



BRAZIL

DBFZ Research and Project Country Profile Activities & Partners



DBFZ Activities

DBFZ and Brazil – this is a long history of joint activities. Since 2005 DBFZ has realized several R&D projects, in particular with a regional focus on the Southern and South-Eastern region. Based on these activities, the DBFZ has established strong relationships with universities, research institutions and with local, regional and national public institutions. In addition, DBFZ actively supports the exchange of young scientists and has already hosted a number of Brazilian guest researchers.

DBFZ R&D and Project Focus

The main focus has been on the sustainable production of biogas using residues from the bioethanol production (especially vinasse) and manure. In particular:

- Support for the establishment of biogas research laboratories
- Research and capacity building on innovative biogas production
- Creation of a research network with continuous exchange of junior and senior scientists

DBFZ Future Activities

Brazil is an important country of DBFZ activities in Latin America. DBFZ will strengthen and extend its current activities mainly in the field of biogas production from agricultural and municipal residues and organic waste and the development of biorefinery concepts. In particular the DBFZ aims to:

- Support the implementation of pilot plants (innovative concepts for specific residues like vinasse, manioc, manure, municipal waste, etc.)
- Transfer and adapt concepts of flexible biogas plants
- Establish a strong research network with Universities
- Support the continuous exchange of scientist and PhD students

DBFZ Partners

DBFZ has signed 16 cooperation agreements with actors from various sectors of the economy, administration and science.

Cooperation Agreements (Selection)	Brazilian Agricultural Research Corporation (Embrapa); Instituto de Energia e Ambiente da Universidade de Sao Paulo (USP); Universidade Federal do Rio Grande do Sul (UFRGS); Universidade Federal de Santa Maria (UFSM); Universidade Regional do Noroeste do Estado do Rio Grande do Sul (UNIJUI); ECOTERRA – Bio.
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Project References



Project Partners	
Universities	Universidade de Sao Paulo (USP); Universidade Federal do Rio Grande do Sul (UFRGS); Universidade Federal de Santa Maria (UFSM); Universidade Regional do Noroeste do Estado do Rio Grande do Sul (UNIJUI).
Companies	Biogastec Energie Assessoria E Projetos de Geracao Energetica LTDA; SCGAS Companhia de Gas de Santa Catarina; Akut Rotaria do Brasil.
Research	Brazilian Agricultural Research Corporation; LACTEC - Institute of Technology for Development.
Public	Consortio Intermunicipal de Saude do Noroeste do Rio Grande do Sul-Camara Setorial de Saneamento Basico (CISA); A OSCIP-Agencia de Desenvolvimento Regional do Norte e Noroeste do Estado do Rio de Janeiro; Ecoterra -Bio.

DBFZ Reference Projects (selected)

01/2014- 02/2014	Support for the characterization of the effluent of a planned biogas plant in Concórdia/SC (GIZ GmbH) The DBFZ supported the development of concepts as well as the evaluation of possible substrate-effluent balances for a planned biogas plant in Concórdia, which shall mainly treat organic residues of the local chicken and pork production, being highly abundant in all the west of the state of Santa Catarina.
07/2014- 03/2015	Contribution to the construction of a waste management center in Jundiaí (Uni Braunschweig) The DBFZ participated in the construction of an anaerobic stage in a waste management center. DBFZ established the laboratory, instructed the employees and hold seminars for the further education of the employees.
11/2015- 12/2016	Support of AKUT / Rotaria do Brasil in the baseline study biogas within the framework of the DKTI Brazil (AKUTBras / ARG AKUT Rotaria) The task was to sift through the biogas plant's global investment techniques and extrapolate the best alternatives for the Brazilian market. The focus for DBFZ was the determination technology for agricultural residues.

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07/2017-03/2018	Extraction of strategic raw materials using biomass in Brazil (BMBF/DLR) In this project, an optimized phytomining process was used to extract strategic raw materials from mining dumps or landfills with less effort than was previously customary. This should continue to counteract the ever-increasing scarcity of raw materials and help the environment and the country.
06/2017-05/2021	Brazil-EU Cooperation for Development of Advanced Lignocellulosic Biofuels (EU/Horizon 2020) The main objective of the BECOOL (EU) and BioVALUE (Brazil) projects is to strengthen EU-Brazil cooperation on advanced lignocellulosic biofuels. Information alignment, knowledge synchronization and synergistic activities on lignocellulosic biomass production logistic and conversion technologies are key targets of both projects and will bring mutual benefits.

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About DBFZ

DBFZ is the leading German research institute in the field of energetic and related material use of biomass. The DBFZ monitors and evaluates the most promising applications for bioenergy in theory and practice, realizing research and collaborative research projects at both national and international level, with partners and stakeholders from industry, administration, politics and academia. Currently about 180 scientists in the departments Bioenergy Systems, Biochemical Conversion, Thermo-chemical Conversion and Biorefineries carry out application-oriented R&D that also provides scientifically-based results to support informed political decision making.

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