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INSTITUTE OF ENERGY PROCESS ENGINEERING AND CHEMICAL ENGINEERING

PROFESSORSHIP OF ENERGY PROCESS ENGINEERING

biogeniV

Green Methanol & Biomethane from Western Pomerania: From Production to Use Residual Material Gasification (bV-B2)

CHALLENGE

In the bV-B2 funding project, a new gasification technology for the utilization of previously unused biogenic residual materials is being developed and tested. The goal is to create climate-friendly and sustainable utilization options so that residual materials from the agriculturally shaped biogeniV alliance region can be converted into high-quality, efficiently transportable, and widely applicable products.

OUR PROJECT

The core of the project is the production of synthesis gas with the main components hydrogen and carbon monoxide. This gas serves as a starting point for numerous applications in the chemical and energy industries, including methanol production. The project thus contributes to reducing dependence on fossil resources, lowering CO_2 emissions, and building a sustainable bioeconomy. The work focuses on further developing existing gasification processes and adapting them to the specific characteristics of biogenic residual materials. The project investigates questions regarding gas quality, energy yield, and pollutant reduction, as well as possibilities for recovering valuable materials—such as phosphorus. In parallel, concepts are being developed to enable economic operation of the technology in smaller, decentralized plants. This will make it possible to use the typical residual material quantities in the region in a profitable and sustainable way.

PARTNERS

- Stralsund University of Applied Sciences, Institute for Regenerative Energy Systems (HOST)
- Cosun Beet Company & Co. KG (CBC)

FUNDING

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DURATION

September 2025 – August 2028 (3 years)

Gefördert durch:

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