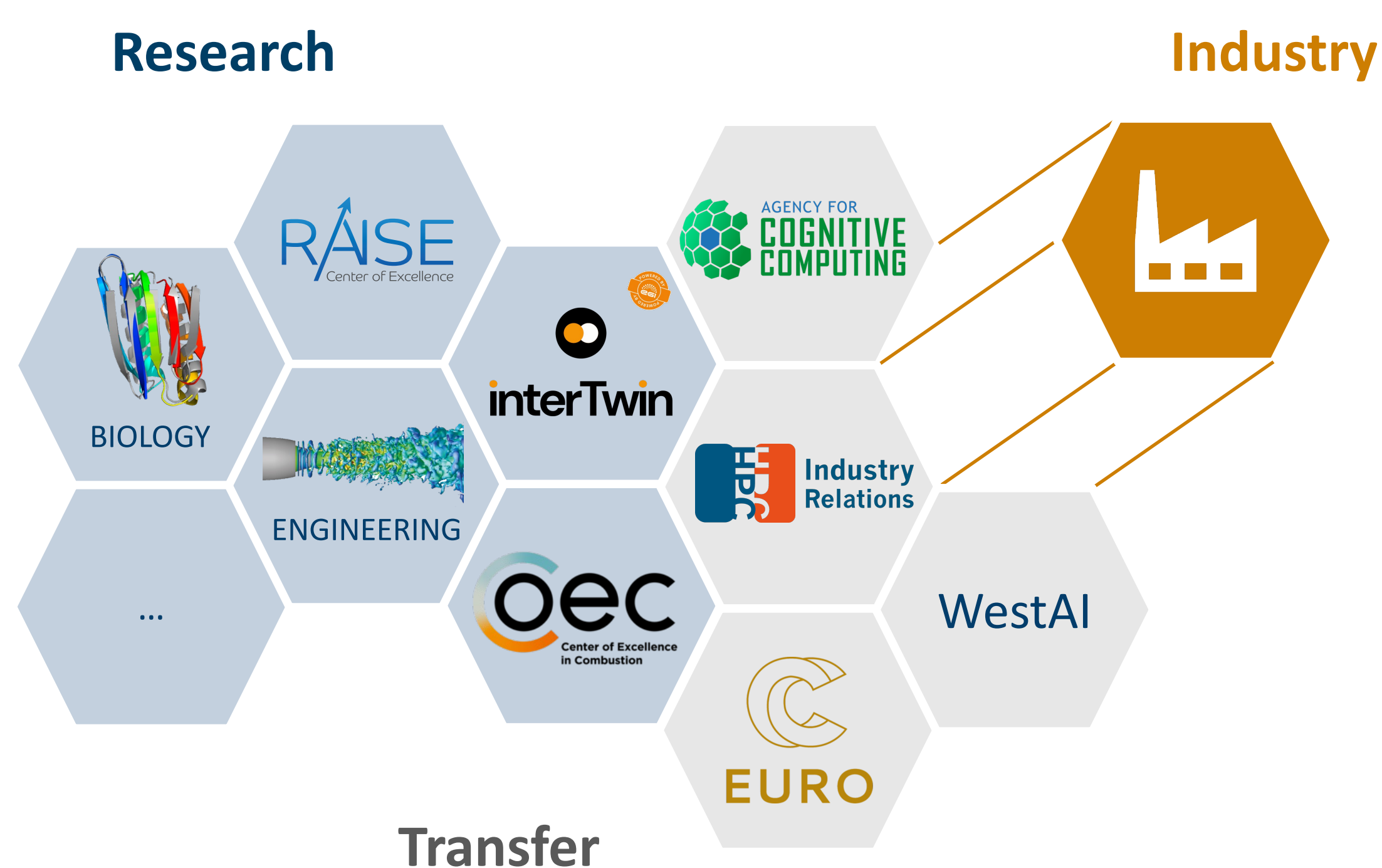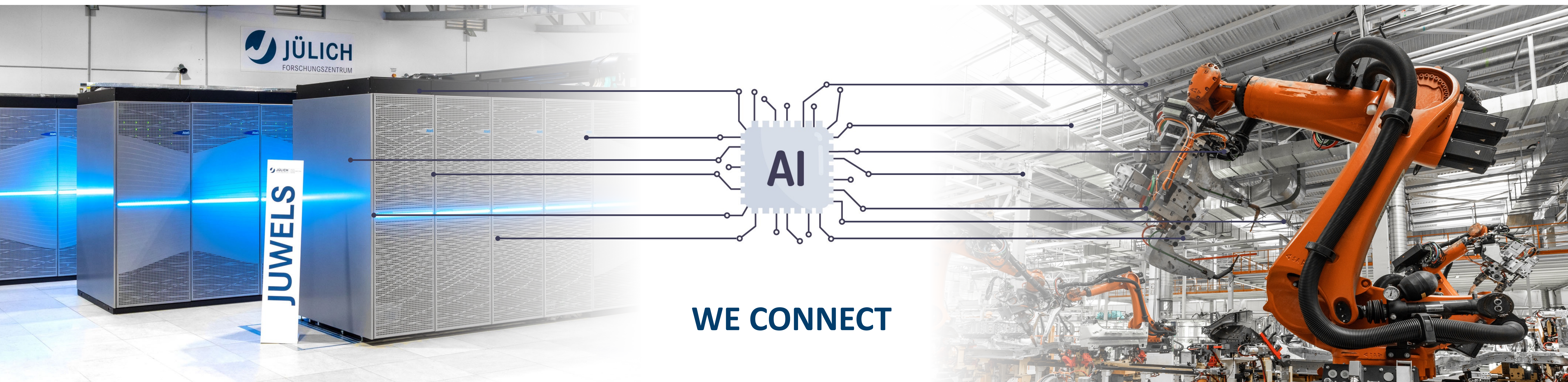# Transfer at the Jülich Supercomputing Centre

Bringing Artificial Intelligence and High-Performance Computing to Industry

JUWELS

AI

WE CONNECT

Research — Industry

BIOLOGY · RAISE Center of Excellence · ... · ENGINEERING · interTwin · AGENCY FOR COGNITIVE COMPUTING · JSC Industry Relations · oec Center of Excellence in Combustion · WestAI · EURO
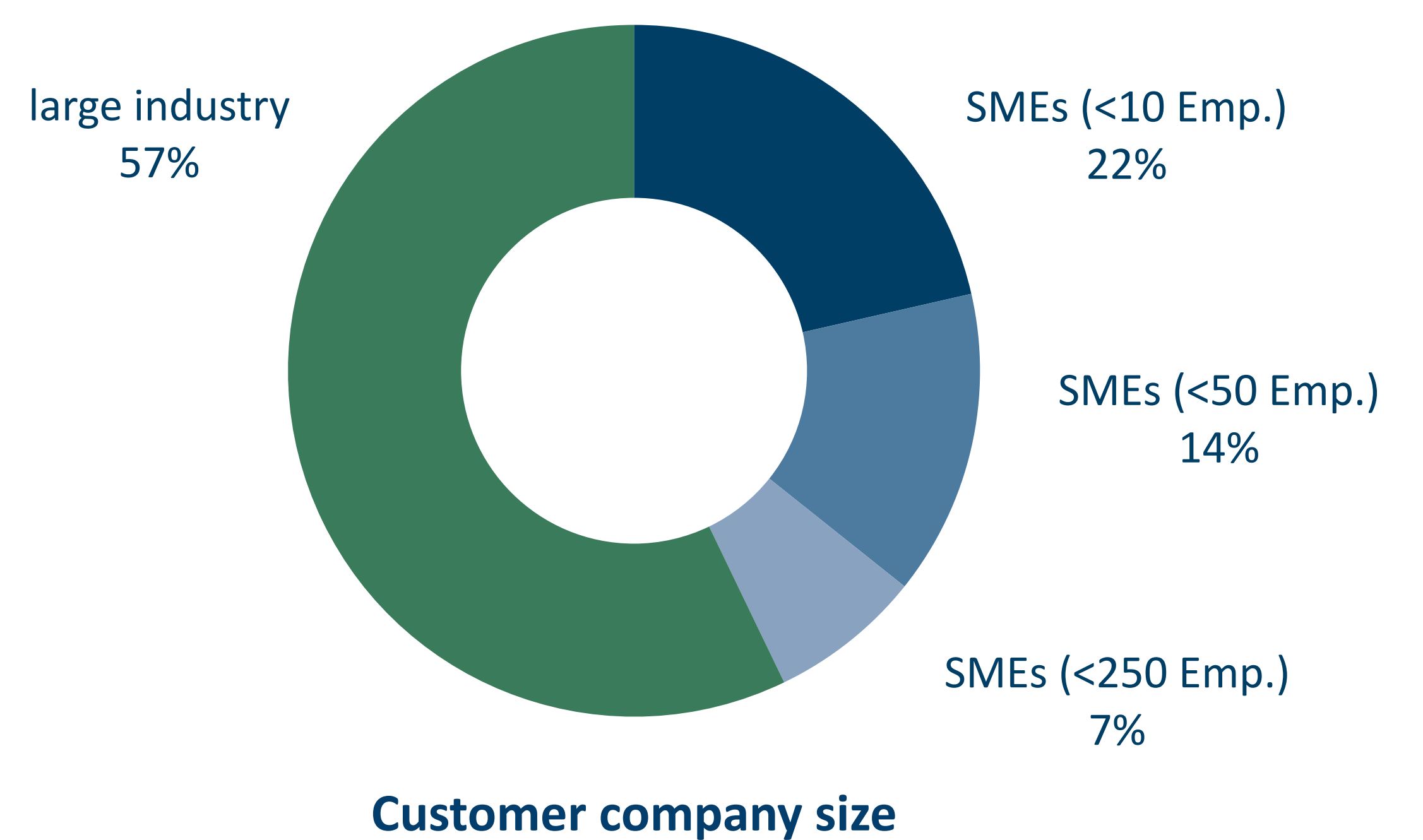
Transfer

Research provides the cutting-edge technologies

- The Jülich Supercomputing Centre (JSC) is involved in many HPC- and AI-based research projects
- JSC provides a unique research and support structure through its Simulation and Data Laboratories (SDLs)
- The latest hardware is integrated into JSC's HPC infrastructure for experimental and production purposes
- JSC will host JUPITER, the first Exascale computer of Europe

Targeted transfer of knowledge

- EuroCC creates bridges between Centers of Excellence and industry
- WestAI provides knowledge to industry in a broad sense
- Agency of Cognitive Computing (ACC) as structural change measure
- The ACC aims at channeling research expertise in AI, HPC, and Quantum Computing to local industry and SMEs
- The ACC brings digitalization to jobs in the Rhenish region by massively strengthening the dual degree program "Mathematical-technical Software Development"

large industry 57%

SMEs (<10 Emp.) 22%

SMEs (<50 Emp.) 14%

SMEs (<250 Emp.) 7%

Customer company size

Service modules

Data · Knowledge Creation · Simulation & Digital Twin · Quantum Computing

Data

Industry/Science · Problem · Management · Services · IT · Competence · Competence network

The Industry Relations Team (IRT)

- Founding of the IRT in 2015
- Continuously growing number of industrial customers (16 as of 01/2023)
- Matchmaking between scientists at JSC and industry
- Tailored solutions for individual customers
- Consulting in HPC hardware procurement
- Sale of compute cycles