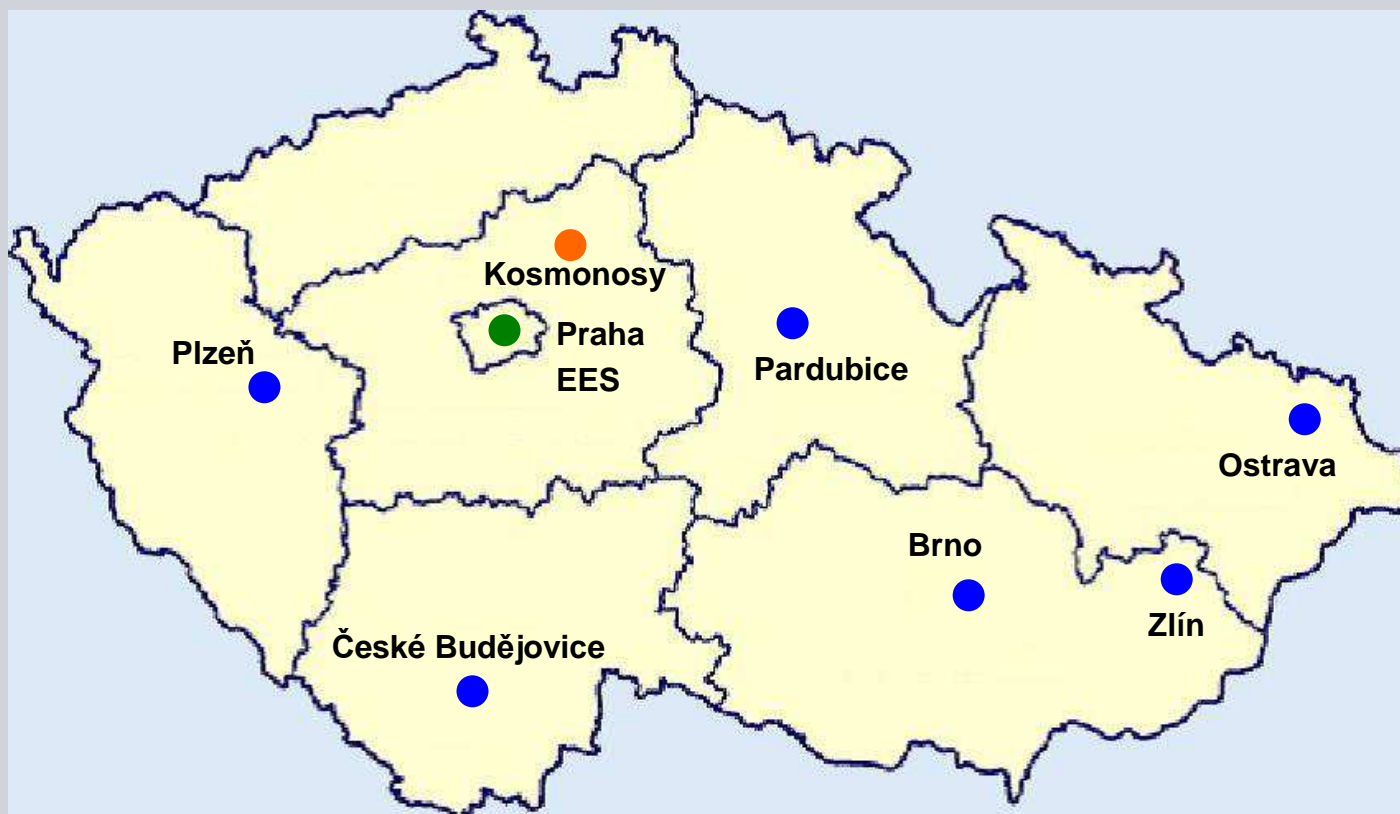


Psychiatric Clinic Kosmonosy

**Reconstruction of the heating system,
new technology for the usage of the water
from the clinic's own source and complete
reconstruction of the laundry**



Project Location



Client's introduction

Basic Information about the Psychiatric Clinic in Kosmonosy

- founded in 1869
- consists of 17 buildings
- 600 beds (average utilization 93%)
- 500 employees
- provides psychiatric care with help of different therapy methods both for inpatients and ambulatory patients



Project # 1 - Reconstruction of the Heating System

Status Quo before Project

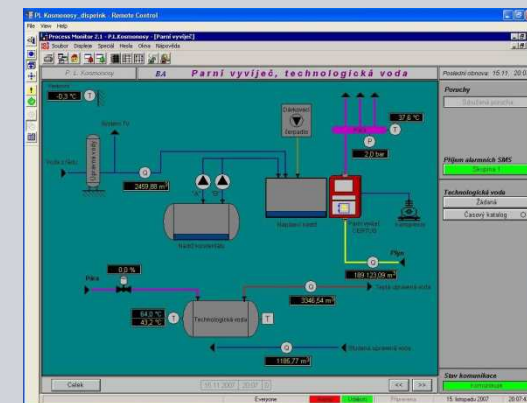
- old central steam boiler plant
- old pipelines with bad insulation and high heat losses
- old heat exchange stations in the buildings
- no effective control system



Project # 1 - Reconstruction of the Heating System

Project description

- designing + project management
- substitution of the old central steam boiler house by 2 new hot-water boiler plants
- new quick steam generator for the laundry
- new insulated underground pipelines
- 7 new exchange substations for heating and domestic hot water
- new control system Unigrv with dispatching center
- energy monitoring and evaluation



Project # 1 - Reconstruction of the Heating System

Project main data

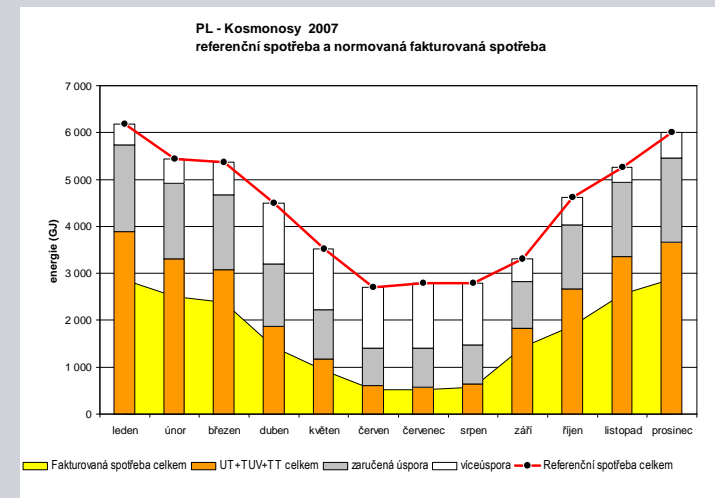
contract signed August 2003
 implementation time 7 months
 PA start May 1, 2004
 investment EUR 0,6 Mio*
 guaranteed savings 15 576 GJ p.a. (30 %)

contract duration 7 years

achieved savings average p.a. 24 594 GJ (47 %)

achieved savings total 196 754 GJ (53 %)

* without VAT



Project # 2 - Waterwell and New Laundry

Status Quo before Project

- very old and unreliable laundry equipment
- high operational costs
- high maintenance costs
- leaks in the clinic's water supply system
- high costs for water consumption



Project # 2 - Waterwell and New Laundry

Project description

- designing + project management
 - waterwell outfit
 - pipeline between waterwell and the water preparing plant
 - building up of water conditioning plant
 - new control system Siemens Simatic
-
- construction work in the existing building assigned for new laundry
 - delivery and commissioning of laundry technology Kannegiesser (washing machines, dryers, rolling press, sleeveers)
 - connection of steam, water, pressure air and electricity
 - connection of the new equipment on the existing control system Unigyr
 - energy monitoring and evaluation



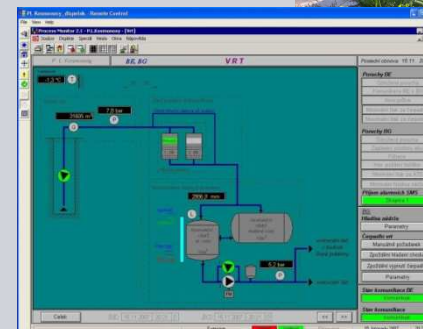
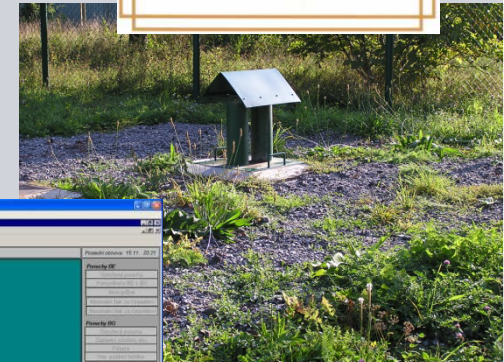
Project # 2 - Waterwell and New Laundry

Project main data

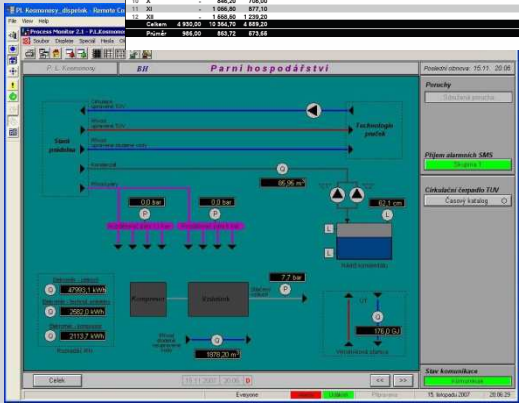
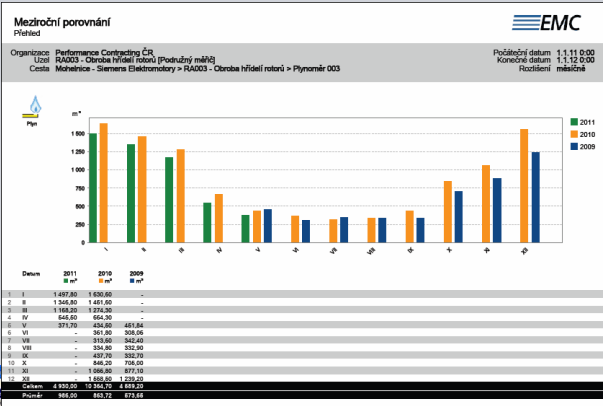
contract signed	July 2006
implementation time	12 months
PA start	October 1, 2007
investment	EUR 1,44 Mio*
guaranteed + not guaranteed savings	EUR 202 238* p.a. (32 %)
contract duration	11 years

achieved savings NG from X/ 07 till XII/10: 1 167 405 kWh
 achieved water savings from X/ 07 till XII/10: 106 222 m³
 operational cost savings from X/ 07 – XII/10: EUR 0,692 Mio*

* without VAT



Project # 2 - Waterwell and New Laundry



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Any questions?

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SIEMENS

Thank you for your attention.

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Building Technologies Division

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