

German Biomass Research Centre

Research for the Energy of the Future

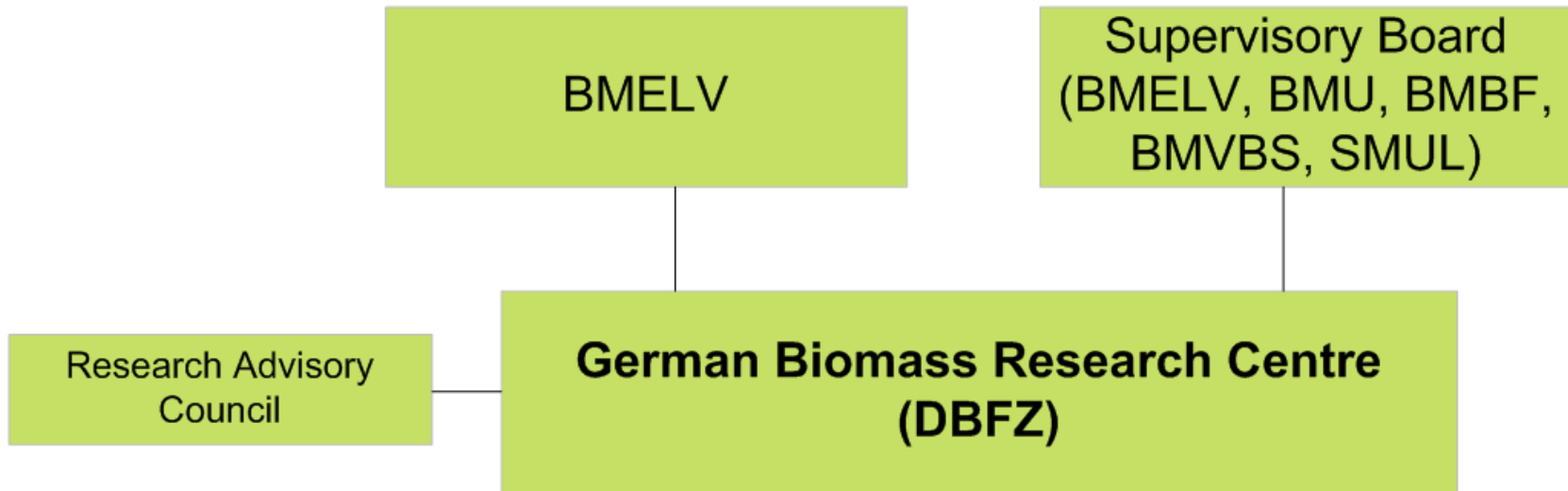


Sofia, April 2011

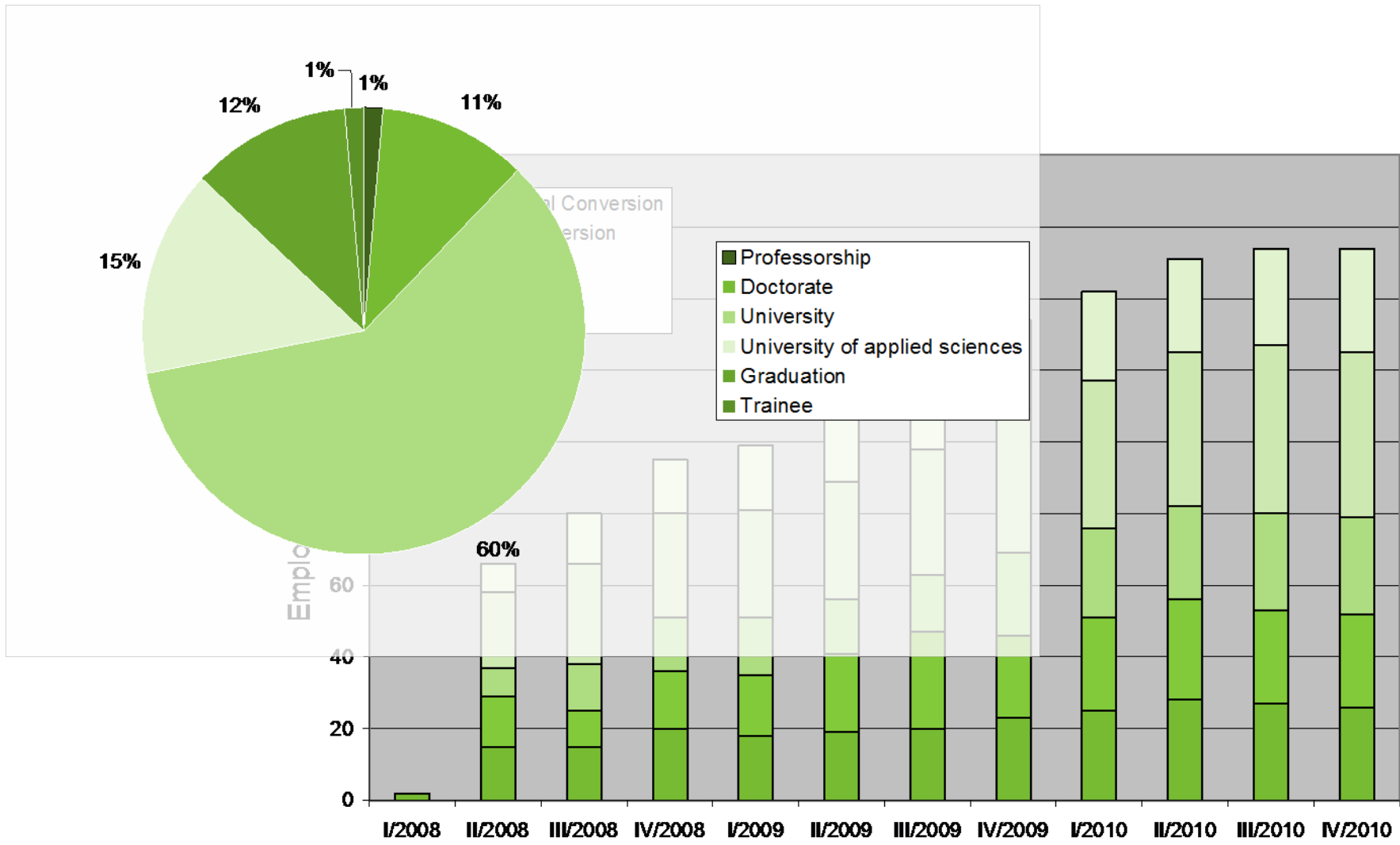
- The German government decided to establish a German Biomass Research Centre within the new Federal States
- This research centre should focus its work on all questions related to energy provision from biomass; the use of biomass as a raw material is not within the scope of the centre
- The centre should become a "light-house" within its area of expertise in Germany; additionally the centre should work internationally with a focus on selected regions (i.e. Eastern Europe, Russia, China, Brazil)

- 1953: Institut für Energetik (IE) has been founded in Halle/Saale, later on moved to Leipzig
- Late 1980ies: 1000 employees
- Early 1990ies: IE has been merged to a GmbH and changed its name; Institut für Energetik (und Umwelt)
- 2000 till 2006: IE started to intensify consulting- / R&D-activities in the field of biomass and bioenergy
- 2003: Discussions about the establishment of a Biomass Research Centre started
- 28.2.2008: DBFZ founded as a new company (gemeinnützige GmbH – non profit company) owned by BMELV

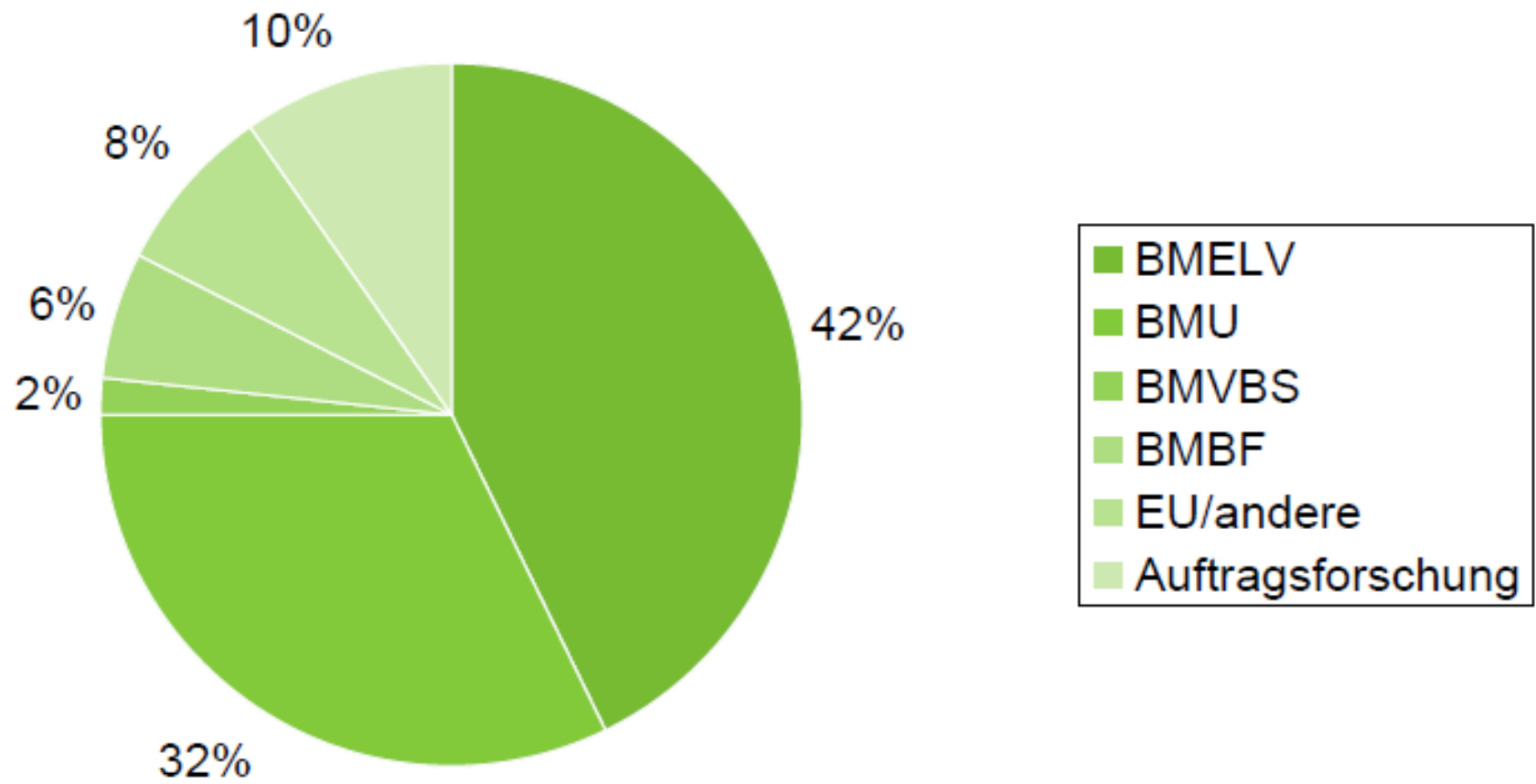
- **Application oriented technical, economic and environmental research and development activities in the field of solid, liquid and gaseous biofuels – for the future role of bioenergy in the energy system and related fields**
- Consulting of private and public institutions concerning all questions related to "Biomass for Energy"
- Testing and certification of solid and liquid biofuels as well as conversion plants for the provision of heat, electricity and/or transportation fuels from biomass
- Market assessment and data provision in the field of "Biomass and Bioenergy "
- Contributions to national and international committees e.g. for the development of standards and guidelines
- Networking between the relevant national and international players within the biomass and bioenergy business
- Support of Federal Ministries concerning strategic questions in the field of "Biomass and Bioenergy"



Development of staff



Financial Resources 2010



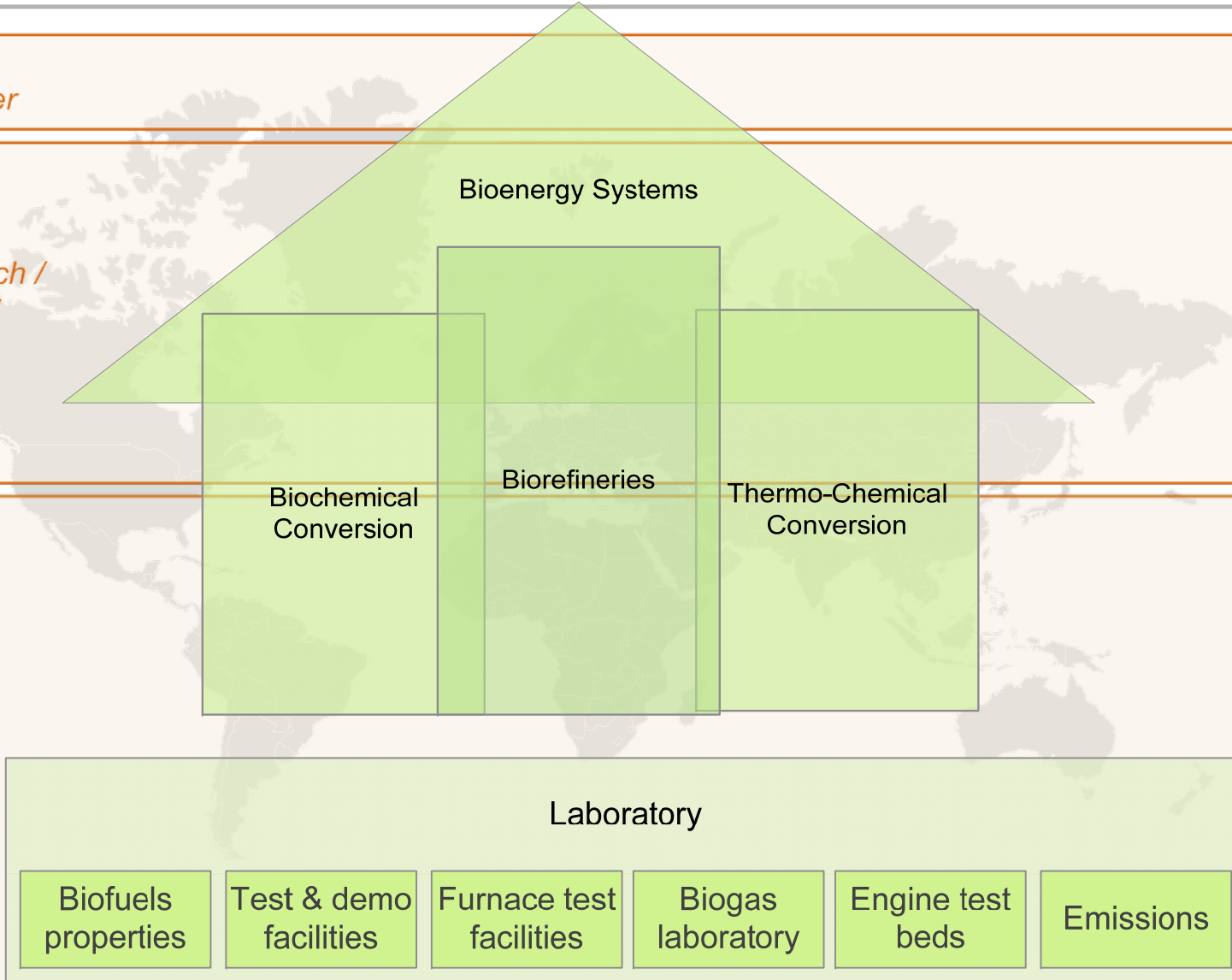


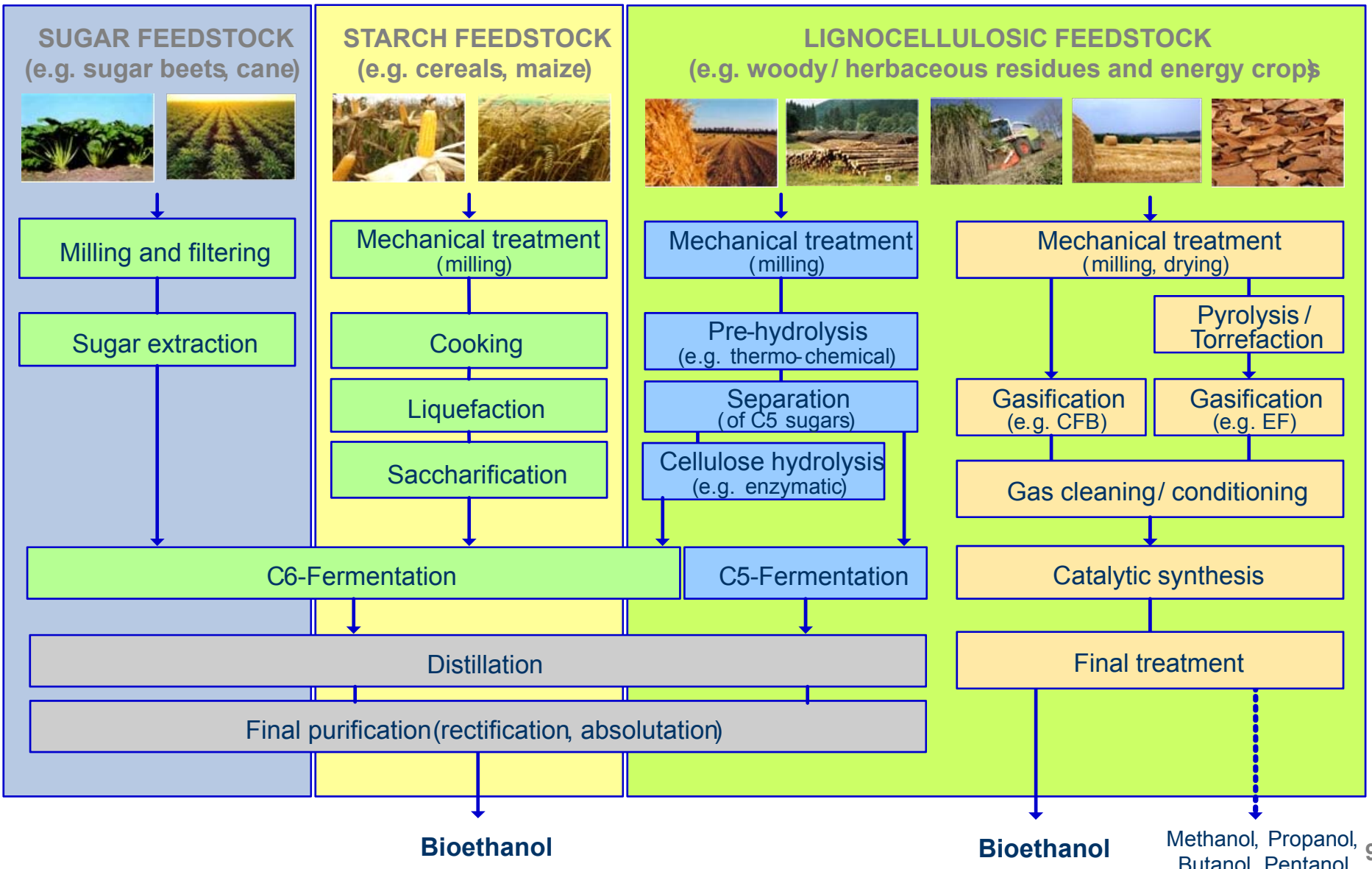
DBFZ Departments

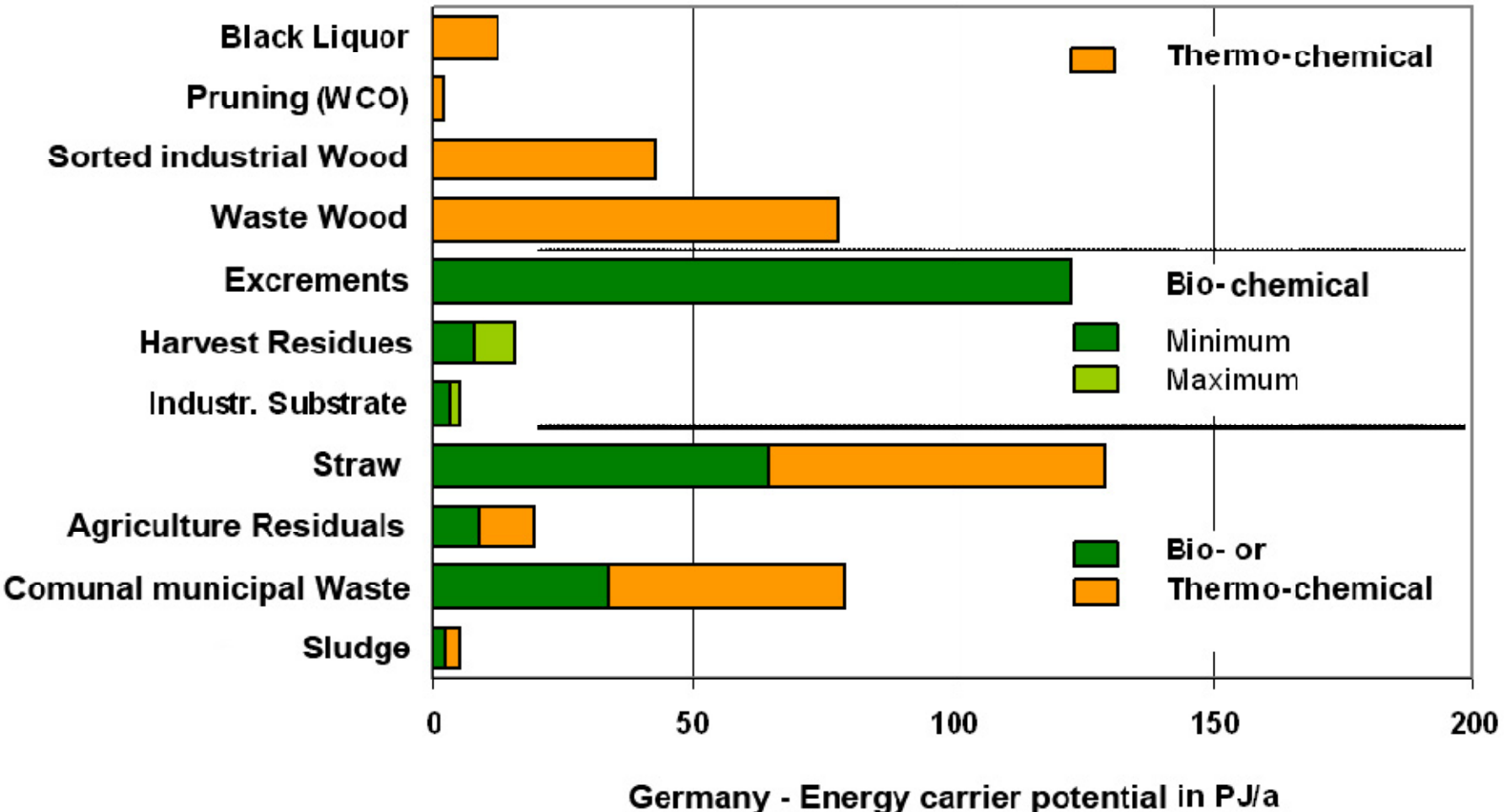
*Capacity Building /
Technology Transfer*

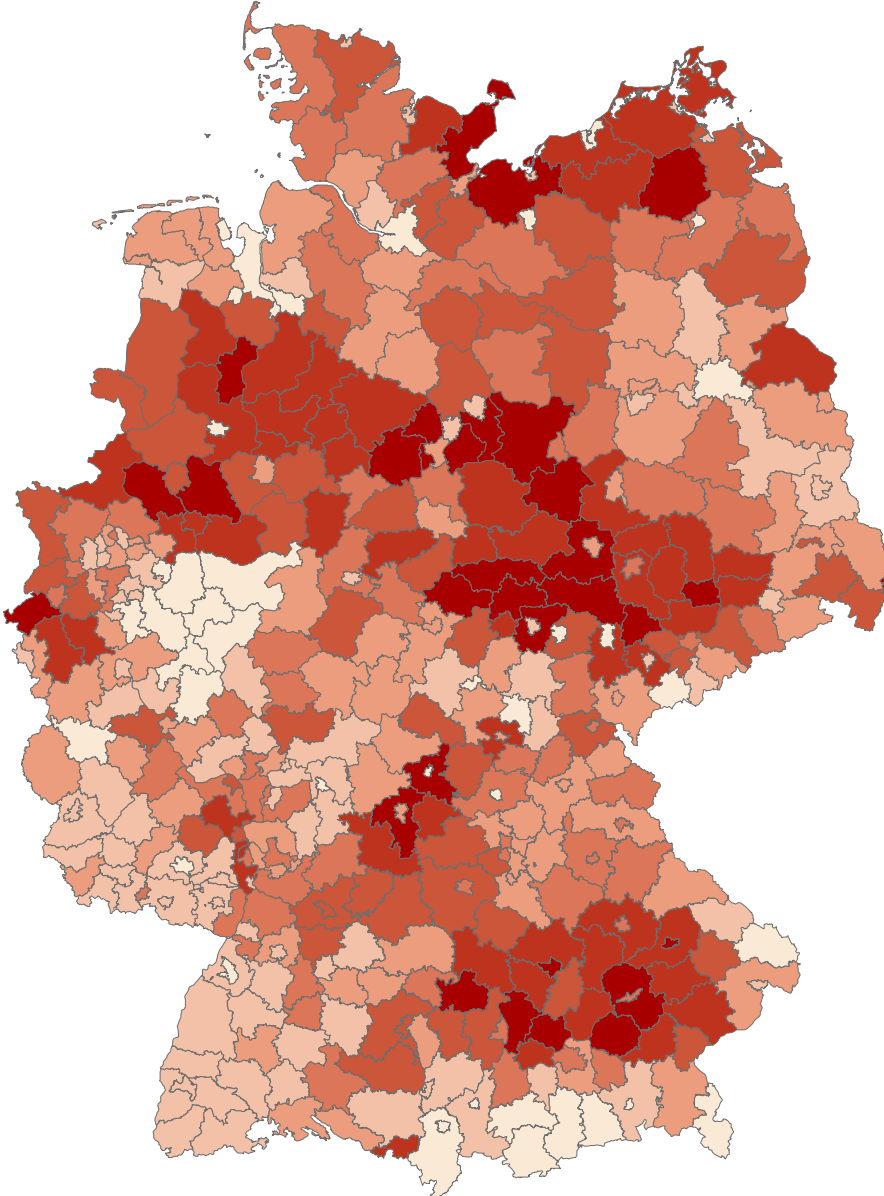
*Theoretical Research /
Advisory Activities /
Monitoring*

*Experimental
Research*












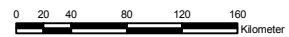


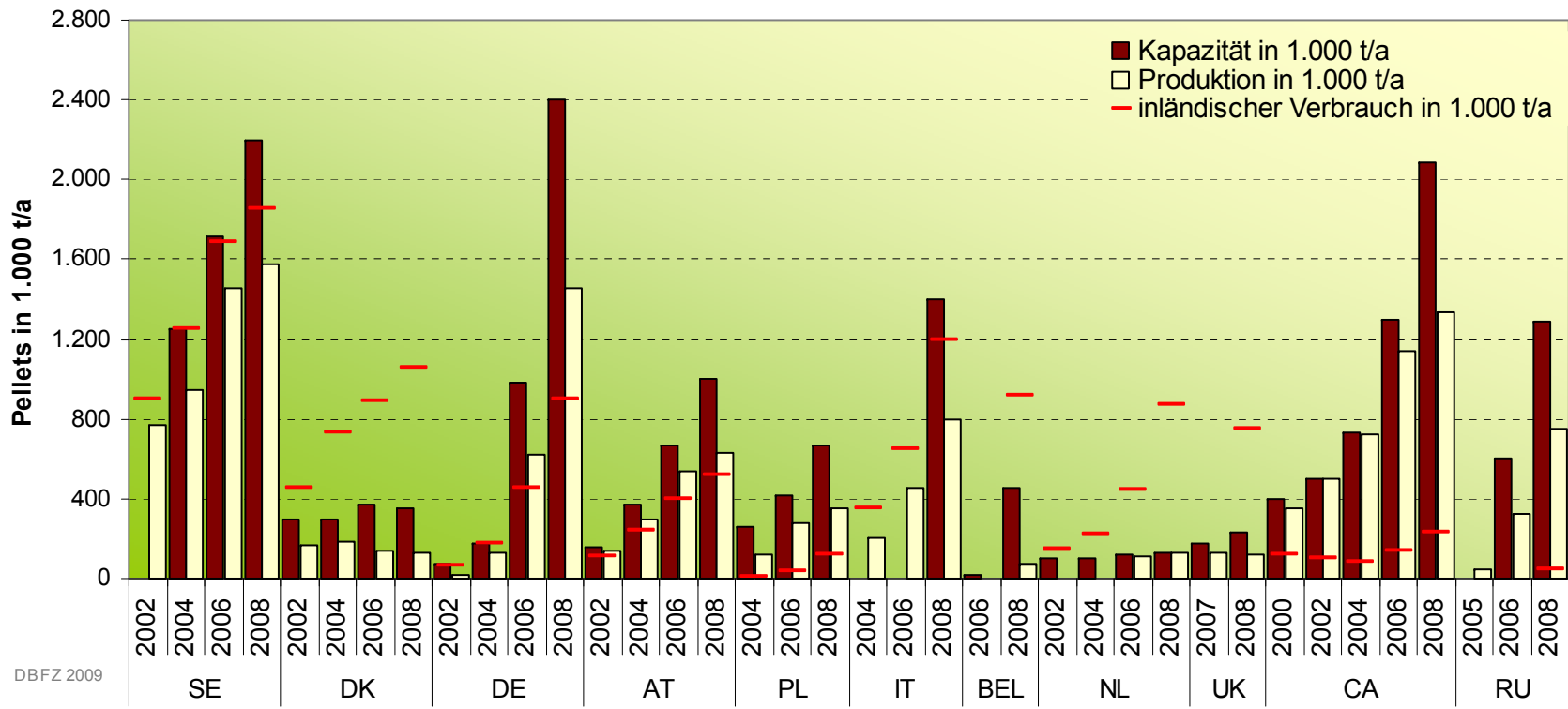


Legende

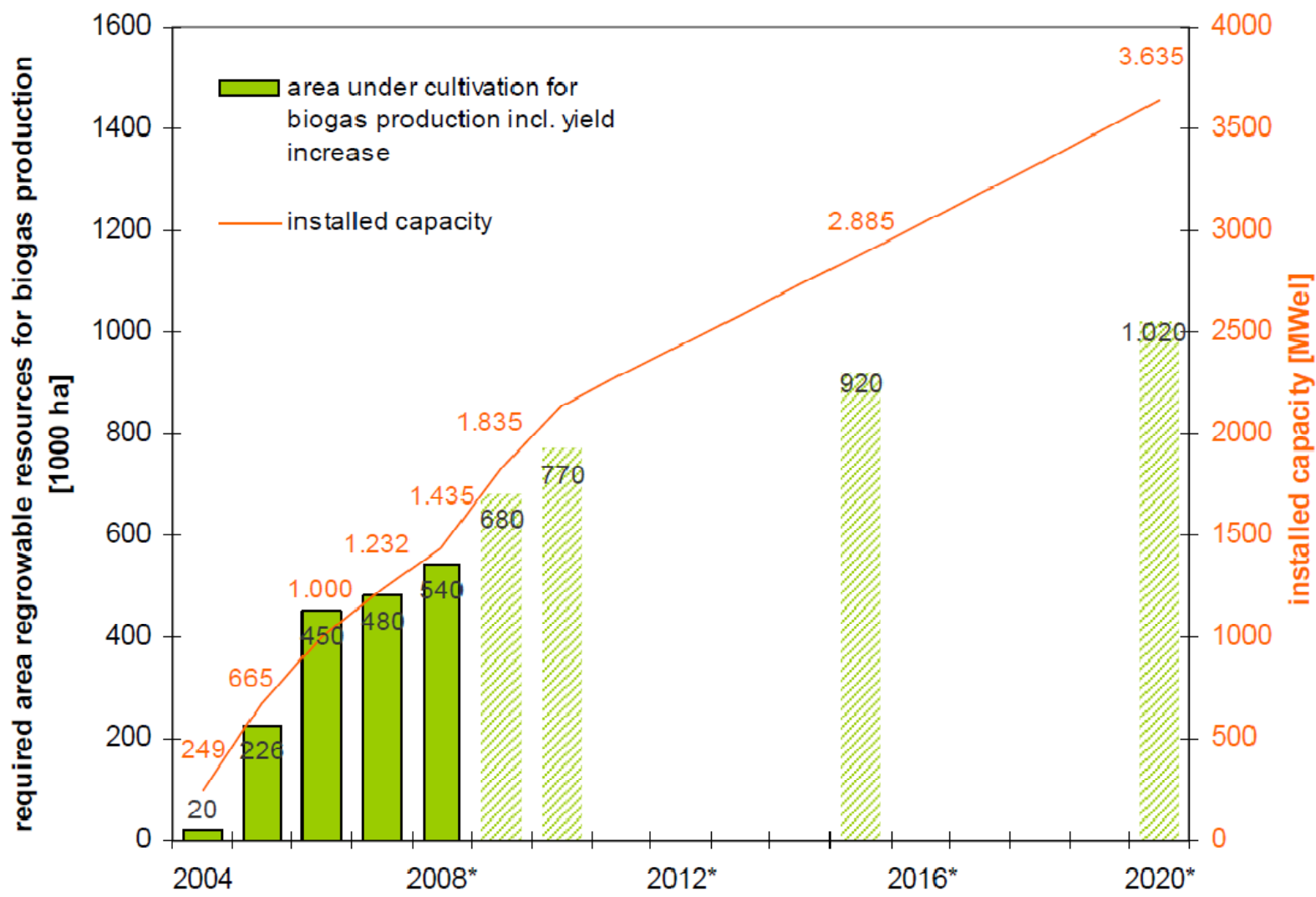
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Lamberts winkeltreue Kegelabbildung
 Ellipsoid: World Geodetic System 1984 (WGS84)
 © DBFZ - Deutsches BiomasseForschungszentrum, Leipzig

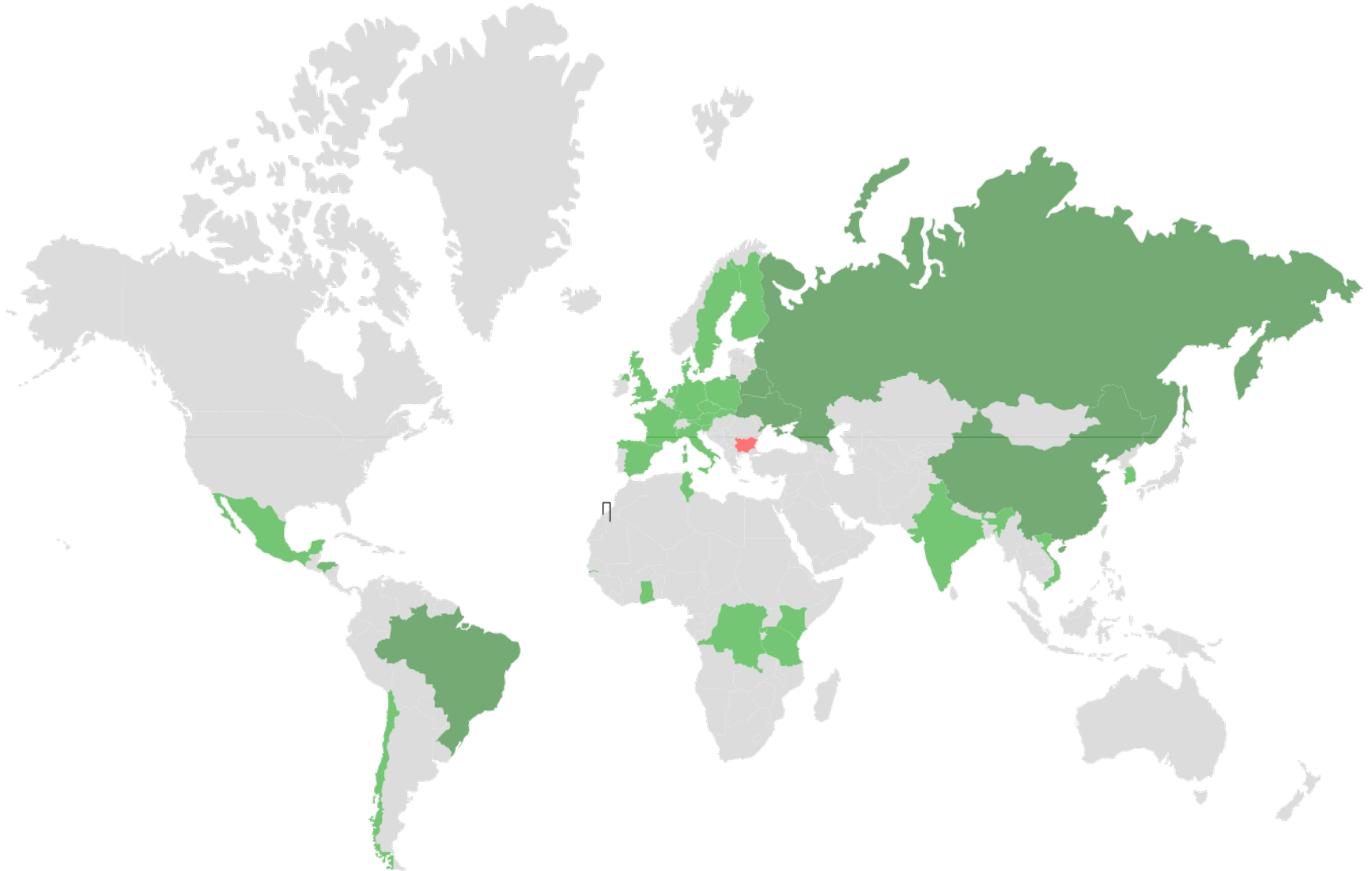




DBFZ 2009

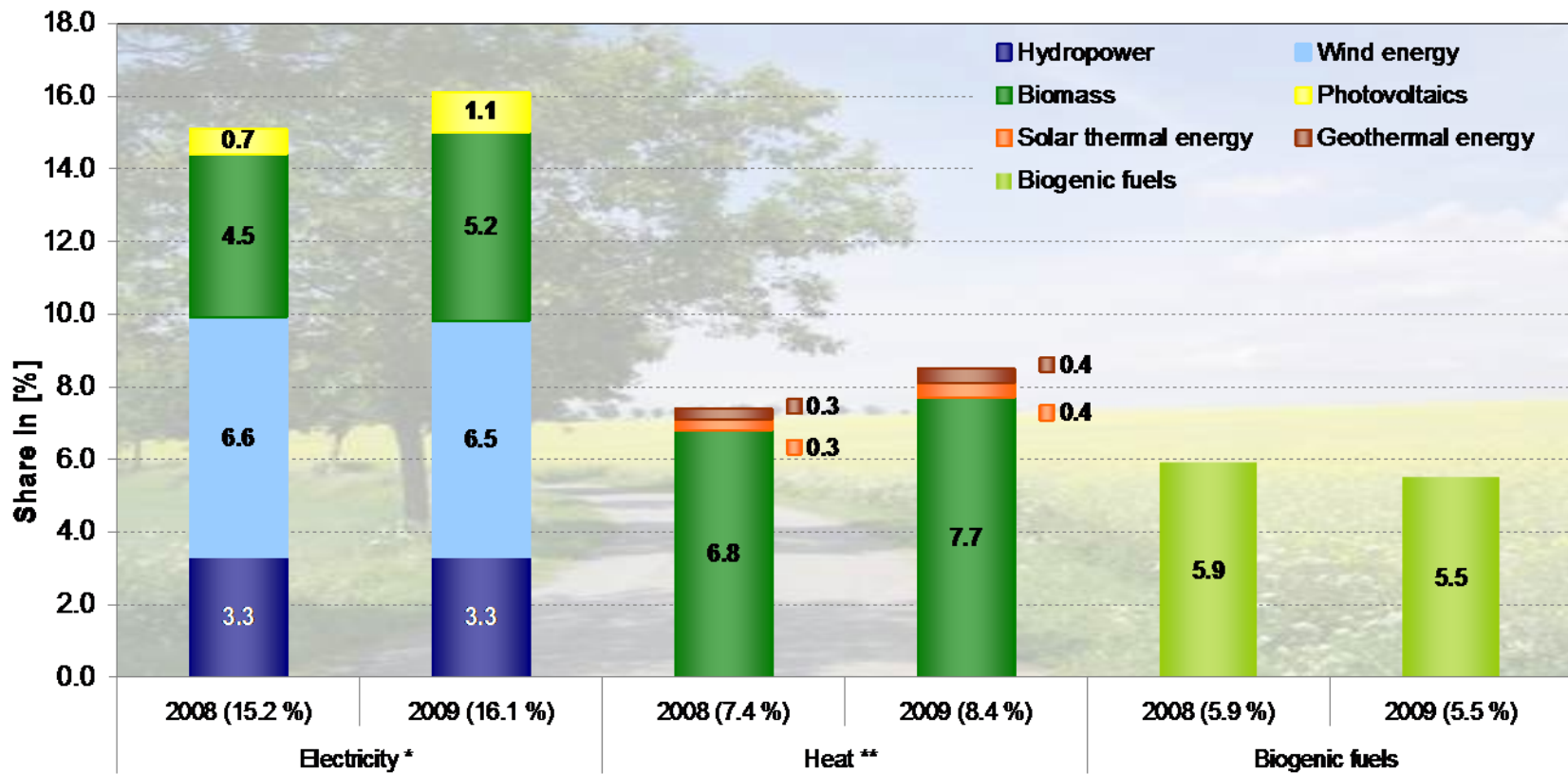


* prediction, based on the installed electric capacity and substrate input 2008; assumed share of renewable resource on installed capacity assumed at 55%



Biomass in German energy context

Share of renewable energy sources in total final energy consumption in Germany 2008/2009

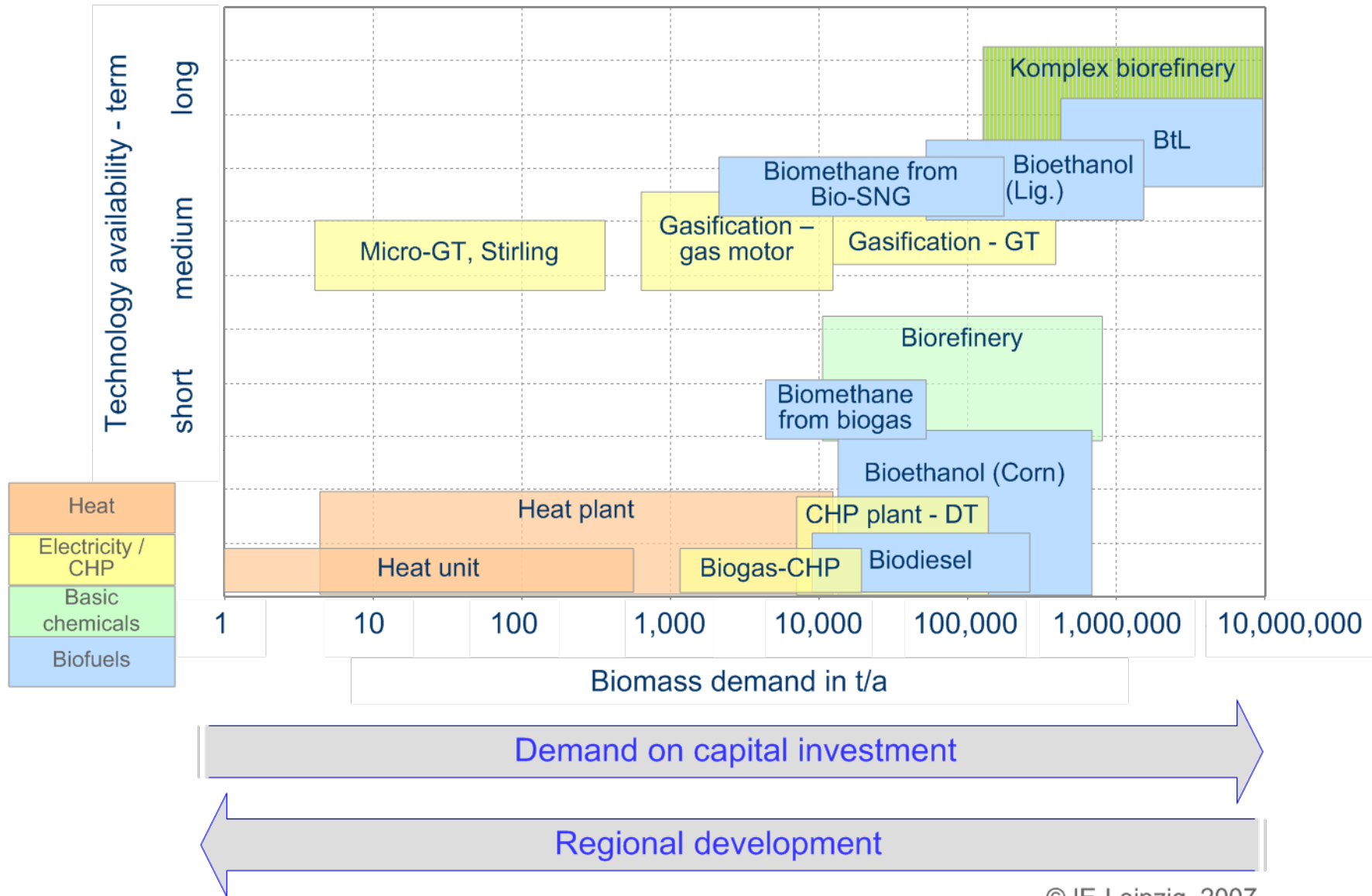


* Biomass: solid, liquid, gaseous biomass, biogenic share of waste, landfill and sewage gas; ** Biomass: solid, liquid, gaseous biomass, biogenic share of waste; Deviations in the totals are due to rounding.

Source: BMU-KI III 1 according to Working Group on Renewable Energies-Statistics (AGEE-Stat); Image: BMU / Dieter Böhme; all figures provisional

Outline of challenges for bioenergy

Technology availability and biomass demand



Програми за подпомагане на енергийно ползване на биомасата

Изследвания в областта на устойчивостта - BMBF

Енергийни изследователски програми BMWi, BMELV, BMBF, BMVBS, **BMU**

Изследвания в областта на технологиите в околната среда BMBF, BMWi, BMU **DBFZ**

Изследвания в областта на аграрния и хранително-вкусов сектор BMELV/ BMBF, BMWi, BMU **DBFZ**

Изследвателски програми на отделните провинции **DBFZ**

Изследвателски програми на ЕС **DBFZ**

Изследвания в областта на индустрията **DBFZ**

Оптимизиране на енергийното ползване на биомасата

Научна и админ. координация
PTJ
Projektträger Jülich
Forschungszenentrum Jülich

Съдействие
DBFZ

6 ПРОГРАМИ

Общини ...

Миникомбиниранни инсталации

Търговски инсталации за охлажд.

Програми за стимул. на пазара

националната инициатива за околна среда

Цел:

- Климаефективни биоенергийни технологии, процеси и методи
- Устойчиво производство на ел. Енергия, топлина и горива от биомаса

Теми

1. Оползотворяване на отпадъците
2. Международно сътрудничество
3. Превръщане на биомасата в газ
4. Стратегия за производство и дистрибуция на биометан
5. Биоенергийни стратегии
6. Регионална биоенергия
7. Подготовка за развитие на стратегии

- Short term
 - Market introduction of new and promising technologies
 - Development of „clean“ technologies
 - Optimisation of technologies / efficiencies

- Mid term
 - The strategy for bioenergy applications in the energy system and related systems (agriculture, waste management, „nature“, bioenergy application in promising systems e.g. biomethane)

- Long term:
 - The place for bioenergy and its development in a 100% renewable energy system (environmental/sustainability approach, social approach, economical approach)

What to expect from a German Biomass Research Centre

- Understanding of the systems related to biomass use
- Long term independent and critical analytical view on bioenergy utilisation
- Practical and application oriented work
- Established connections with stakeholders from industry, associations, politics, science
- Broad range of knowledge from all relevant fields
- Strategic, feasibility, best practice, demonstration studies, Transfer of practical experiences
- Flexible cooperation on a project basis as research partner or consultant – national and international

Thank you very much for your attention!

German Biomass Research Centre.
Research for the Energy of the Future.

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Dipl.-Ing. Franziska Müller-Langer