



IEA Bioenergy
Technology Collaboration Programme

Task 42
Biorefining in a circular economy



Germany country update

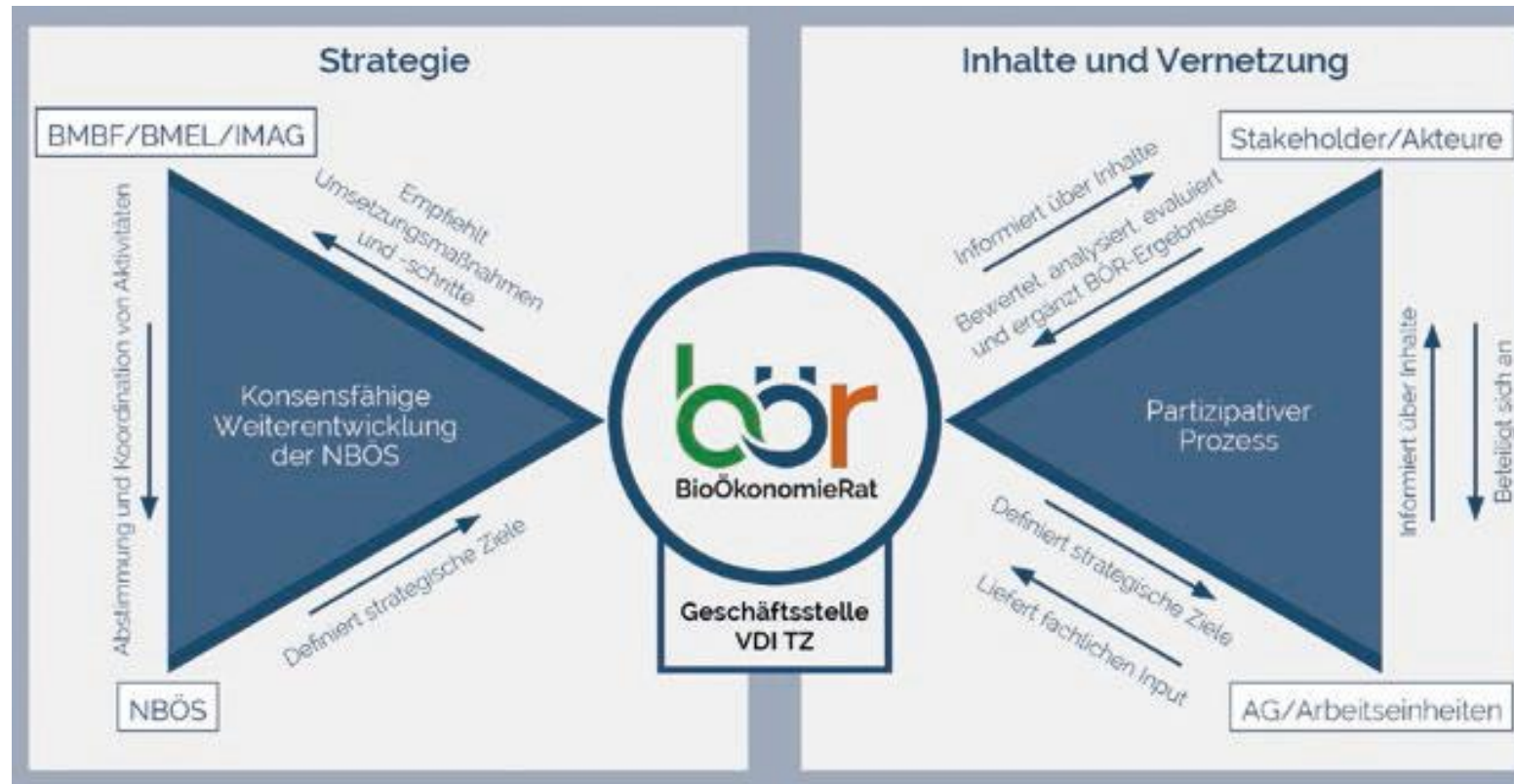
June 2022

Heinz Stichnothe, Thünen Institute

Braunschweig, 9th June 2022

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Germany's bioeconomy council



<https://www.biooekonomierat.de/en/>

Germany's bioeconomy council

Verankerung der Bioökonomie im Koalitionsvertrag zur 20. Legislaturperiode – eine Kurzbewertung

The Bioeconomy Council hands over its 1st working paper to representatives of the BMBF and BMEL

<https://www.biooekonomierat.de/en/>

UN SDGs

- Sustainable agriculture
- Transition fossil-based
- Cascade use
- Emission reduction
- Biodiversity loss
- Integrated strategies
- Cut red tape

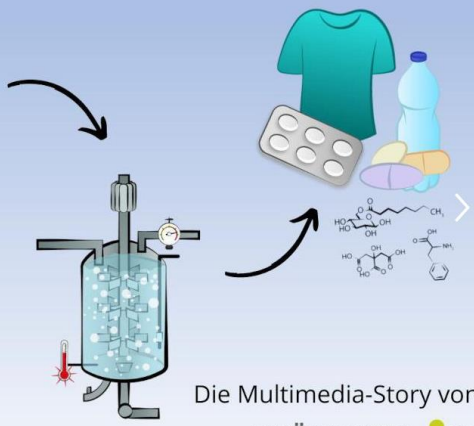
Germany's bioeconomy

Multimedia-Story

Entdeckungstour durch eine Bioraffinerie

Bioraffinerien sind die nachhaltigen Fabriken der Zukunft: Aus pflanzlichen Reststoffen werden hier Chemikalien als Bausteine von Alltagsprodukten hergestellt. Wie das Innenleben einer Bioraffinerie funktioniert, veranschaulicht die fünfteilige Multimedia-Story von biooekonomie.de.

→ Mehr erfahren



Die Multimedia-Story von **BIOÖKONOMIE**.DE

<https://biooekonomie.de/>

Hot topic: Green Hydrogen

Research cooperation with Australia

Hydrogen storage

Hydrogen from waste


Etc.

In-depth report

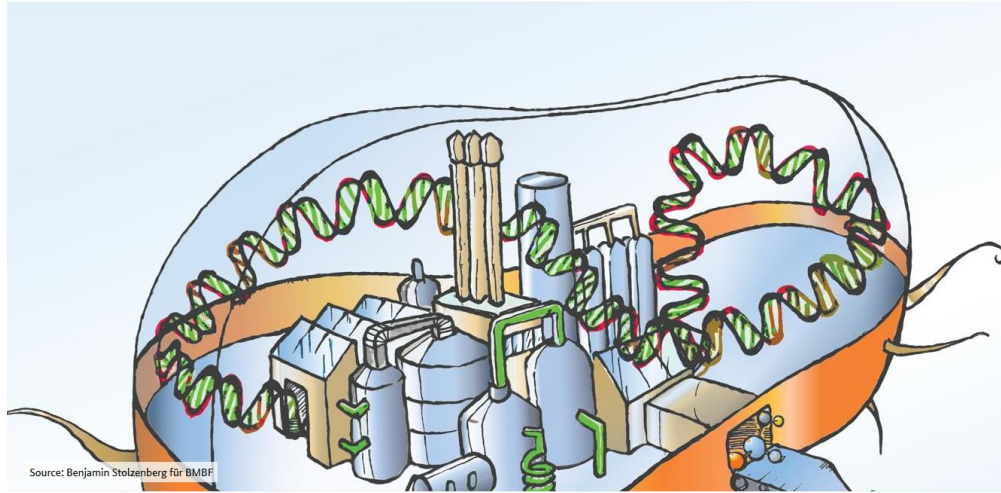
Plant-based meat substitutes - products with future potential

Vegetarian and vegan alternatives to sausage and meat are booming and have hit the middle of society. This dossier looks at the plant-based alternatives. It presents the most important resources and meat substitute products, market development, economic players and relevant funding projects.

→ Learn more



National Research Programm Industrial Bioeconomy



Purpose: scale-up processes and sustainable supply chain management

Three pillar approach

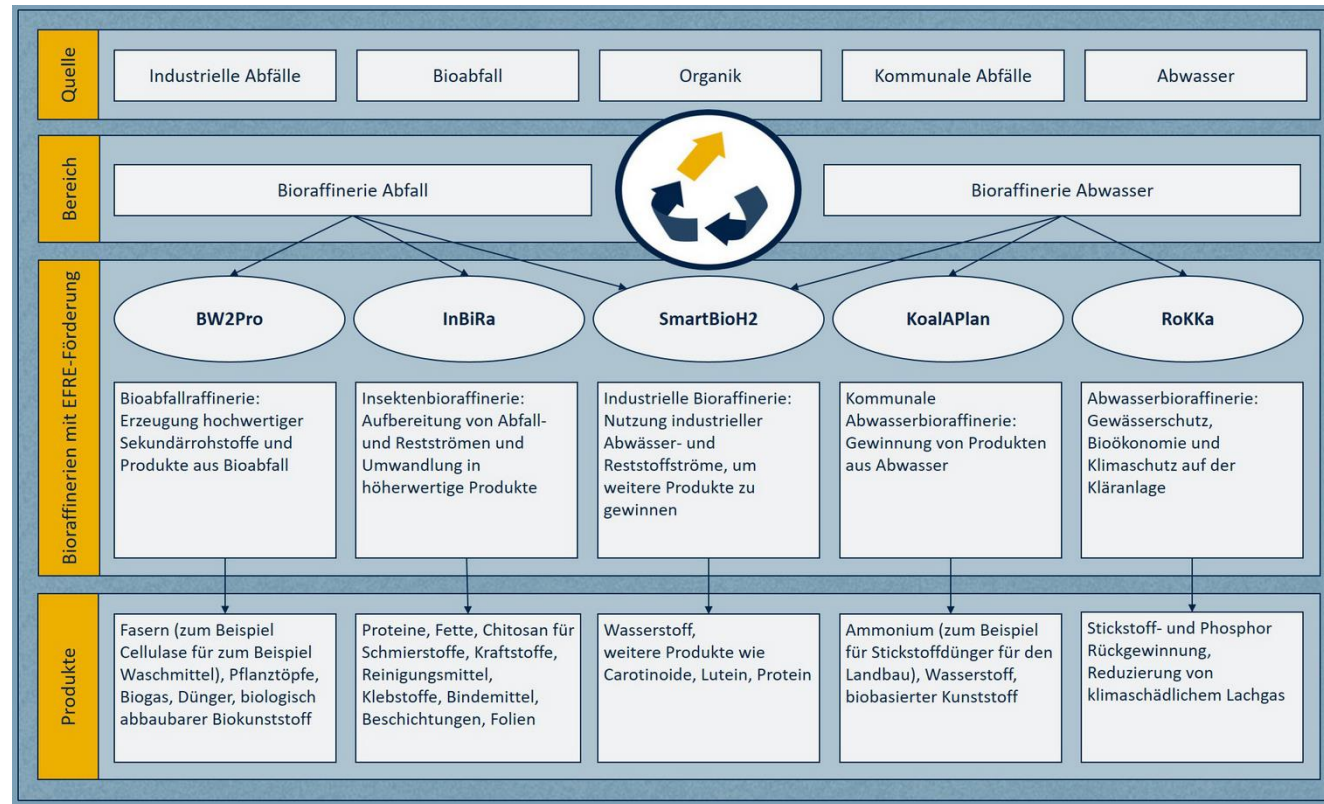
A TRL > 4 Target group SMEs

B TRL > 6 to 8 (any size)

C transition management, e.g. formation of clusters, novel supply chains, etc.

Federal State Baden-Württemberg Research Programme Bioeconomy (Bio-Ab-Cycling)

Biorefineries for value added products from waste and waste water



<https://um.baden-wuerttemberg.de/de/wirtschaft/biooekonomie/bio-ab-cycling>

Bioeconomy success stories

<https://biooekonomie.de/en/bioeconomy-in-germany/success-stories>



24.05.2022

Recycled fertilizer from manure and leaves

Researchers want to establish environmentally friendly fertilizer for agriculture from manure and leaves, thus offering farmers and municipalities a new source of income.

[→ Read more](#)



05.04.2022

From Elstar to Selstar

Researchers have developed a selenium-rich apple that can replace dietary supplements.

[→ Read more](#)



22.12.2021

Getting closer to sustainable plastics

Bio-based, biodegradable and with good technical properties: The requirements for new plastics are high - yet new PHB composites come very close.

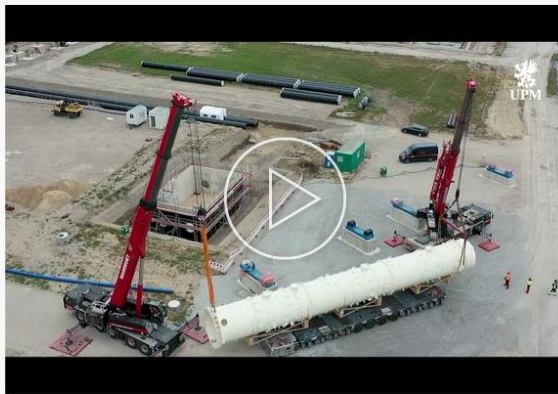
[→ Read more](#)

UPM Biochemicals builds a state-of-the-art biorefinery in Leuna

Feedstock: sustainably sourced wood

Products: BioMEG, BioMPG + lignin-based functional fillers

Our biorefinery under construction – watch the progress here



Once operational, our new biorefinery in Leuna, Germany, will ramp up to turn wood into next-generation biochemicals producing sustainable glycols and lignin-based renewable functional fillers. After the groundbreaking in 2020, the construction of the UPM biorefinery is in full swing. The technical start-up is estimated by the end of 2023.

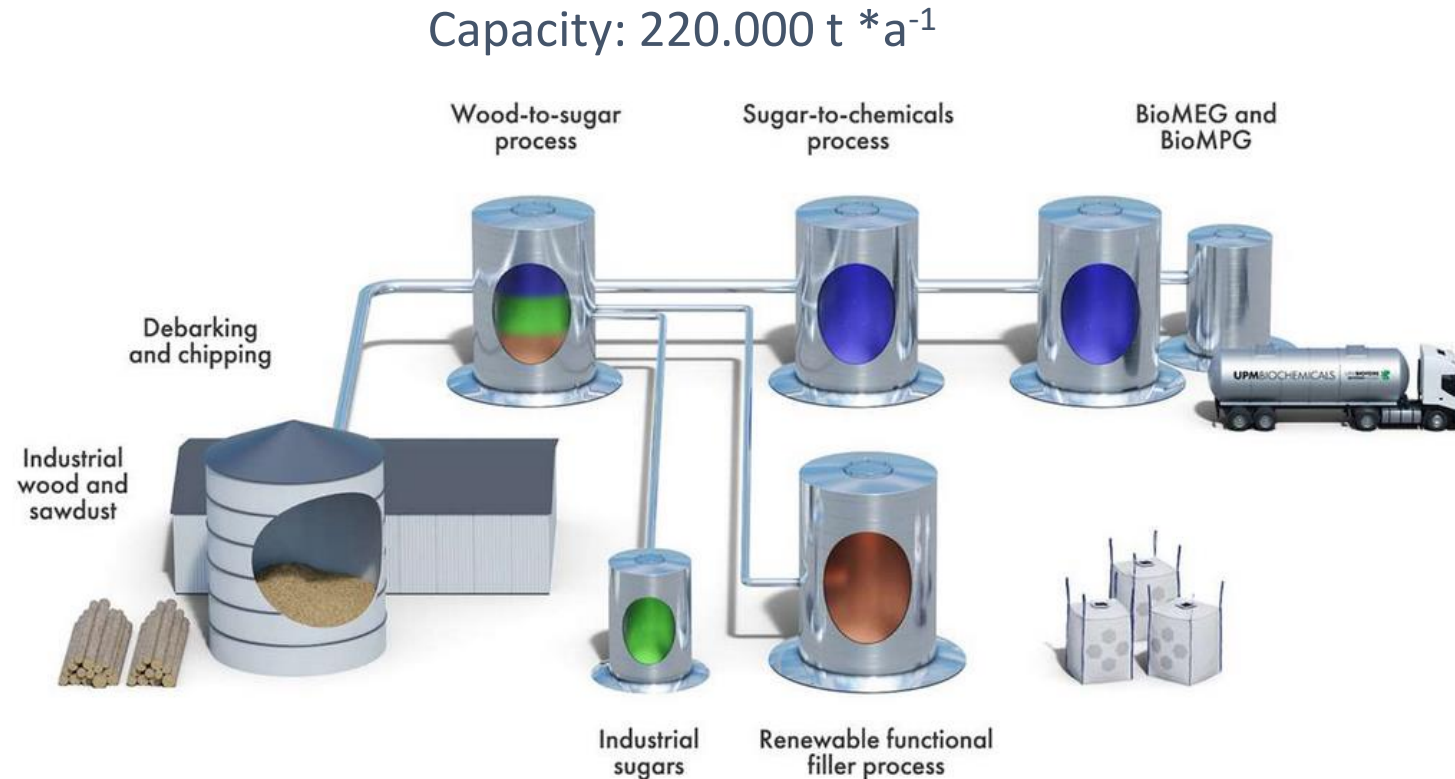
Recently, distillation column parts were moved to our site in an elegantly planned undertaking involving trains, trucks and heavy-duty carriages.

 Watch the groundbreaking video



<https://www.upmbiochemicals.com/about-upm-biochemicals/biorefinery-leuna/>

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