


Biomass Research Infrastructure in Germany

Dr. Karl-Friedrich Ziegahn
Head of Program Research Energy and Environment
Helmholtz Topic Speaker Bioenergy


KIT Program Directorate Energy and Environment



KIT – University of the State of Baden-Wuerttemberg and
National Research Center of the Helmholtz Association

www.kit.edu

Helmholtz Energy Programs 2010 - 2014

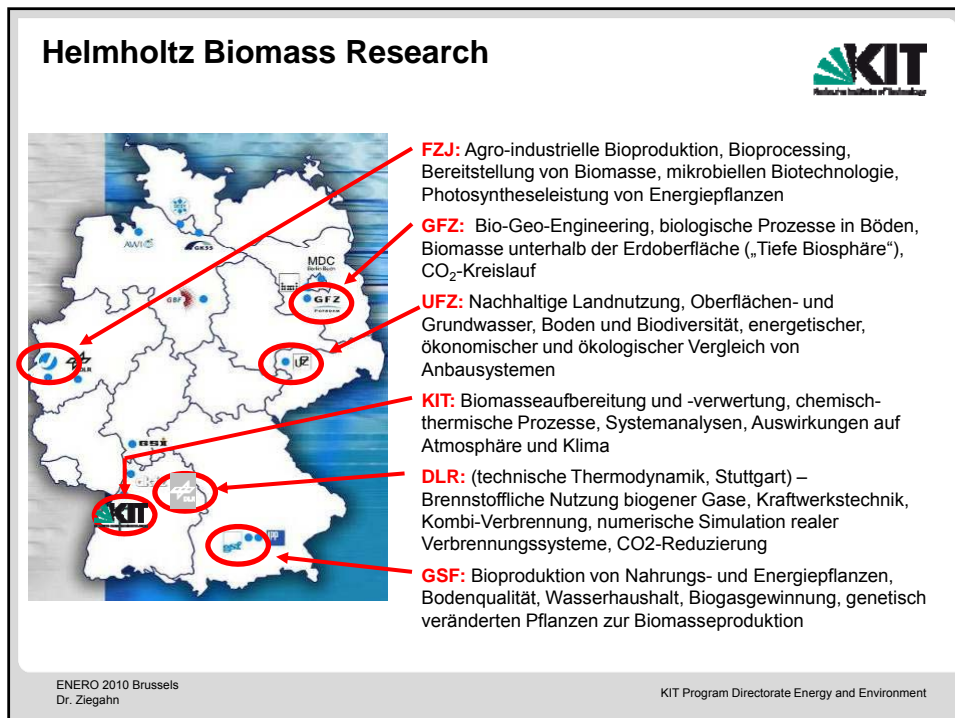
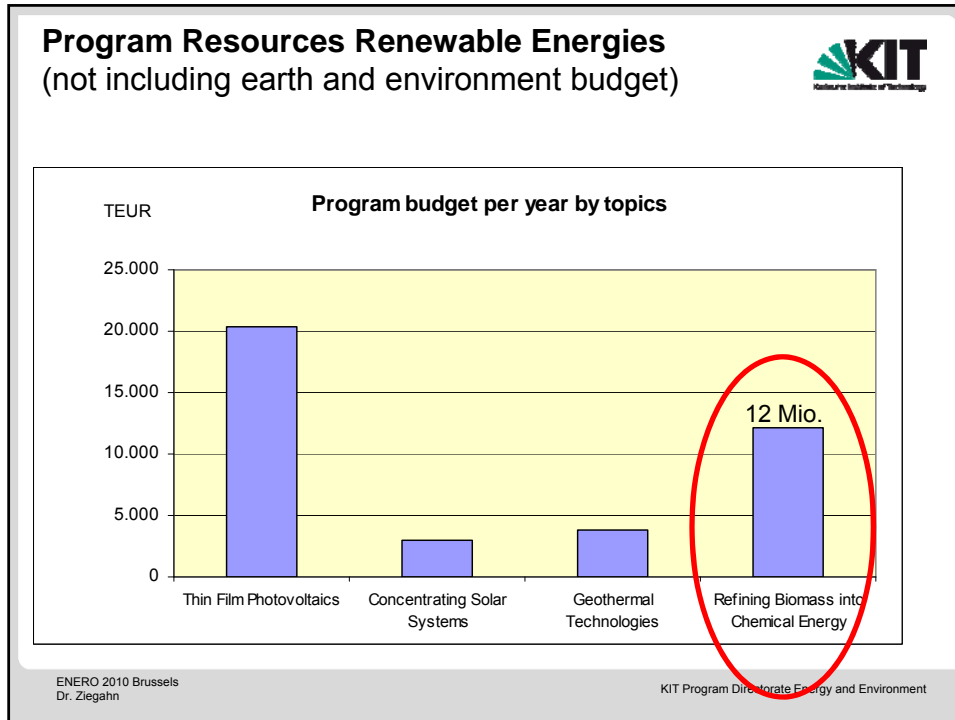


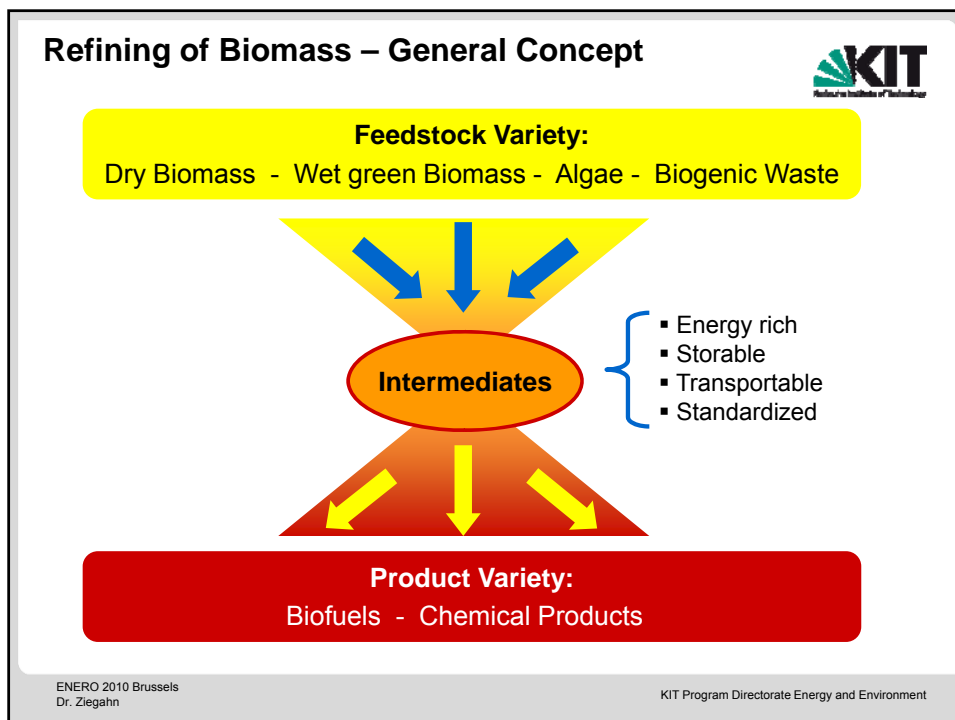
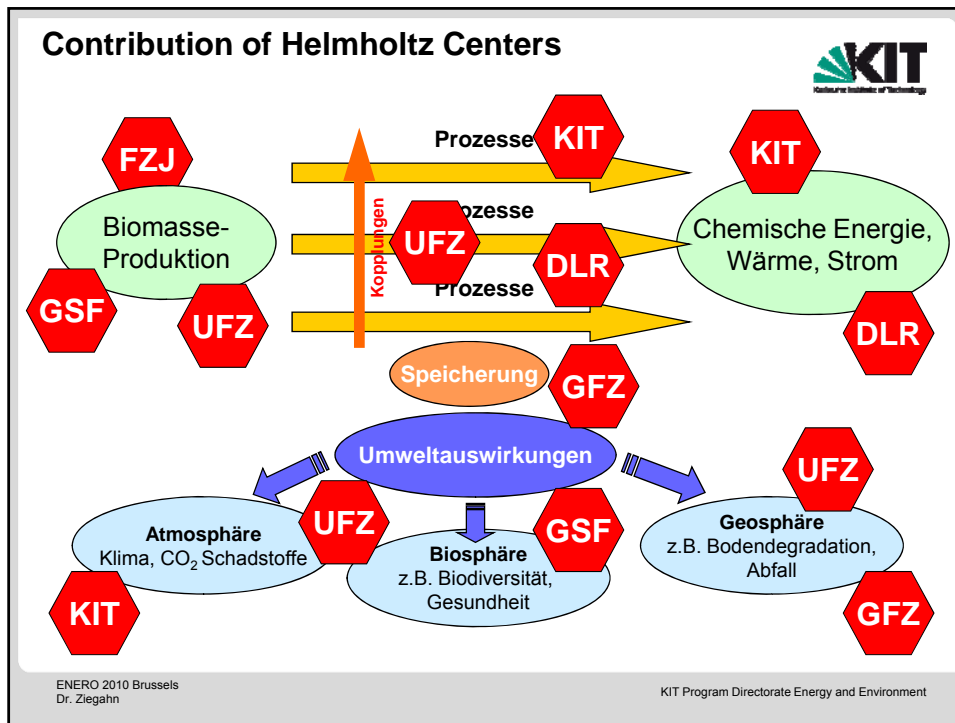
19		Renewable Energies
22		Efficient Energy Conversion and Use
12		Nuclear Safety Research
44		Nuclear Fusion
3		Energy Systems Analysis

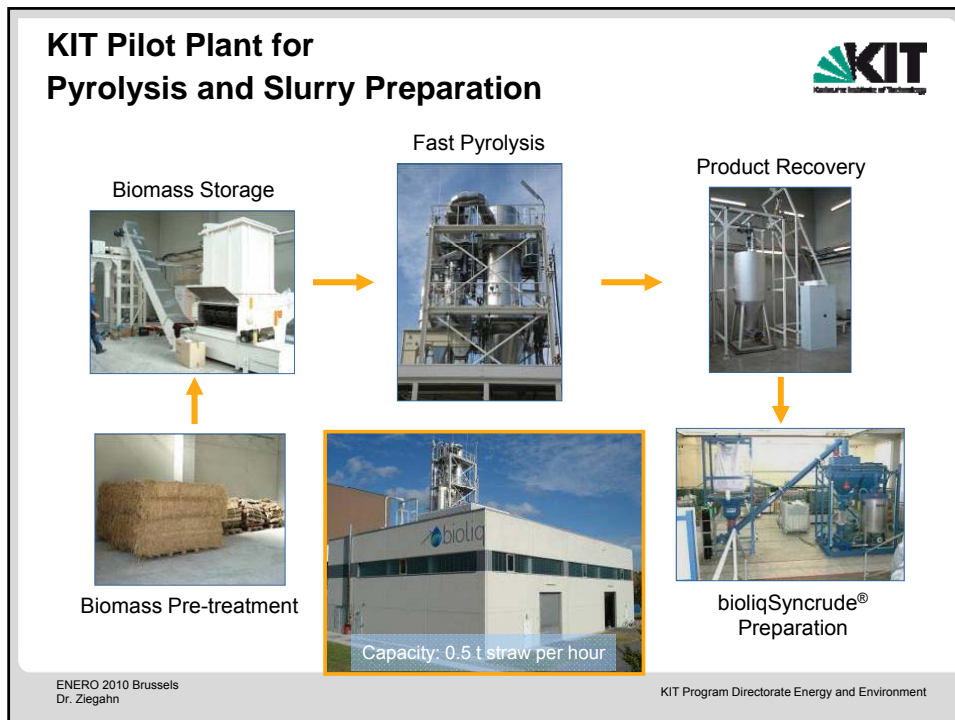
Total Helmholtz Annual Energy Budget: 260 Mio €
(some 60% of energy research budget of German Federal Government)

ENERO 2010 Brussels
Dr. Ziegahn


KIT Program Directorate Energy and Environment







Biomass Research in Germany: Big Players




	DBFZ Leipzig	KIT Karlsruhe	VTI* Braunschweig
Staff (FTE estimate)	80	150	50
R&D Focus:			
Biomass Provision			X
Conversion to Energy :		X	
Fundamental research		X	
Technology development	X	X	
Pilot-/Demonstrationplant		X	
Materials utilization of biomass		(x)	(x)
Systems analysis, Scenario development	X	X	

* Johann Heinrich von Thünen-Institut: Federal Research Institute for Rural Areas, Forestry and Fisheries

ENERO 2010 Brussels
Dr. Ziegahn

KIT Program Directorate Energy and Environment

Biomass Research in Germany: Smaller Players



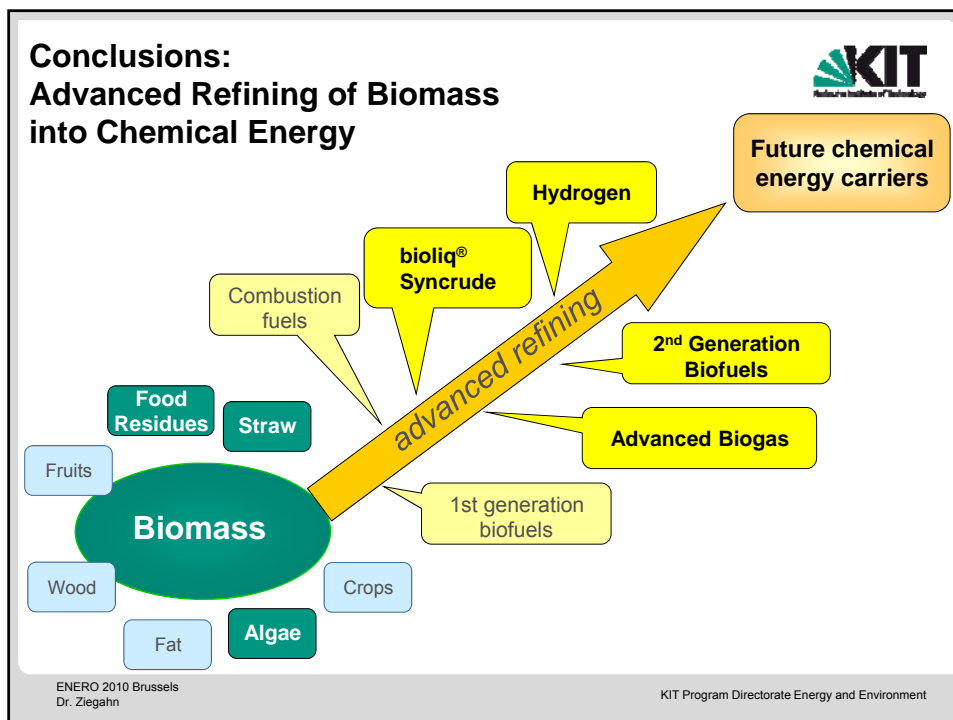
Staff: 10 - 50

Helmholtz: FZJ, UFZ, GSF, UFZ
Fraunhofer: Umsicht Oberhausen, ICT Pfinztal, IGB Stuttgart
Leibnitz: ATB (Inst. für Agrartechnik, Potsdam-Bornim)
Universities: Bergakademie Freiberg, Uni Hohenheim, TU München, TU Stuttgart, TU Karlsruhe, TU Claustal-Zellerfeld
State research agencies: TFZ (Technologie- und Förderzentrum des Bayerischen Staatsministerium für Landwirtschaft und Forsten), TLL (Thüringer Landesanstalt für Landwirtschaft, LfL (Bayrische Landesanstalt für Landwirtschaft), LAP (Landesanstalt für Pflanzenbau KA-Rheinstetten); Zentrum für Agrarlandschaftsforschung (Zalf), Müncheberg

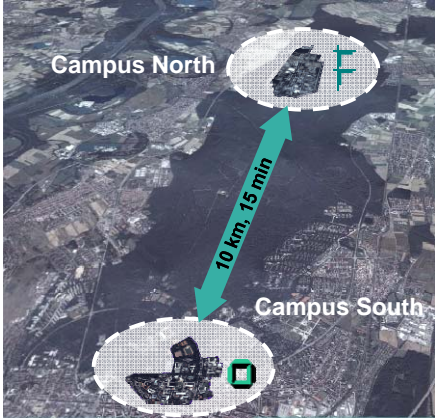
Staff: < 10
 (selected examples)
Universities: Giessen, Göttingen, Kassel, TU Berlin
Private institutes: Wuppertal Institut, Ökoinstitut, IFEU, meo Consulting


ENERO 2010 Brussels
Dr. Ziegahn



KIT Program Directorate Energy and Environment



KIT - a Unique Merger of Equals Shaping Science Landscape





 FZK
National Research Lab
  University of
Karlsruhe

KIT Key Figures

640	Million € budget 2009
7.200	Staff
290	Professors
18.600	Students

Natural & technical sciences


- Education
- Research
- Industrial cooperation
- Technology transfer

Northern Vicinity of Karlsruhe

ENERO 2010 Brussels
Dr. Ziegahn

KIT Program Directorate Energy and Environment

International and National KIT Leadership in Energy




KIT Energy Center (1.100 staff)

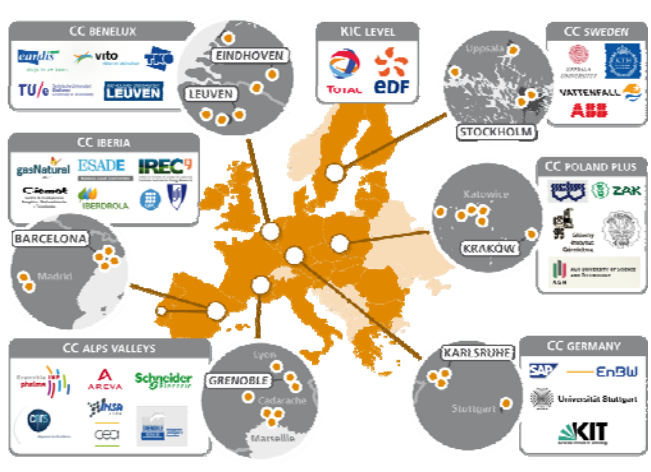
- Germany's Speaker in EERA
- Co-ordinator of EIT KIC InnoEnergy
- Co-ordinator of Helmholtz 260 mio Energy Research
- Speaker of Helmholtz Research Programs and Topics
 - Nuclear
 - Energy Systems Analysis
 - Energy Use of Biomass
 - Superconductivity
 - Fuels Characterization

ENERO 2010 Brussels
Dr. Ziegahn

KIT Program Directorate Energy and Environment

KIC InnoEnergy – A world class alliance of top European players with a proven track record





- 13 companies, 10 research institutes, 13 universities
- ~50% industry partners (incl. associated partners)
- >50% of key research players in Europe
- Covering the whole energy mix
- Knowledge triangle balanced along all dimensions
- Strong connection with VCs and local governments

ENERO 2010 Brussels
Dr. Ziegahn

KIT Program Directorate Energy and Environm: t