

# Indoor climate and energy systems

**Our specialists develop innovative technical concepts to ensure maximum comfort for indoor climates with minimal energy and equipment costs.**

When it comes to interior comfort and energy efficiency, our state-of-the-art measurement and simulation tools not only enable us to perform troubleshooting with our own measuring instruments, but also enable us to develop concepts for solutions. Our simulation instruments do not just record thermal processes; they also give insights into flow processes. This allows us to develop concepts for low-energy systems for heating, cooling and ventilation processes, as well as fire safety concepts and their corresponding smoke extraction simulations. We place special emphasis on developing advanced technical concepts for the application of renewable energy and energy efficiency. As experienced energy specialists, we undertake design and process control for renovations and structural adaptations to heating and energy supply structures, and we oversee these projects right up to the start of operations.

Our experienced team of building services and mechanical engineers is involved in the following areas in particular:

- Indoor climate consulting
- Comfort analyses and measurements
- Energy analyses
- Plant optimization/energy efficiency of technical systems
- Refinement of technical systems
- Pilot and demonstration projects/research projects
- Special energy systems (e.g. solar cooling)
- Thermal and flow simulations
- Fire protection concepts / smoke extraction simulations
- Concepts for the use of geothermal energy/renewable energy/LowEx systems
- Local and district heating networks
- Concept solutions for heating and cooling systems that use biomass and energy from the environment
- Cogeneration plants (CHP)