

Optimized Energy Consumption

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Profit

The energy consumption shown in the charts and diagrams is made available to the customer in the internet. Energy supply is monitored by the computer. When the determined limit values are exceeded, a fault report is issued. In this way leakages and burst pipes are discovered quickly. Between 2004 and 2005 the energy consumption decreased by 9.5 %. So we could counteract the 12 % annual energy cost increase.

Context

SKE was awarded a 15-year-PPP-Contract for energy supply of 41 schools within the district of Offenbach, Germany. This contract requires SKE to bear the operational costs for heating, power and water supply. In order to reduce the operational cost and the pollution, SKE projected a renovation of the energy supply facilities.

Description

In order to obtain reliable data on the efficiency of the heating plants, all meters were upgraded with electronic counters. A temperature sensor and a "smart box" were installed. A smart box is a device that collects measured data, saves them and transmits them to the server. The meters gather all consumption data (energy consumption, consumption period, heating flow temperature, room temperature etc.). Afterwards these data are transferred to a central energy management system (Ennovatis Controlling) which issues diagrams and reports.