



## CHINA

### DBFZ Research and Project Country Profile Activities & Partners



#### DBFZ Activities

In 2010 the DBFZ started its consulting, training and technology transfer activities in China in close cooperation with the Chinese Academy of Agricultural Engineering (CAAE). Since then DBFZ has extended its cooperation with the GIZ Office China and had been involved in the implementation of the SINO-German Biomass Utilization Project. In addition, the Scientific Managing Director of DBFZ, Prof. Dr. mont. Michael Nelles, was appointed Visiting Professor at the China University of Petroleum (CUPB) in 2014. Through the cooperation with CUPB a number of PhD students have been hosted at DBFZ for a research stay.

In 2017, State Administration of Foreign Experts Affairs (SAFEA) evaluated DBFZ and qualified it, as one of the few international research centres, for the Overseas Training Cooperation Framework Agreement. In the same year, DBFZ founded three virtual cooperation centers: the Sino-German Center for Biomass Research in Beijing (C-DBFZ Beijing) and the German-Sino Center for Biomass Research in Leipzig (C-DBFZ Leipzig) whose cooperation partner is, in each case, CAAE. On a regional level, DBFC launched the Sino-German Regional Center for Biomass Research in Anhui (C-DBFZ Anhui) whose cooperation partner is the University of Hefei. At the same university, Dr. agr. Walter Stinner was appointed professor for bioenergy and material flow management in 2018.

#### DBFZ R&D and Project Focus

The focus of DBFZ engagement in China has been on different biogas applications, in particular for straw and manure, and on the material and energetic use of (organic) waste:

- Support for the transfer of biogas technologies through 'best practice' demonstration projects
- Solutions for the utilization of straw and manure;
- Material applications for silica rich biomass;
- Training measures and training materials.

#### DBFZ Future Activities

DBFZ will primarily extent the cooperation with universities and research institutions. Joint activities focus on biogas applications and waste management:

- Support the research on biogas, especially from manure
- Development and evaluation of waste concepts
- Cooperation and projects dealing with rice husk and straw
- Support the exchange of scientist and PhD students



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### DBFZ Partners

The DBFZ has signed three cooperation agreements with research institutions in China and cooperates closely with the GIZ Office China.

Cooperation Agreements	Chinese Academy of Agricultural Engineering (CAAE), Institute for Energy and Environmental Protection; China University of Petroleum Beijing (CUPB), New Energy Research Institute (NERI); Hefei University.
Project Partners	Deutsche Gesellschaft für internationale Zusammenarbeit (GIZ) China PowerChina German RETech Partnership
Universities	China University of Petroleum Beijing (CUPB), New Energy Research Institute (NERI). China University of Agriculture (CAU) Tongji University Shanghai University of Hefei
Research	Chinese Academy of Agricultural Engineering (CAAE) Chengdu Institute of Biology

### DBFZ Reference Projects (selected)

08/2013-06/2014	<b>Feasibility study on the establishment of a Chinese-German biogas research and development center in China (GIZ GmbH)</b> This study is a feasibility study to build a Sino-German biogas research and development center. The aim of this project is to analyze the design options for the sustainable implementation of the intended center in China under the given development policy and partner-like framework conditions of both countries.
07/2014-11/2014	<b>Optimizing the use of biomass in China (GIZ GmbH)</b> Aiming to provide technical assistance and support to set up about 106 middle and large scale biogas plants in China. Against this background, it is the aim of this quotation to support the customer in promoting the project, presenting a greater public with the results and providing interested stakeholders with information about the project's main findings.
08/2015-12/2019	<b>Consulting Services for Biogas Project Hebei (BZINE - Beijing Zhongshida Institute of New Energy Co.)</b> In the Hebei region, 6 biogas plants are planned, which, however, will only be built by experts. The DBFZ is available here with its expertise in creating guidelines, ensuring quality and providing advice.
08/2017-10/2020	<b>Energetic use of agricultural residues in Germany and China (BMEL/FNR)</b> This project seeks theoretical and practical solutions for more effective use of the agricultural sector to better utilize the materials used in the production of biogas. At the same time, work is being done on how the use of straw and manure can counteract the extent of pathogens.

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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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