

# **Bayern Innovativ GmbH**

## **Cluster Energy Technology**

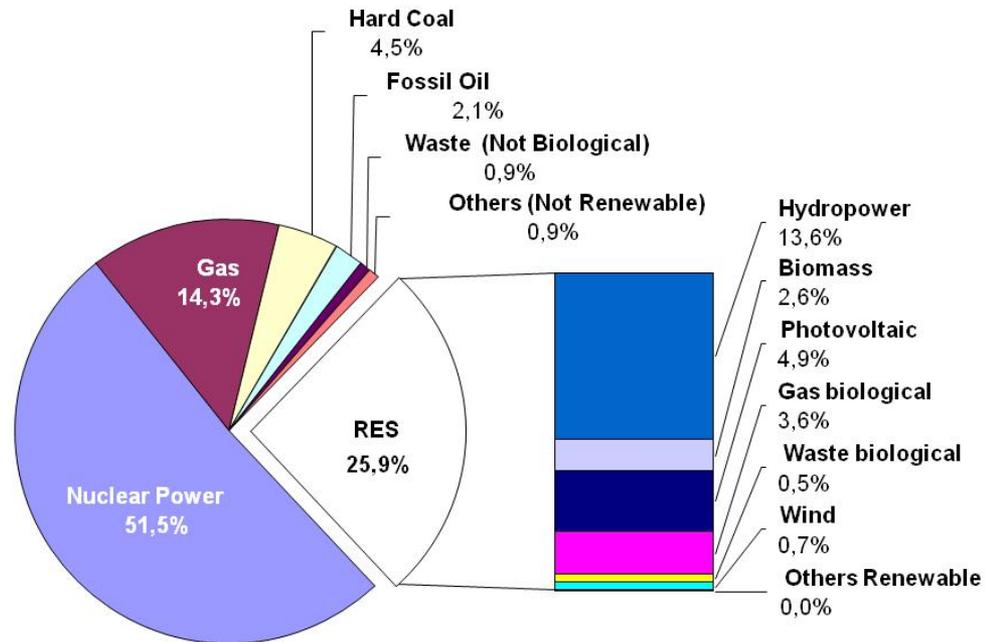


### **Renewable Energy Sources in Bavaria**

**November 17, 2011, IHK für München und Oberbayern**

**Energy Situation in Bavaria**  
Bayern Innovativ GmbH  
Cluster Energy Technology

## Powergeneration in Bavaria 2010 (92,0 TWh)



Source: Bayerische Energieagentur Energie Innovativ

# Target of Energy Policy of the Free State of Bavaria

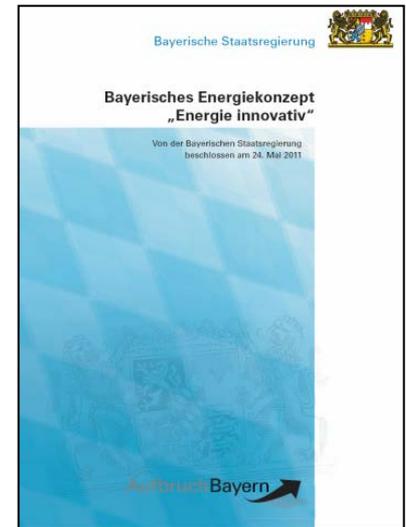
## Core Tasks:

- increase in energy efficiency
- development of RES
- development of storage technologies & power and distribution grids
- development of fossil gas infrastructure
- Increase of energy R&D



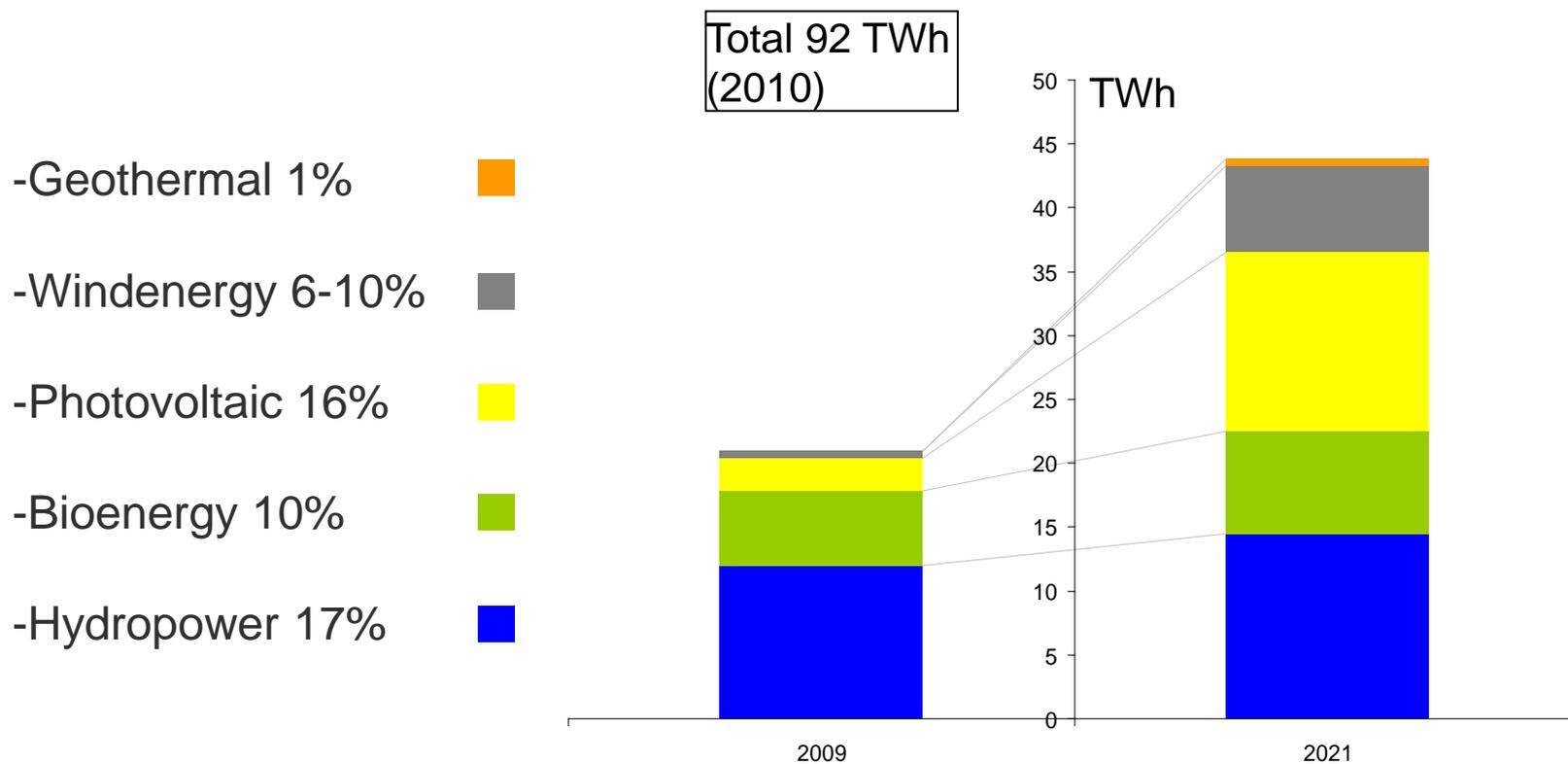
Picture Source: Fotolia\_Simon Kraus

# Energy Draft of the Free State of Bavaria, Mai 24, 2011



- Doubling RES to reach 50% on power consumption in the coming 10 years
- Share of RES on energy consumption of 20% in the coming 10 years
- CO<sub>2</sub> emission of less than 6t/year inhabitant

## Development of RES (50%) in Power Consumption

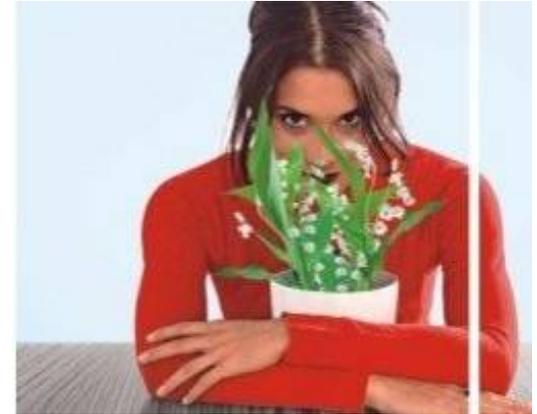


Source: Bayerische Energieagentur Energie Innovativ

**Energy Situation in Bavaria**  
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# Innovation

. . . ist the commercialization of newly developed products, processes or services.



## Bayern Innovativ GmbH

- Corporation of the Free State of Bavaria  
Employees: 85 (Scientific staff: 55)  
Turnover: 13.8 Mio. €



- Location: Nürnberger Akademie, Nuremberg



- Interdisciplinary Team



# Organisational Structure

## Supervisory Board

Chairman: Bavarian State Minister for Economic Affairs  
Bavarian Ministry of State for Economic Affairs, Infrastructure, Transport and Technology; Bavarian State Chancellery; Bavarian Ministry of State for Education, Culture, Science and Arts; Financial Institution for the State of Bavaria (LfA); Bavarian Chamber of Industry and Commerce (BIHK); Bavarian Trade Corporation (BHT); Organization of the Bavarian Economy (VBW); Universities; Colleges; Fraunhofer Gesellschaft (FhG)



## Shareholders

LfA, BIHK, BHT, VBW, Universities, Universities of Applied Sciences, FhG

## Chief Executive

Prof. Dr.-Ing. habil. Josef Nassauer



## Advisory Board

Representatives of science, technology transfer and industry

## Core Tasks

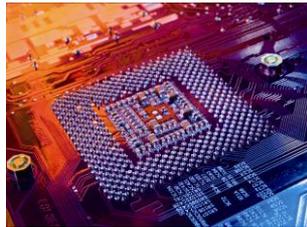
### Business development for the industry, in particular SMEs

- Instigation of innovations by conceiving **platforms** for cooperation
  - For the initiation of cross technology and cross branches cooperations
  - Corner stone for the development of sustainable networks for cooperation
  
- Continuous **information and knowledge transfer**, e.g. Web-Portals, E-Letter, Newsletter, Special Reports, Studies

## Open Innovation – Fields of Activity



Automotive



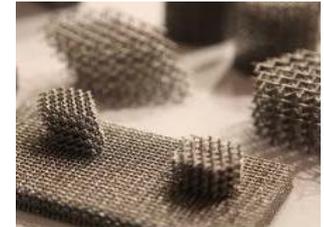
Electronics



Medical Technology



Life Sciences



New Materials



Technical Textiles



Timber Engineering



Energy Technology



Logistics

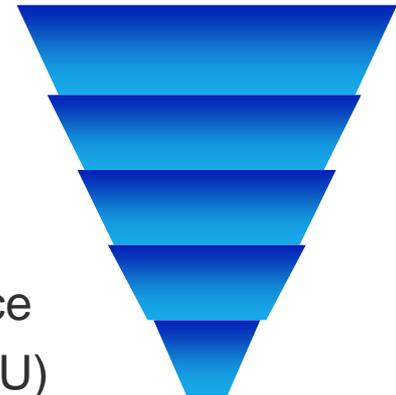


Environ. Techn.

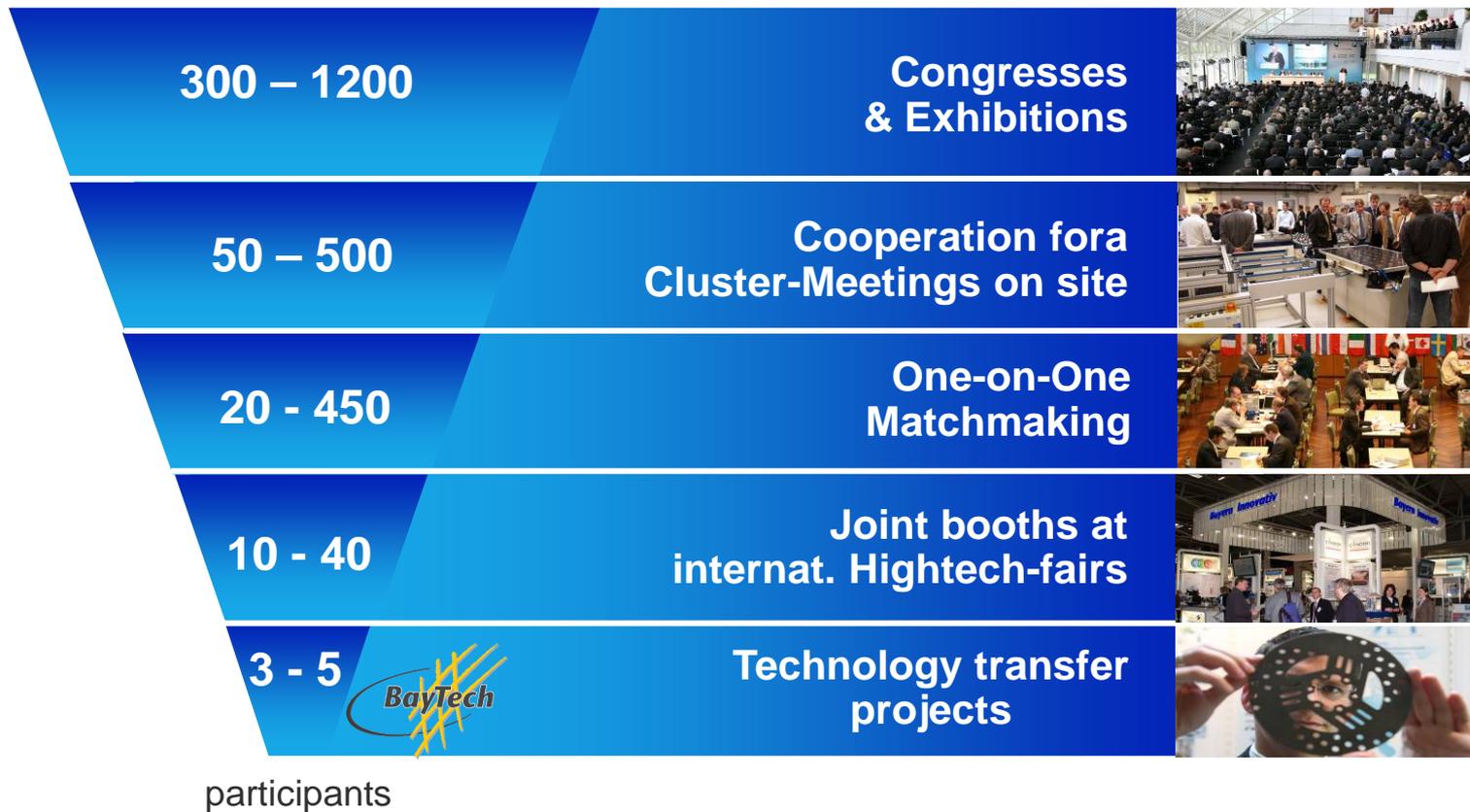
## Open Innovation – Set of Activities

- Broad and interdisciplinary congresses
- Specific cooperation platforms
- Group meetings in innovative companies and institutes
- Management of project circles
- Structuring projects and project teams of industry and science
- Navigation to public research funds (Bavaria – Germany – EU)

Condensing  
innovation ideas



# Platforms for Initiating Cooperations



# Haus der Forschung Access to project funding



## Partners



## Locations



Nuremberg



Munich

## Info-Hotline

Der direkte Draht zu Fördermöglichkeiten von Innovationen:  
**0800-0268724**

[www.hausderforschung.de](http://www.hausderforschung.de)

## Internet

Startseite | Kontakt | Impressum | Suchgröße | Suchen

GRÜSSE WIR ÜBER UNS UNSER ANGEBOT AKTUELLES

**Bayern *Innovativ*** Bayerische Forschungsallianz ITZB Innovations- und Technologiezentrum Bayern Bayerische Forschungsstiftung

Bayern Innovativ GmbH: Innovation und Wissenstransfer, Anbahnung und Begleitung von Kooperationen über Netzwerke und Cluster

Bayerische Forschungsallianz GmbH (BayFOR): EU-Förderzentrum, Bayerische Forschungsverbünde, Internationale Wissenschaftskooperation

Innovations- und Technologiezentrum Bayern (ITZB): Förderung (Bund und Bayern) und Projekttäger Bayerische Technologie-Förderprogramme

Bayerische Forschungsstiftung (BFS): Förderung von wissenschaftlich-technologischen Forschungsvorhaben für Kooperationsprojekte Wissenschaft/ Wirtschaft

**Aktuelles**  
Das Haus der Forschung wurde am 28. 6. 2019 in Nürnberg offiziell eröffnet.  
weiter lesen

**Telefonische Beratung**  
Rufen Sie uns unter **0800-0268724** kostenfrei\* an oder vereinbaren Sie über unser Kontaktformular einen Rückruf.  
\*Gültigkeit aus dem deutschen Festnetz, elektronische Preise für Anrufe aus dem Mobilfunknetz sind möglich.

**Participants 2010: Approx. 11.500 from 45 countries**

**Comprehensive Network (since 1995)**



**55.000 Companies, thereof 30.000 from Bavaria**



**500 Scientific Institutes**



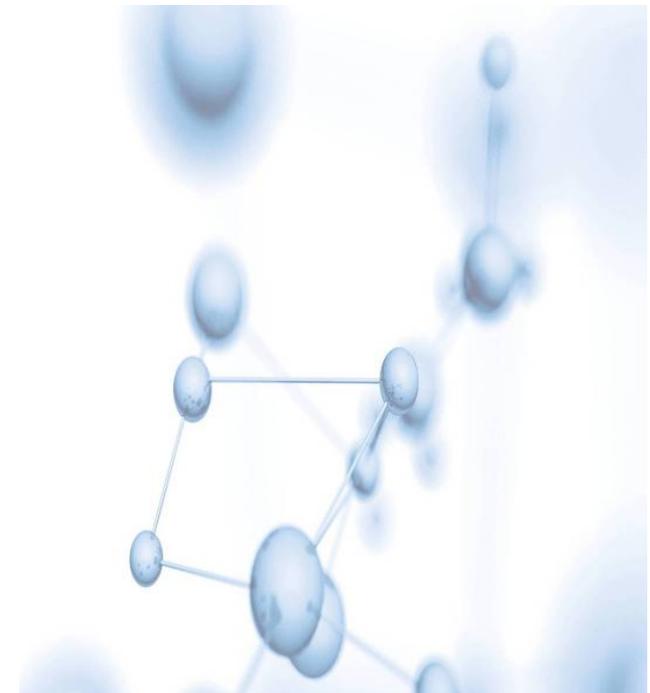
**50 Countries**

Energy Situation in Bavaria  
Bayern Innovativ GmbH  
**Cluster Energy Technology**



## Cluster-Initiative Bavaria – 19 Cluster

- Support of co-operations between industry and science **in Bavaria** for tomorrow's innovations
- 19 clusters with 14 responsible organisations
- Bayern Innovativ manages 5 clusters
- Synergetic co-operation with existing networks and regional clusters



## Cluster-Offensive Bayern

### Mobilität

Automotive

Bahntechnik

Logistik

Luft- und  
Raumfahrt

Satelliten-  
navigation



### Material- entwicklung

Neue Werkstoffe

Chemie

Nanotechnologie



### Mensch und Umwelt

Biotechnologie

Medizintechnik

Energietechnik

Umwelttechnologie

Forst und Holz

Ernährung



### Informations- und Elektrotechnik

Informations- und  
Kommunikations-  
technik

Sensorik und  
Leistungs-  
elektronik

Mechatronik und  
Automation

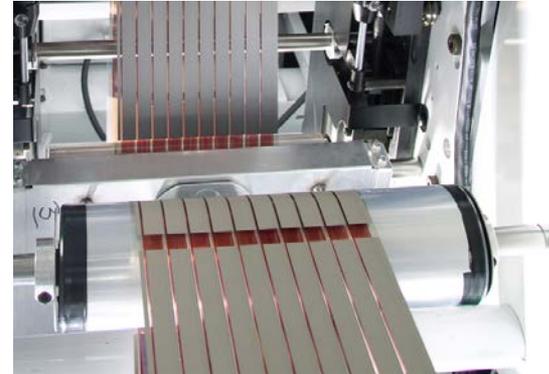


### Dienst- leistungen und Medien

Finanzdienst-  
leistungen

Medien





## The Bavarian Cluster Energy Technology – Key Element for Innovations “Smart Grid, Energy Efficiency & Photovoltaics”

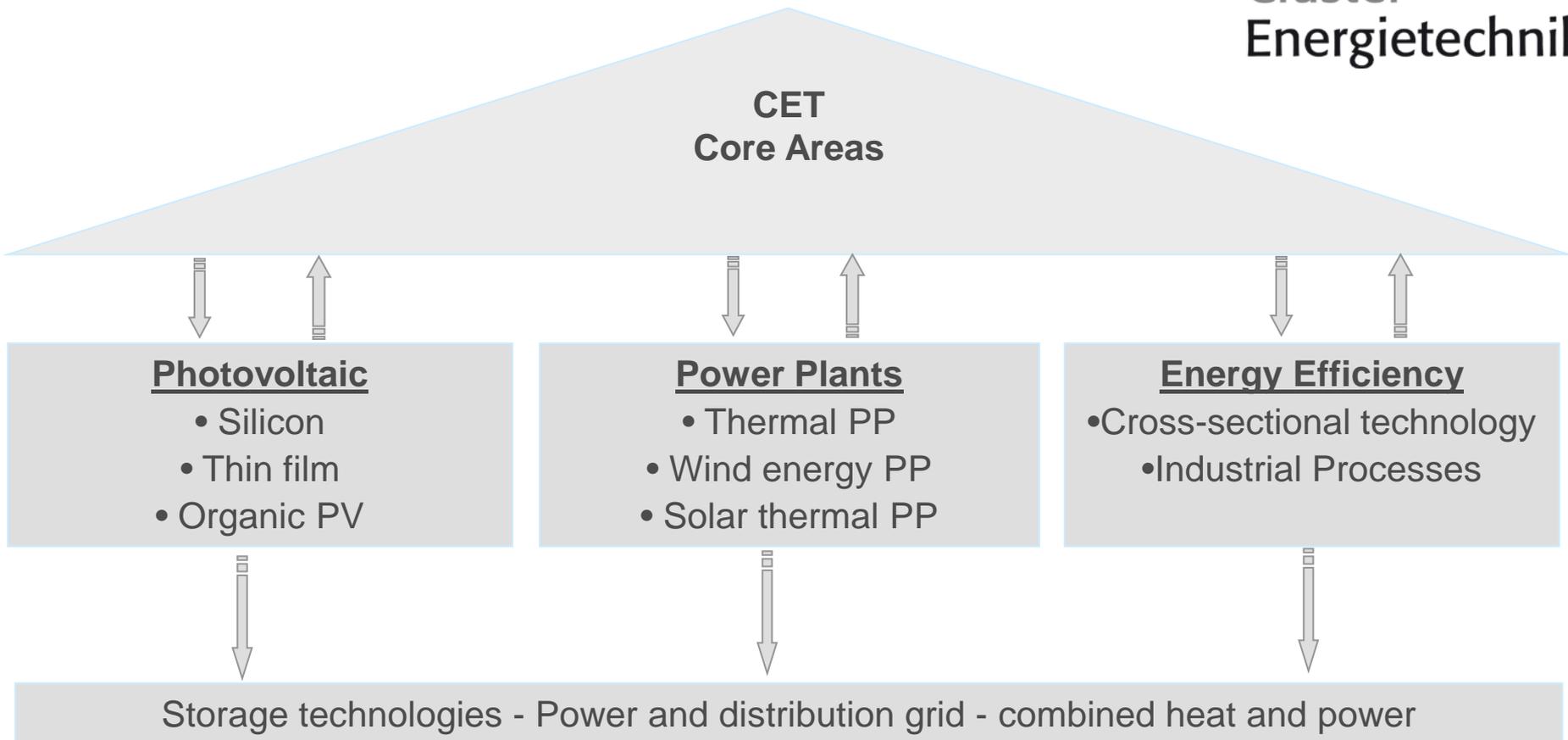
## Cluster Energy Technology (CET)

The “**Cluster Energy Technology**” is the biggest Bavarian networking platform for innovations in energy technology.

The main goal of the Bavarian Cluster Energy Technology is to strengthen the competitiveness of Bavarian companies, mainly focused on SME's.

Best premises to develop marketable innovations are created by initiating efficient networking among companies and research institutes.

The network enables you to find the suitable co-operation partner.



# Structure



**Chief Executive**  
**Bayern Innovativ GmbH**  
*Prof. Dr.-Ing. habil. Josef Nassauer*

**Cluster-Spokesperson**  
*Prof. Dr. Jochen Fricke*  
*Dr. Klaus Hassmann*



**Advisory Council**  
Companies, Researchers, Public Sector

## Cluster-Management

*Dr. Robert Bartl*  
*Dr. Manfred Fenzl*  
*Katrin Schiller*  
*Torsten Urban*  
*& Team Bayern Innovativ*



*Gisela Baumann, EU Projects*

**Participants**  
*Companies and Research Institutes*

## Advisory council



THE LINDE GROUP



SIEMENS



SCHOTT  
solar

ENERGIEregion Nürnberg e.V.



FFE Forschungsstelle für  
Energiewirtschaft e.V.



## Cluster Services

- Congresses
- Cooperation fora
- Meetings
- Workshops
- Joint booths at trade fairs
- Surveys and reports
- Individual projects



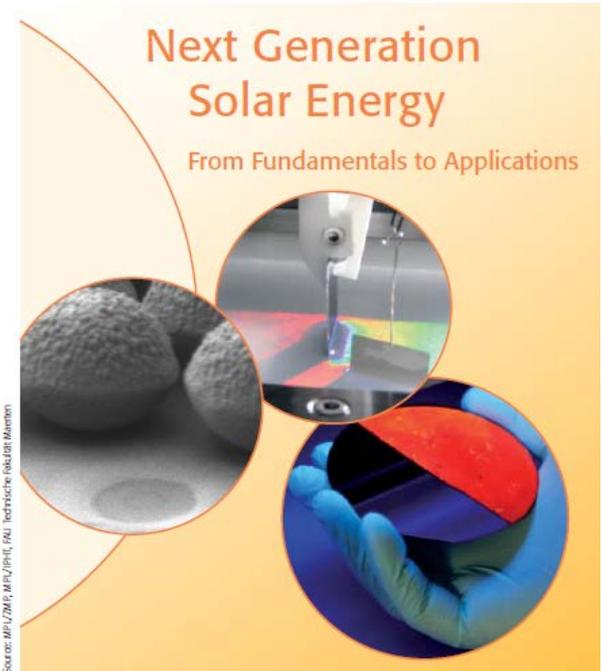
# Upcoming international conference in 2011

## - Next Generation Solar Energy

Invited Speakers among others:

- Prof Dr Harry Atwater, California Institute of Technology, Pasadena, USA
- Prof Dr Gavin Conibeer, SPREE, University of New South Wales, Sydney, Australia
- Prof Dr Vladimir Dyakonov, ZAE Bayern, Würzburg, Germany
- Dr Winfried Hoffmann, Vice-President EPIA, Belgium
- Prof Dr Hiroshi Imahori, Kyoto University, Japan
- Dr Sofie Khalil, Bayer Technology Materials, Leverkusen, Germany
- Prof Dr Lincoln J. Lauhon, Northwestern University, Evanston, USA
- Prof Dr Jenny Nelson, Imperial College, London, UK
- Dr Arthur Nozik, National Renewable Energy Laboratory (NREL), Boulder, USA
- Prof Dr Uwe Rau, Forschungszentrum Jülich, Germany
- Prof Dr Bernd Rech, Helmholtz-Zentrum Berlin, Germany
- Dr Erik Garnett, Stanford University, USA
- Dr Loucas Tsakalacos, General Electric - Global Research Center, New York, USA
- Prof Dr Eli Yablonovitch, Berkeley, USA

Location Schloss Erlangen



Source: MPL/ZMP, MPL/PSH, FAU Technische Fakultät/Merten



Schloss Erlangen  
December 12 - 14, 2011



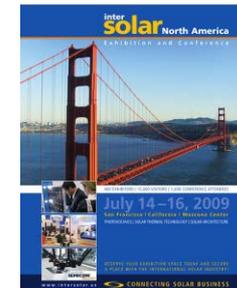
## Energy Efficiency



- Working group „Energy efficient production“ since February 2010
  - Participants: Bavarian companies with high energy costs
  - Objective: Increased energy efficiency of participating companies within three years
  - Method: Initial energy consultancy, definition of common objectives regarding energy efficiency and CO2 reduction, regular meetings and monitoring, support hotline
  - Management and facilitation: Cluster Energy Technology

## Trade Fair Participation

- **Energiesparmesse Wels**  
2.-6. March 2011, Wels, Austria
- **Hannover Messe – Leading fair ENERGY**  
4.-8. April 2011, Hannover
- **Interstroy Expo**  
14. April 2011, St. Petersburg
- **Intersolar Europe 2011**  
8.-10. June 2011, Munich
- **Intersolar North America 2011**  
12.-14. July 2011, Moscone Center, San Francisco
- **RENEXPO®**  
22.-25. September 2011, Augsburg



## Internationalization

- EU- Project „EcoClup“ (Eco-innovative cluster partnership for growth and internationalisation) (13 Cluster organizations from 10 countries, Great Britain, Austria, Denmark, Finland, France, Germany, Hungary, Netherlands, Spain und Sweden – Kick Off September 2009, 3 years

## Objektives

- Strengthening of cooperation between European clusters
- Promotion of internationalization of innovative SMEs
- Initiation of pan-european R&D partnerships between
- Training of Cluster Managers for further improving cluster coordination



[www.bayern-innovativ.de](http://www.bayern-innovativ.de)

[www.cluster-energietechnik.de](http://www.cluster-energietechnik.de)

