



Made efficient: SI-Erlebnis-Centrum Stuttgart

The SI-Centrum is an urban entertainment center in Stuttgart with a wide range of attractive offers: two hotels, two musical theatres, six cinemas, a sauna complex with large wellness facility, apartments, suites and several administrative buildings. Visitors enjoy a combination of hotels, entertainment, theme-based gastronomy in 19 different restaurants and bars, relaxation in the VitaParc Schwaben Quellen water world, excitement in the Stuttgart casino, the MaxX Filmpalast and world famous musical successes. The total surface area is approx. 106,000 m².

Since January 2004, HOCHTIEF Energy Management GmbH has supplied the entire building complex with heat, chilling energy, power and domestic water. The target was to achieve an annual cost reduction of 175,000 Euros, related to the base year 2003. By taking into account rising energy costs, over one million Euros were saved in both 2006 and 2007. The tenants benefit to 100% from these savings.

Annual costs of 175,000 Euros saved.

Tenants profit to 100 percent from this.



SI-Erlebnis-Centrum Stuttgart

Requirements

On December 2nd 1994 the SI-Erlebnis-Centrum Stuttgart was opened. This leisure complex is unique throughout Europe. To increase the value and prestige of this property, in the interests of the tenants involved, the complex operators looked for ways to reduce the operating costs of the building complex. After almost ten years of business, there was a high potential for savings in the energy supply field. The solution was found in the form of a contracting agreement: the entire energy management was outsourced to HOCHTIEF Energy Management GmbH, achieving both targets in 2004. Despite extensive re-development measures, the property owners did not have to invest their own funds.

Results

Since January 1st 2004 the supply of media for the entire complex is managed by HOCHTIEF Energy Management GmbH. As specialists for large-scale sites, the company optimized the energy facilities at its own cost. The refinancing was covered by part of the savings achieved during the thirteen year contract period. The contractor thereby saves the customer annual costs of 175,000 Euros. To implement the required measures, HOCHTIEF Energy Management invested a total of 1.6 million Euros.

Through a re-tendering of electricity and natural gas suppliers in Germany and bordering countries, the contractor was able to achieve significantly better purchase prices. The installation of heat and chilling network systems increased the reliability of the supply. The company also linked the existing heat and chilling facilities with a pipeline to form a composite network. This connection of two existing DDC systems also made central control and remote monitoring of the systems possible.

Parallel to this, the contractor erected a new combined heat and power plant, which started operation on January 1st 2005. This has a power output of 890 kW. The use of an environmentally-friendly combined heat and power plant enables the SI-Erlebnis-Centrum Stuttgart to not only generate useful heat but also a large percentage of the electricity required.

Services provided by HOCHTIEF Energy Management

- Facility operation
- Facility optimization
- Provision of useful energy

Individual measures

- Installation of a combined heat and power plant, 800 kW power output
- Connection of two different, existing DDC systems (Direct Digital Control-System, controls and monitors heat, air-conditioning and ventilation systems)
- Establishment of heat and chilling composite networks
- Upgrading of all consumption counters to M-Bus for consumption recording and billing

Media

- Heat, chilling energy, power, water, waste water



Savings

- HOCHTIEF Energy Management saves the tenants of the SI-Center annual costs of Euros 175,000.

Customer benefits

- Energy supply contracting with guaranteed savings
- A reliable supply for the contract period of 13 years
- 326,000 € were saved in the first year.
- In 2004 and 2005 about 500,000 € were saved each year, while over 1.1 million € were saved in both 2006 and 2007.
- The tenants benefit to 100% from the savings!

**Efficient energy –
perfect workflow.**



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