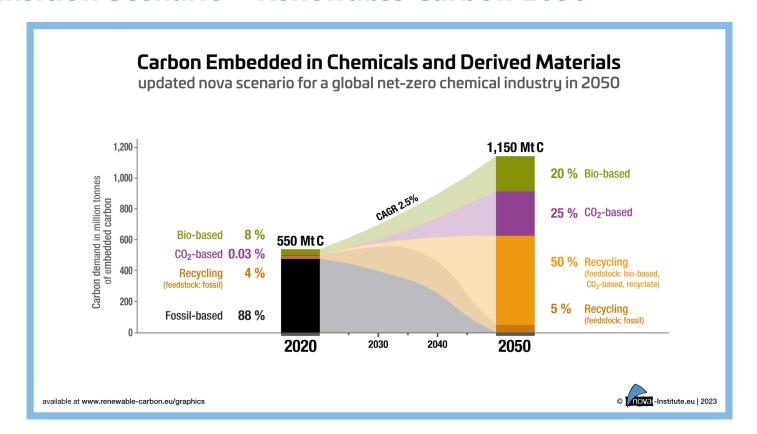


# Renewable carbon for the Chemical Industry





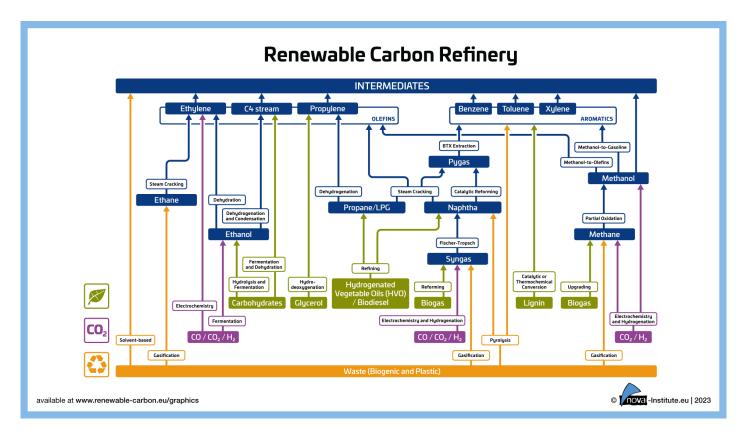
## **Transition Scenario – Renewable Carbon 2050**



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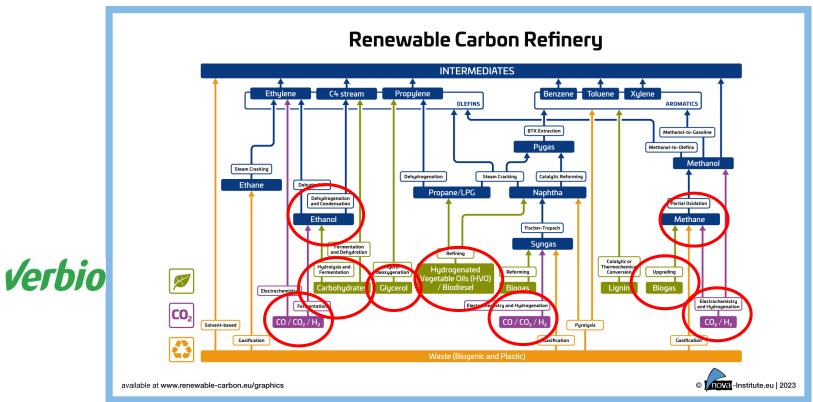
# Renewable carbon streams



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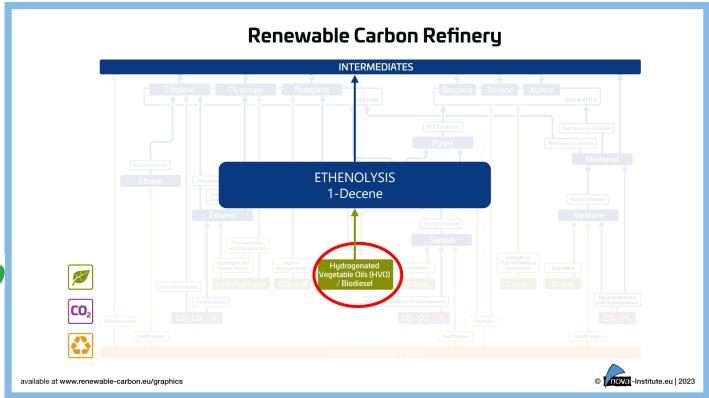
## Renewable carbon streams



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# **Renewable carbon streams**



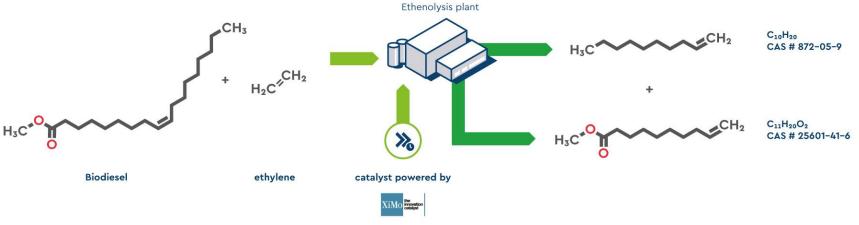




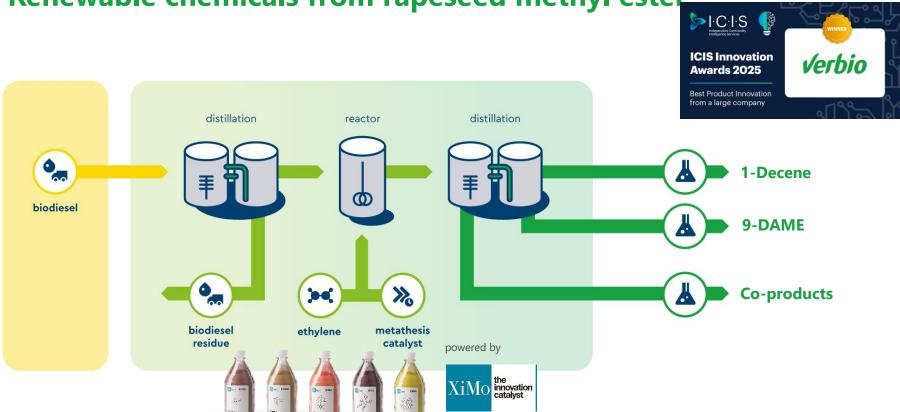
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# Renewable carbon products based on biodiesel





Renewable chemicals from rapeseed methyl ester



Verbio

### 1-Decene

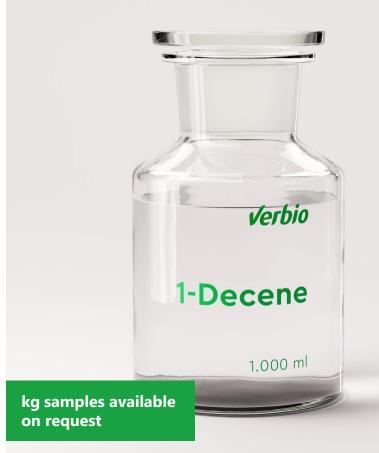


#### production volume:

17,000 t/a

#### characteristics:

- Renewable Drop in 1-decene
- RCI = 0.9
- Enables customers to change existing products to a renewable source
- Known application as lubricant, as coating agent in food, in surfactants, in polymers
- e.g. Enables green PolyAlphaOlefins



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# 9-DAME (9-Decenoic acid methyl ester)

#### production volume:

32,000 t/a

#### characteristics:

- Bifunctional renewable chemical
- RCI > 0.8
- So far with limited supply for the industry
- Highly interesting chemical profile
- Based on European rapeseed oil
- Known applications in surfactants, lubricants, solvents and polymers



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# Octadecanedioic acid (ODDA) – expansion of portfolio

#### **Characteristics Octadecanedioic acid (ODDA)**:

- High purity
- RCI = 1
- Low GHG emission profile
- Local European supply chain
- building block for PA, PU, PElike and polyester, lubricants...







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**Ethenolysis Bitterfeld Germany** 



Our new ethenolysis plant near Leipzig

**Existing biorefinery** 

• Site	2023
Basic Engineering	2023
• Permissions	2024
Detail Engineering	2024
Construction	2024
<ul> <li>Commissioning</li> </ul>	2026
Production	2026





#### New production facility for renewable chemicals at the Bitterfeld site

Ethenolysis plant based on rapeseed methyl ester (biodiesel)

**Total investment:** €80 – 100 million

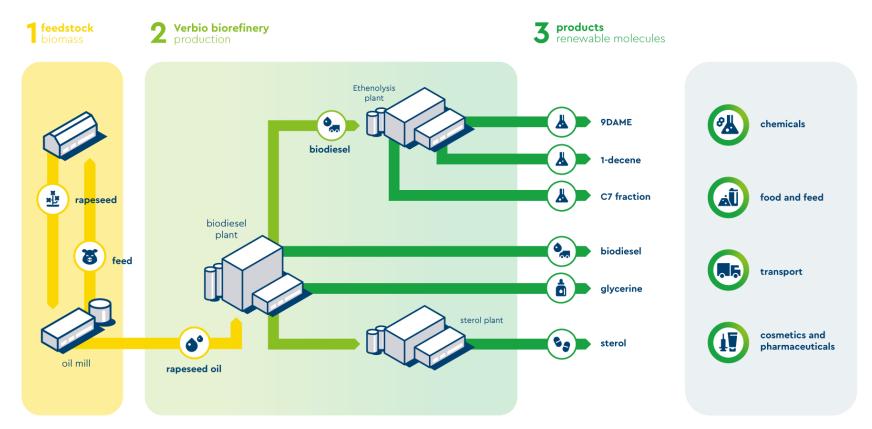
#### **Production capacity:**

60,000 tonnes per year of renewable chemicals





# Our core biorefinery concept on plant oil





# **Summary**

- Verbio will provide about 60 kta of biobased renewable carbon products to specialty chemicals industry
- Verbio's specialty chemicals starting 2026
- Verbio's main products 9-DAME and 1-DECENE
- Verbio's products are based on RME with low CO<sub>2</sub> footprint
- Mo/W and Ru based metathesis catalysts production at scale



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# Pioneering green solutions

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