



Environment and energy in
North Rhine-Westphalia and the
Enterprise Europe Network

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Our location

- North Rhine-Westphalia
 - 18.5 Mil. population





Who we are

- Public Private Partnership founded in 1984 to support structural change in NRW, 50 employees
- Mission:
To promote innovation and technology, above all in small and medium-sized enterprises, in NRW
- Shareholders:
Netzwerk ZENIT e.V.,
State of North Rhine-Westphalia
and a consortium of banks





Services

- Services for enterprises:
Markets, technologies, finance and funding,
internationalisation, clusters,
events & publications
- Services for the public sector:
Project secretariats, policy evaluation, policy concepts,
inter-regional co-operation, strategy development for regions,
delegation visits





Our core project: Enterprise Europe Network

- The largest business support network in the world
- Close to 600 organisations in 44 countries
- All EU services for business and science from one source
- Regional, national and EU networking
- Information, consulting, innovation, technology transfer, mediation...
- Strong focus on eco-innovation Sector Groups



Business Support at Your Doorstep

<http://ec.europa.eu/enterprise-europe-network>





The Network in Germany and NRW

- Germany:
13 consortia with 55 partners
- North Rhine-Westphalia:





NRW.Europa

- NRW.Europa is the Enterprise Europe Network node for North Rhine-Westphalia
- NRW.Europa is one of the largest nodes in the Network (annual budget ~3 million €)

- Our clients are:

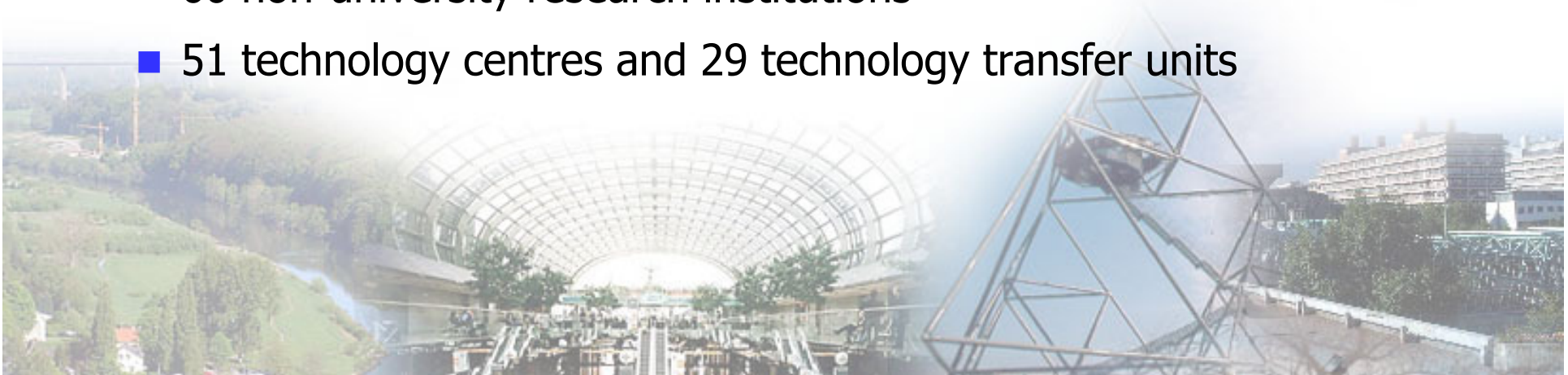
- SME
- Universities
- R&D institutes
- Other





Relevance for NRW

- 723.000 small and medium-sized enterprises
- NRW exports amount to 174 billion €
(117 billion € alone to other EU countries)
- Eight of NRW's twelve most important trade partners are members of the EU
- 59 universities and universities of applied sciences,
60 non-university research institutions
- 51 technology centres and 29 technology transfer units





Sector Groups

- 18 Sector Groups
- **Purpose:**
Generally to support a specific sector and specifically to initiate all types of partnerships (commercial, technology transfer, research) between enterprises/other organisations in different countries
- **Activities:**
Formal meetings, brokerage events, seminars, company missions, policy feedback and publications, amongst others ("Rolling Plan")
- NRW.Europa: Chairmanship of SG Environment and SG Security





Sector Group Environment

- About 50 Members
- 19 countries represented
 - From Norway and Sweden in the North, to Malta and Greece in the South
 - From Portugal and Spain in the West, to Hungary and Romania in the East
- Next Formal Meeting and Brokerage Event on 28-30 October 2009 at ENTSORGA-ENTECO in Cologne, Germany





Sector Group Intelligent Energy

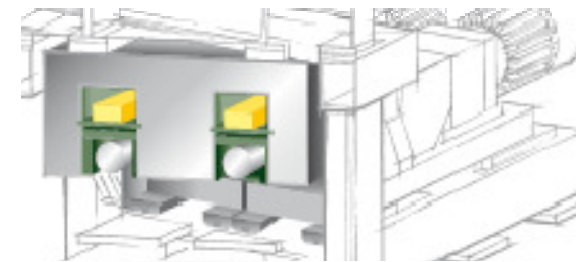
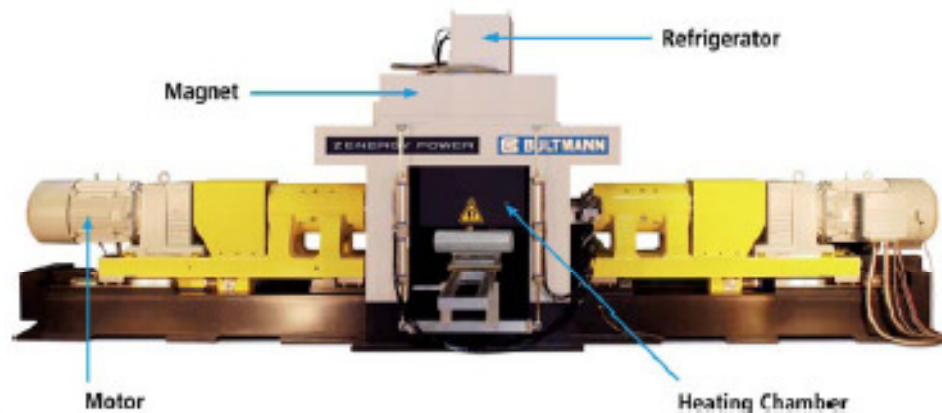
- About 65 Members
- 21 countries represented, including Iceland, Turkey and Macedonia
- Next Formal Meeting and Brokerage Event on 19-20 May 2010 at All Energy Conference, Aberdeen, Scotland



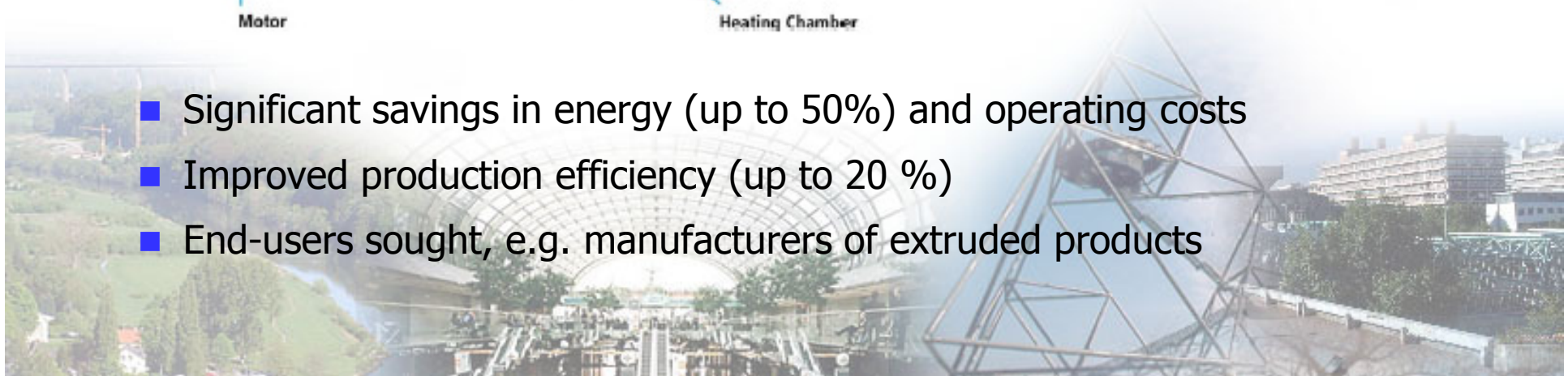


Example of a Technology Offer

High-temperature super-conducting induction heater (Magnetic Billet Heater)



- Significant savings in energy (up to 50%) and operating costs
- Improved production efficiency (up to 20 %)
- End-users sought, e.g. manufacturers of extruded products

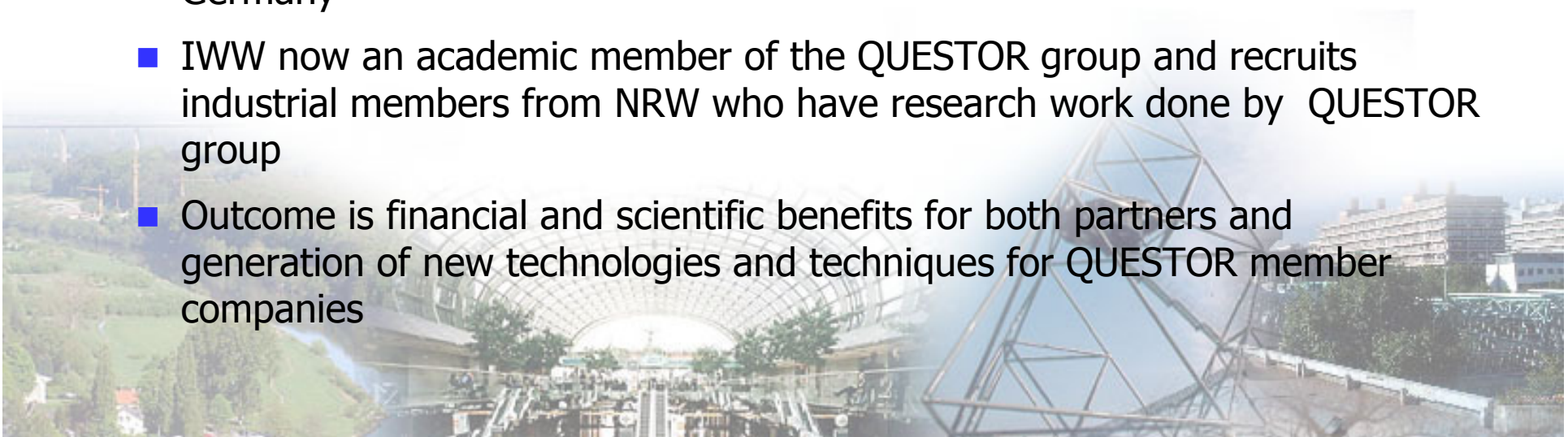




Example of a Success Case

Water Quality-Related Research and Development

- A technology co-operation agreement between the QUESTOR Centre and IWW Rhine-Westphalia Institute for Water Research
- First meeting of partners – initiated by ZENIT - at the E-World Energy & Water - International Matchmaking Event, 7 February 2007, Essen, Germany
- IWW now an academic member of the QUESTOR group and recruits industrial members from NRW who have research work done by QUESTOR group
- Outcome is financial and scientific benefits for both partners and generation of new technologies and techniques for QUESTOR member companies





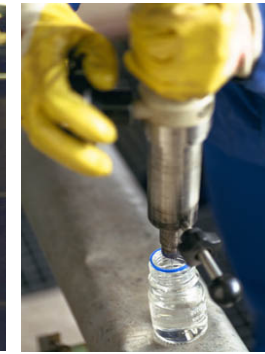
Environmental protection in NRW

- End of the 1960's
 - "A blue sky over the Ruhr"
- From the 1970's onwards
 - Environmental technology establishes itself as an industrial sector (End-of-pipe technologies)
 - Objectives:
Preservation of resources and avoidance of waste
- Today
 - Production-integrated environmental protection
 - Objectives:
Climate and species protection





Environmental economy in NRW



- 3.000 enterprises with products and services, 60% active at international level
- 200.000 employees, primarily in small and medium-sized enterprises
- Interdisciplinary sector with a turnover of 22 billion Euro
- Very good environmental technology infrastructure with about 3000 disposal and recycling plants



NRW as an energy region

- Percentage of the total mining of primary energy sources in Germany
 - 90% black coal
 - 50 % brown coal
- Electricity production and consumption in comparison to Germany as a whole
 - 35 % is produced
 - 30 % is consumed
- 25% of the Germany's workforce in the energy sector
- Energy entities in NRW: e-on, RWE, RAG



NRW's energies of the future

- Modern power plant technologies
- Fuels of the future
 - Biomass / biowaste
 - Methane
- Regenerative energy sources
 - Solar energy
 - Wind energy
 - Geothermal energy
- Intelligent use of energy
 - Fuel cells
 - Rational usage





Priority fields in NRW

- Energy saving
- Regenerative energies
- Heat/power co-generation
- Fossil energy
- Fuel cells & hydrogen
- Transport
- Nuclear energy
- Energy research





Employment in Germany in the fields

- 1.8 million employees in 2006
 - 400.000 employees in classic environmental technologies
 - 1.165.000 employees in environmental services and personnel
 - 235.000 employees in renewable energies (major increase)
 - ▶ 160.500 employees in 2004
 - ▶ 105.000 employees in 2002

- Outlook
 - Very expansive development in the area of renewable energies
 - Energy saving in buildings has an impact on the craft trade sector
 - Environment-oriented services gain in significance





Environment and energy: Assumptions

- Assumption 1:
The classic environmental sector is continuously developing
- Assumption 2:
The climate discussion re-focuses the environment discussion on CO₂ reduction
 - Energy-saving technologies are at the forefront
 - Energy-saving technologies are of transnational significance
- Contribution of the Enterprise Europe Network to finding solutions
 - Initiation and support of technology developments (FP7)
 - Information about technologies and contact to know-how owners
 - Networking of players via delegation visits, brokerage events
 - Technology transfer and mediation of partnerships





Thank you for your attention !

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