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www.dbfz.de

Deutsches Biomasseforschungszentrum



THE DBFZ

The DBFZ was founded in 2008 with the aim of setting up research bodies for all relevant bioenergy research fields, and of combining results from throughout the multifaceted German research community in this sector. The DBFZ's scientific task is to comprehensively and scientifically support the efficient integration of biomass as a valuable resource for sustainable power using applied research. This task includes technical, ecological, economical, social and energy elements along the whole process chain. The development of new processes, experiences and concepts is closely followed and supported by the DBFZ in close collaboration with industrial partners. The DBFZ also develops scientifically based decision-making tools for politics.

OUR SHAREHOLDER

The DBFZ's sole shareholder is the Federal Republic of Germany, represented by the Federal Ministry of Food and Agriculture (BMEL). Other bodies include the Supervisory Board and and the international Research Advisory Council. The Supervisory Board consists of representatives from the Federal Ministry of Food and Agriculture (BMEL), the Federal Ministry of Education and Research (BMBF), the Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (BMUV), the Federal Ministry for Digital and Transport (BMDV), the Federal Ministry for Economic Affairs and Climate Action (BMWK) and the Saxon State Ministry for Energy, Climate Protection, Environment and Agriculture (SMEKUL).

With support from

by decision of the German Bundestag

Federal Ministry of Food and Agriculture DBFZ

GETTING HERE:

Pictures/Illustration: DBFZ, Jan Gutzeit, Stefanie Bader

By train: to Leipzig main station. Take tram line 3/3E (towards Taucha/Sommerfeld) as far as the Bautzner Strasse stop. Cross the street, leave the car park on the right and use the main entrance of the DBFZ (House 1, Torgauer Str. 116). Please check in at the front office.

By car: on the A14 motorway. Exit at Leipzig Nord-Ost; follow signs for Taucha; then follow signs for Leipzig; then follow signs for Zentrum, Innenstadt. Turn off left after the "bft" filling station (see "By train" for further directions).

By tram: line 3/3 E towards Taucha/Sommerfeld; Bautzner Strasse stop (see "By train" for further directions)





SMART BIOENERGY

INNOVATIONS FOR A SUSTAINABLE FUTURE



"Smart bioenergy stands for the sustainable use of biomass as a building block for decentralised power supply systems, and a step towards a bio-based economy."

(Prof. Dr. Michael Nelles, Scientific Managing Director of the DBFZ)

WHAT DO WE RESEARCH?

Adopting biomass into the existing energy system involves many challenges and questions: how can energy efficiency be improved, how can usage competition be avoided, how can ground, water and air emissions be avoided, and how/should 'smart bioenergy' develop in the future?

These and more questions are competently and independently researched and answered at the DBFZ, the german centre for biomass research. The DBFZ's mission is to use applied research and technical solutions such as multifaceted concepts to develop the economically viable, ecologically sound and socially feasible use of biomass as energy with the largest possible system use.

Furthermore, scientific staff at the DBFZ comprehensively analyse potential areas of conflict between different goals as a result of expanding bio energy, and come up with forward-looking design approaches. The DBFZ's work is intended to expand knowledge of the possibilities and limits of the integrated use of bio materials as power in a bio-based economy, and to ensure the sustainably prominent role of Germany as a location of industry within this sector.

OUR VISION: SMART BIOENERGY

With its various areas of application (electricity, heat, fuel), biomass is the oldest and most flexible renewable energy resource. It also provides construction materials and raw materials for the chemical industry, contributing significantly to integrated material use in a bio-based economy. With its wide range of established and researched technical methods of energy provision, biomass is an important building block for the sustainable future of power. Alongside challenges regarding the sustainable production of biomass, the topic of the future will be the 'smart' use of biomass, where other renewable alternatives cannot be used or reach their limits. The smart integration of bioenergy into existing and future energy systems will require the comprehensive technological development of biomass use as energy within the heat and fuel sector but also with regards to flexibility and operational efficiency.

RESEARCH FOCUS AREAS AT THE DBFZ

In order to cover important bioenergy issues to the extent required for excellent research, the DBFZ came up with five research focal areas at the beginning of 2015. These are based on future developments as well as research challenges regarding the material use of biomass and its use as power (e.g. the national research strategy BioÖkonomie 2030, the BioÖkonomie national political strategy, the government's mobility and fuel strategy, the biorefineries roadmap etc.). Further cornerstones are political conditions, differentiators within the research landscape and, in particular, the use of the DBFZ's excellent equipment.

- Research Focus I: Systemic contribution of biomass (Contact: Dr. rer. nat René Backes)
- Research Focus II: Anarobic processes (Contact: Dr. agr. Peter Kornatz)

- Research Focus III: Biobased Products and Fuels (Contact: Dr.-Ing. Franziska Müller-Langer)
- Research Focus IV: SmartBiomassHeat (Contact: Dr.-Ing. Volker Lenz)
- Research Focus V: Catalytic emission control (Contact: Prof. Dr. rer. nat. Ingo Hartmann)

SCIENCE-BASED SERVICES

As a research institute dealing mostly with applied research, the DBFZ strives for close cooperation with project partners from the economy, and offers comprehensive commissioned research and science-based services equally directed towards politics, economy, associations, expert consultants and committees. Find out more on www.dbfz.de/en

