Cooperation

We offer broad competence and deep know-how with respect to energy technologies. Cooperation is provided by

Contract cooperation:
- Research and development projects
- Application and demonstrators
- Feasibility studies and consulting based on simulation

Publicly funded research projects:
- On regional, national and international level
- Research and development work
- Project proposal writing and coordination activities

Fraunhofer IISB

FRAUNHOFER INSTITUTE FOR INTEGRATED SYSTEMS AND DEVICE TECHNOLOGY

Project SEEDs

Fraunhofer Institute for Integrated Systems and Device Technology IISB

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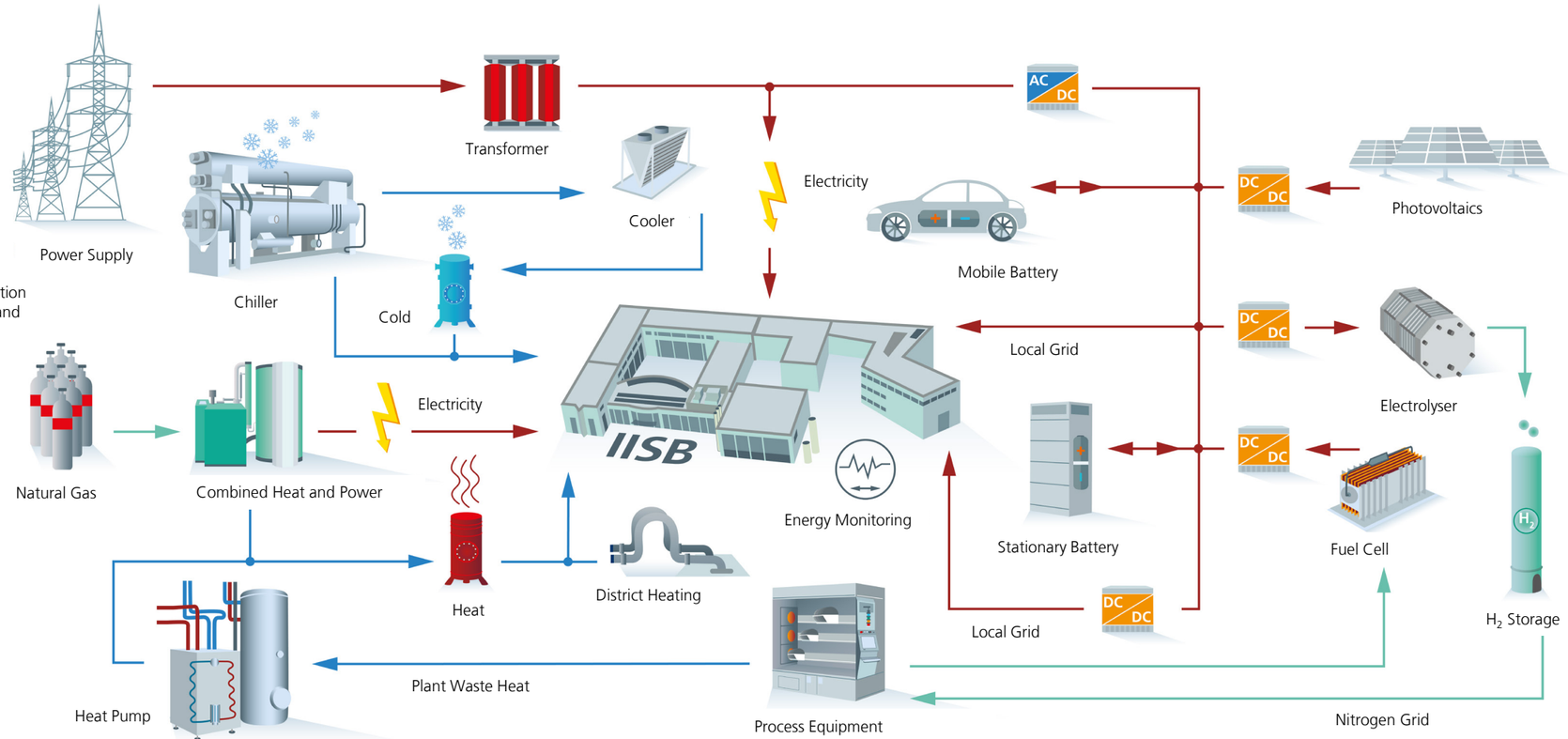
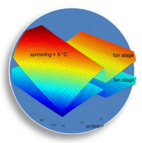
Project Goal and Overview of SEEDs

- Set-up and optimization of a local energy system at industrial level (for small and medium-sized companies) by utilizing and developing existing approaches and innovative techniques
- Coupling of various energy forms like electricity, heat, cold and hydrogen technology with special focus on efficient interlinking by power electronics
- Whole institute building and infrastructure of the Fraunhofer IISB serves as research and demonstration platform
- Focus is on maximum efficiency, cost effectiveness as well as on security of supply and stability of the local energy system

Research and Demonstration Platform



Examples for research and development activities concerning thermal and hydrogen systems



Customized Simulation of Cold and Hot Water Energy Grids

Modelling, simulation, characterization and operation of thermal systems and components

Thermal Energy Storage Technologies

Characterization, simulation and prototype development for thermal energy storages

Fuel Cell System Technologies for Exhaust Hydrogen and Diluted Hydrogen

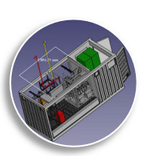
Characterization, system integration and dilution effects for fuel cell systems

Energy Efficiency and Monitoring

Energy monitoring, analysis of supply load and consumption profiles

Load Shifting and Peak Shaving

Load prognosis and peak load reduction by electrical storages



LOHC Systems

Demonstration and modelling of advanced hydrogen storage systems based on liquid organic hydrogen carriers (LOHC)

Funded by
Bavarian Ministry of
Economic Affairs and Media, Energy and Technology