



# Dr.-Horst-Schmidt-Clinics Ltd.

## Energy Efficiency in Buildings

- 8 buildings with 1'053 planned beds
- Optimization and modernization of technical plants
- Reduction of CO<sub>2</sub> emissions by app. 30% p.a.
- Model project for the State of Hesse



## Energy Efficiency in Buildings Dr.-Horst-Schmidt-Clinics Ltd.

### Situation

Based on the primary structural properties, the Dr. Horst Schmidt Clinics Ltd. is a hospital for centralized care. It is thus, as a supplement to basic, specialized, and critical care, a general hospital offering all important specialties.

Comprehensive modernization measures, financed exclusively through energy cost savings the HSK was the first internationally published and awarded contract under the contracting guidelines \*<sup>1</sup> from the state of Hesse. The clinic consists of 23 different clinics from the most important care specialties.

### Energy relevant measures

- Modernizing the air conditioning and ventilation plants, including demand-controlled control
- Modernizing the control technology within the heating plant
- Introducing a Siemens building management system with peak load and energy management programs
- Replacing more than 1,500 lighting fixtures
- Preheating domestic hot water through exhaust air from laundry facility
- Optimizing steam supply
- Installing a new turbo compressor
- Supplying CGP with 364 kWel
- Installing a blind current compensation plant

\*<sup>1</sup> The Hessian Environmental Ministry drafted contracting guidelines, offering an aid for applying Performance Contracting to awarding, contracting, and budgetary issues.



### Project data

- Energy management for 8 buildings and 1'053 beds
- Energy costs before modernization: € 2.42 Mio.
- Guaranteed energy costs savings: € 500'000 p.a.
- Savings share for the Clinic: € 103'200 (21%) p.a.
- Reduction of CO<sub>2</sub> emissions: 30% p.a.
- Investment: € 3.3 Mio.
- Contract period: 14 years

### Customer benefits

- Customer-specific, tailored modernization of building services plant and automation technology without investing any capital.
- The budget is relieved through a share in the savings.
- Increased plant availability thanks to maintenance and repairs. The value of the building is secured and profitability increased.
- Siemens endeavors to create transparency of costs and performance by continuously optimizing the process. Forming the basis for economical and ecological management.

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