

DBFZ Deutsches Biomasseforschungszentrum

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Deutsches Biomasseforschungszentrum DBFZ gemeinnützige GmbH

TOOLS AND METHODS

The research focus "Systemic contribution of biomass" uses standardized data management tools to collect a wide range of data that can be used to monitor the development of the bioenergy market. On the basis of the data, the DBFZ offers a multitude of consulting services regarding strategy policy issues and marketrelevant decisions. In addition, methods for assessing the technical, environmental, social and economic effects of biomass use can be used to support decision-makers from politics and business. In order to assess sustainable raw and residual material availability, the DBFZ also develops a model that can be used to calculate regional, national and international biomass potentials for energy use.

KEY REFERENCE PROJECTS

- AG BioRestMon Working Group Biomass Residual Monitoring, BMEL/FNR, FKZ: 22019215 (running)
- Bioplan W System solutions Bioenergy in the heat sector in the context of future developments, BMWi/PTJ, FKZ: 03KB113A (running)
- BECOOL Brazil-EU Cooperation for Development of Advanced Lignocellulosic Biofuels, LCE22, EU-Project, H2020, GA: 744821 (started)
- Programme support of the funding programme "Biomass energy use", BMWi/PTJ, FKZ: 03KB001B (running)
- RecordBiomap Research Coordination for a Low-Cost Biomethane Production at Small and Medium Scale Applications, EU/Horizon2020, GA 691611 (running)
- Symobio Systemic monitoring and modelling of the bioeconomy, BMBF/PTJ, FKZ: 031B028C (running)

With support from

Federal Ministry of Food and Agriculture

GETTING HERE:

otos/Grafik: DBFZ, ECN, DREWAG/Peter Schubert, Jan Gutzeit, Stefanie Bader

By Train: Arrive at Leipzig Central Station; then take tram 3/3E (towards Taucha/Sommerfeld) to Bautzner Straße; cross the road, pass the car park on the right, straight ahead to the entrance of number 116, turn left after approx. 100m, and the DBFZ entrance is another 60m on the left.

By Car: Via the A14 motorway; take the Leipzig Nord-Ost exist, Taucha; towards Leipzig; head towards the centre; pass the bft petrol station and the DBFZ is on the left (see 'By Train').

By Tram: Tram 3/3E (towards Taucha/Sommerfeld); alight at the Bautzner Straße stop (see 'By Train').





RESEARCH FOCUS AREA

Systemic contribution of biomass





"Smart Bioenergy use in small, very precisely controlled plants will be a building block of integrated supply systems and be able to contribute to the sustainable energy supply of tomorrow."

(Dr. René Backes, Head of the research focus area)

CHALLENGES OF BIOMASS USE

Future biomass use must meet a wide range of needs. They include safeguarding food supplies, assuring security of supply in the mix with other renewables, creating innovative products and markets within the bioeconomy, climate and environmental protection, and, not least, rural development. This poses a major challenge in terms of implementation. In conjunction with the fact that biomass potential is limited, conflicts of aim and constraints on biomass use will inevitably arise. Those challenges can only be met by means of raw material resource strategies embedded in sustainability frameworks, and by prioritising key technologies for biomass use.

THEMATIC FOCUS AREAS

- Analysis and discussion of the quantitative and qualitative contribution of biomass in the future energy system
- Future demands on bioenergy technologies as a prerequisite for system integration
- Interaction of bioenergy sectors in the energy system of the future

SYSTEMIC CONTRIBUTION OF BIOMASS

The research focus area will contribute to the creation of sustainable bioenergy strategies at national and international level. To that end, it will identify regional and global biomass potential and investigate and assess the wide-ranging options offered by different biomass recovery concepts.



Interactive Bioenergy tool for the determination of biomass potentials (to be retrieved in german language at the address: www.dbfz.de/biomassepotenziale)

The primary aim is to answer methodological and technical system-related questions on the efficiency and sustainability of biomass use from economic, ecological and technical viewpoints, incorporating both the land resources used as well as treatment and conversion technologies specific to the energy source. The combination of these topic areas provides the basis for deriving strategies and recommendations for action for decision-makers in the political and business spheres.

POLICY ADVICE

By its very nature, research into the sustainable use of biomass as a material and energy source covers a wide range of different subject areas and levels of analysis. These must be regularly collated and processed in order to provide targeted assistance and support to decision-makers in government and industry. In this context, the DBFZ offers a wide range of consulting services for policy decision-makers. They include, for example, long-term monitoring of trends in bioenergy markets and, on that basis, support in framing policy instruments. The services also offer targeted support to policy decision-makers through the compilation of commentaries and position papers.

Overview of services:

- Scientific support to strategic policy development and derivation of recommended action
- Commentaries on legislative procedures and support in their development
- Development and implementation of suitable monitoring systems under changing (research) policy framework conditions

