

Saving energy and increasing performance

SIEMENS

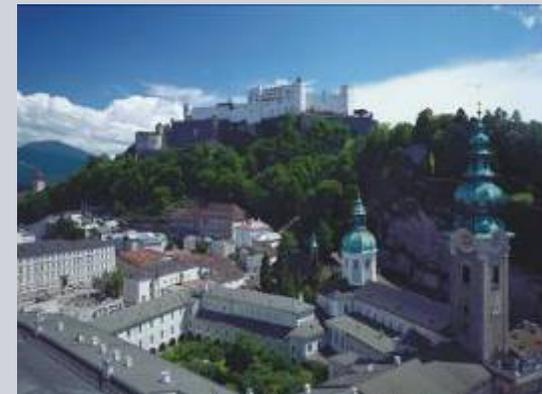
Energy Contracting Wiener Neustadt

Annex 61 - Technical Day
21.9.2015

Siemens Building Performance & Sustainability



- Energy optimization in about 450 buildings
- More than € 70 million contract volume
- More than 7 million €/year of guaranteed savings
- Member of the Association „Dienstleister Energieeffizienz und Contracting Austria“ (Energy efficiency service and contracting Austria)



DECA

“A voice for energy efficiency“



Our mission

- Representation of interest of energy efficiency (services)
- Think-tank for energy efficiency
- Information, transparency and raising awareness

We stand for

- Active and sustainable contribution for environmental protection
- Strengthening energy efficiency services
- High quality standards for services

Our Goals

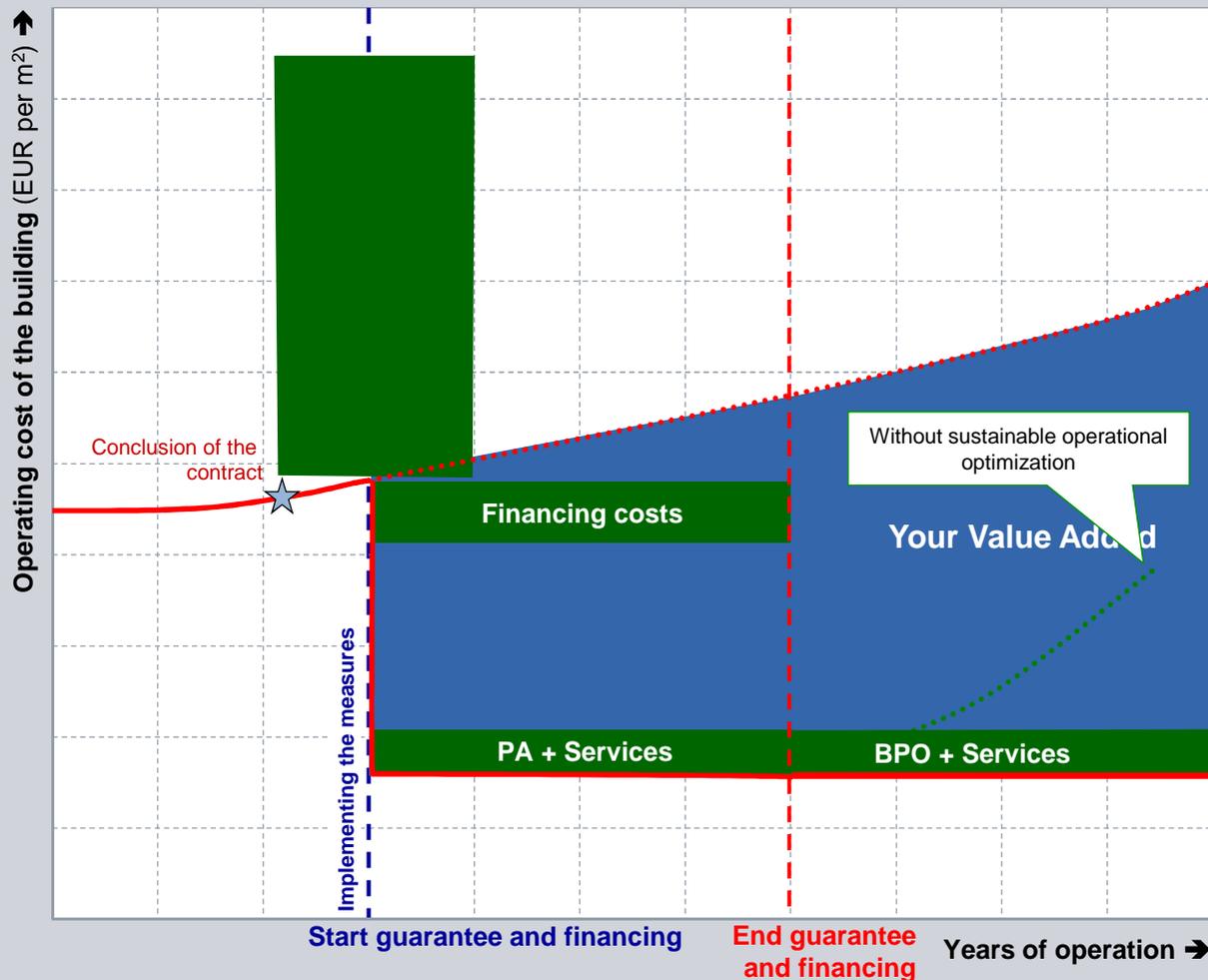


- Requesting contact for all questions regarding Energy Efficiency and Energy Contracting for customers and cooperation partners
 - Which energy services and for which tasks?
 - Market overview, transparency of offerings and services
- One voice for energy efficiency when dealing with decision makers
- Increased considerations of topics on energy efficiency during the decision-making process.
- Support for private and public households when achieving targets for climate change using budget-friendly or investment-free reductions of the energy consumption.

33 Members, e.g.



Energy Contracting – How does it work?



Costs in relation zu savings

- All customer's identified and requested measures are implemented immediately
- The investments can be financed during the contractual period using the savings.
- On request, we guarantee the savings and support the search for suitable financing solutions
- The savings can be maintained with little effort even after the warranty period



Project: Energy Contracting Wr. Neustadt



Customer's View – Initial Situation (c/o M. Hesik)

- More than 100 Objects, most of them with savings potential
- Energy Concept 2012, Klima- und Energiemodellregion with focus on buildings
- Tight financial situation
- Need for action in public swimming pool
- Diffuse anxiety against Contracting => „Objectification“
 - Pilot project at building with highest energy consumption:
„Aqua Nova“ 2012
 - Follow up project: Contracting for building pool 2014



Customer's View – Reasons (c/o M. Hesik)



„Expected benefits are higher than the doubts!“

- No budget required for (necessary) investments
- Claiming of subsidies enable additional measurements
- Outsourcing of technical and financial risks
- Professionalization of energy management and – controlling by external experts
- Increased user comfort

Key data of the project

- **Tender Start :** April 2014
- **Award :** End of 2014
- **Reconstruction works:** till 31.08.2015
- **Beginning of the warranty phase:** 01.01.2016
- **Guaranteed savings :** appr. 100k EUR p. a.
- **Guaranteed savings in % :** 27 %
- **Investment amount:** appr. 1 Mio. EUR
- **Contract Duration :** 15 years



Subject of contract

Building pool consisting of 7(9) objects:

- Europaschule
- VS Pestalozzi inkl. Kindergarten
- Neue Sportmittelschule Fred Sinowatz
- Kindergarten Oskar Helmer
- BAKIP/HLM
- Stadtmuseum
- Stadttheater inkl. Musikschule und Musikvolksschule



Measures: Europaschule

- Extension of the building management system (BMS)
- Hydraulic adjustment
- Installation of thermostatic valves
- Restoration of the windows



Measures: VS Pestalozzi

- Variable speed pump
- Expansion of BMS
- Installation of thermostatic valves
- Hydraulic adjustment
- Restoration of the windows

VS PESTALOZZI NORD



**FIRST BILINGUAL
PRIMARY SCHOOL**



Measures: NMS Fred Sinowatz

- Extension of the building management system (BMS)
- Installation of speed-controlled pumps
- Lighting: LED gymnasium including regulation, panel lights
- Hydraulic adjustment
- Installation of thermostatic valves
- Restoration of the windows (gaskets, fittings settings)

Investitionskosten:	EUR	200.000,-
Einsparungen:	EUR	18.000,- p.a.



Measures: Kindergarten Oskar Helmer

- Variable speed pump
- Expansion of BMS
- Retrofit lighting to LED (mandatory action)
- Installation of thermostatic valves
- Hydraulic adjustment
- Restoration of the windows

Investment cost:	EUR	80.000,-
Savings:	EUR	4.800,- p.a



Measures: BAKIP / HLM

- Extension of the building management system (BMS)
- Installation of speed-controlled pumps
- Insulation of the top ceiling
- Hydraulic adjustment
- Installation of thermostatic valves
- Restoration of the windows



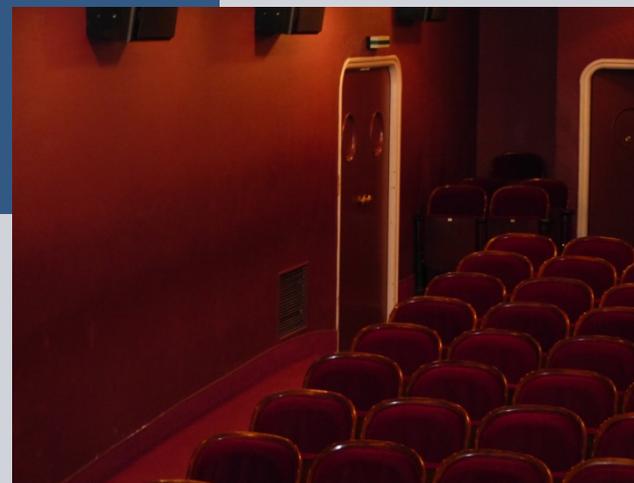
Measures: Stadtmuseum

- Variable speed pump
- Expansion of BMS
- Installation of thermostatic valves
- Hydraulic adjustment
- Restoration of the windows



Measures: Stadttheater

- Extension of the building management system (BMS)
- Installation of speed-controlled pumps
- Lighting change to LEDs
- Insulation of the top ceiling
- Hydraulic adjustment
- Installation of thermostatic valves
- Restoration of the windows



User Motivation

The experiences shows that a technical modernization often only leads to the desired success by raising the user's awareness.

For this reason, a user motivation program is planned over the entire project duration.

The "UsMo" concept is part of the offer.

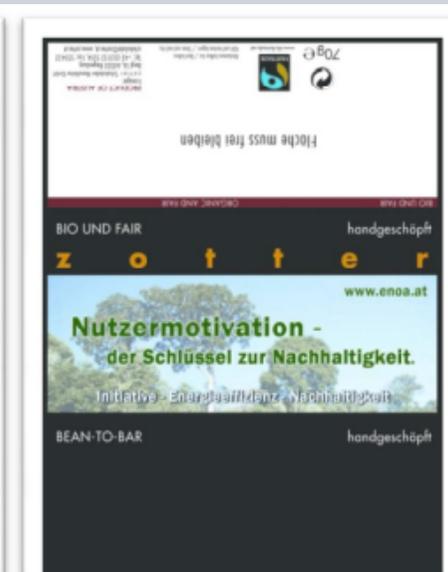
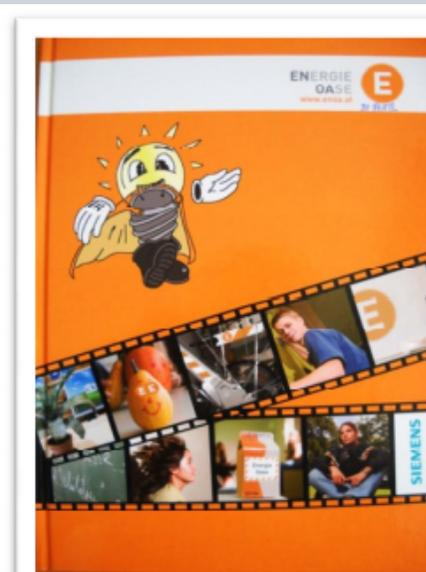


User Motivation Tools

- Homepage ENOA
- Energie efficiency workshops
- Expert talks
- On-site Energie Days
- Technical trainings
- Energy efficiency workshops with students
(Finding "energy guzzlers", supervision of school projects, motivation events, CO2-footprint representation, creating awareness,...)
- Thematic exhibitions



„UsMo“ is a dynamic process and is continuously coordinated and adapted in relation to the city.



User Motivation - Timeline

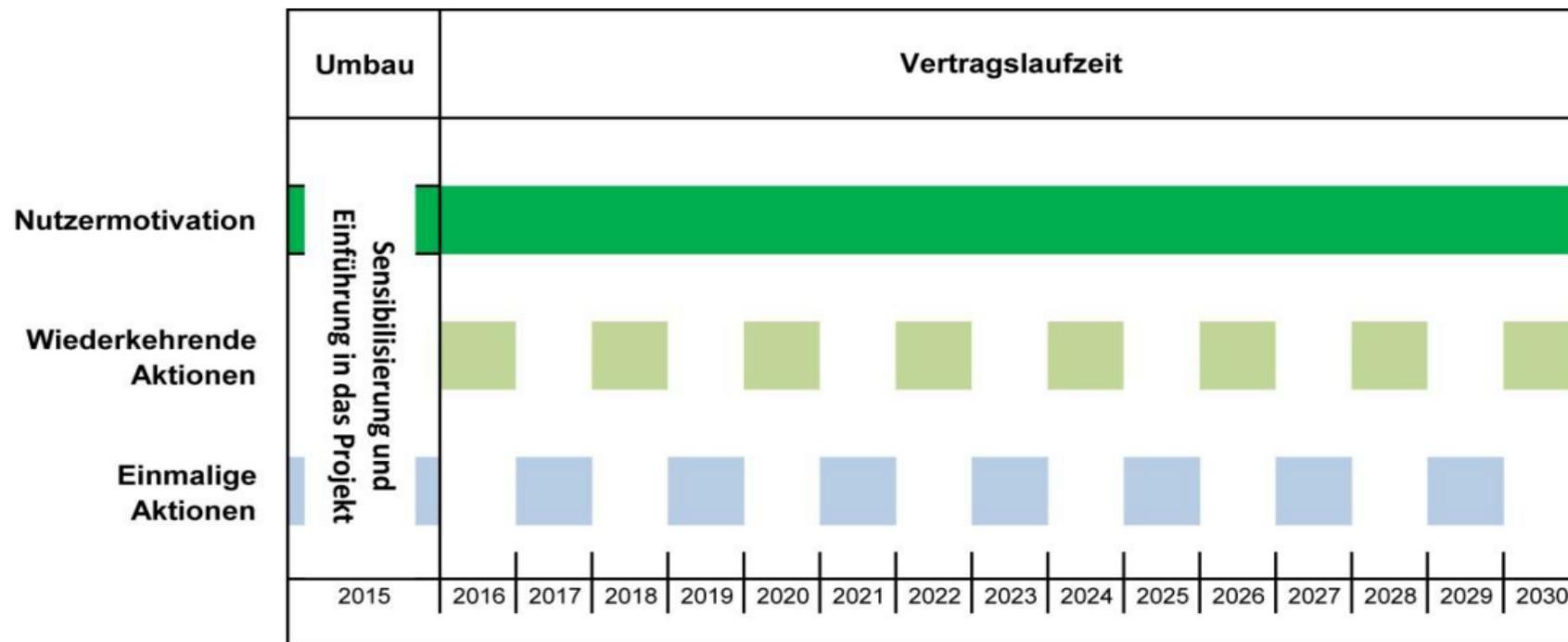


Abb.: Zeitlicher Ablauf der Nutzermotivation

The time of each user motivation activity is constantly agreed and adjusted with the city! First workshop series will start in autumn after the reconstruction phase.



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