CASE STUDIES OF ENERGY EFFICIENCY PROJECTS SUPPORTED BY "OPPIK" NATIONAL PROGRAMME

Tomáš Voříšek, Technical Director, SEVEN Energy, s.r.o.
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CASE STUDY No 1: MECHANICAL ENGINEERING COMPANY
BEFORE PROJECT IMPLEMENTATION:

- Company category „large entrepreneur“ (printing industry)
- Energy costs represent about 2.5 % of annual turnover
- Plant comprises of ~ 37 buildings, total floor area ~ 24 thous. m²
- Old-fashioned central source of heat on gas (cca 7 GWh/year), steam-based distribution of heat (1.4 km)
SOME PHOTOS OF ORIGINAL STATE:
ENERGY EFFICIENCY PROJECT TIMELINE:

- **2015: Energy audit** – heating system should be renovated, identified possible gas savings ~ 20-30% of current consump.

- **2016: Project design documentation & Grant application** – OPPIK programme used for co-financing of eligible project costs (cca 15 mil. CZK)

- **2016: Tender organized & Grant approved** – winning bid at ~ 13,5 mil. CZK, 30% co-financed from OPPIK

- **2017: Efficiency measures realized** – manufacturing halls heated by infrared gas heaters, others with gas-fired boilers
EXPERIENCE & RECOMMENDATIONS

- **Integrated project management** shortened preparatory phase, and avoided any deviations from OPPIK rules

- **Quality assurance/inspection** during construction phase proved as **very important** (avoided major technical flaws and helped to lower investment costs)

- **Energy-performance-based contractual conditions** oblige the Contractor to **guarantee savings** during the whole 5-year-long monitoring period

- Introduce **effective energy management** for monitoring
CASE STUDY No 2: COMMERCIAL LAUNDERING COMPANY
BRIEF PROJECT INTRODUCTION

- SME client (turnover cca 20 mil. CZK/year), nearly 900 tonnes of laundry processed annually

- Identified two possible energy savings – heat recovery from waste process water (washing) and air (press machine)

- Investment of 2.9 mil. CZK needed to recover more then 120 MWh/y (> 10% of total energy use)
ENERGY EFFICIENCY PROJECT TIMELINE:

- In 2016 submitted application for investment grant from OPPIK, grant contract signed in 1Q of 2017 (50% of total costs)

- Throughout 2017, tender for supplier organized, the installation of EE technology completed by 9/2017

- First year of operation brought energy savings more than 80% of those planned (450 thous. CZK/a)

- Investment grant helped to shorten payback period to ~ 3 years
GENERAL CONCLUSIONS (FROM THE POINT OF INVESTORS)

- OPPIK Programme helps to improve economic attractiveness of energy efficiency projects (especially for SMEs)

- However, at the expense of more costly and time consuming project preparatory phase, and (unwelcome) long-term obligations (5-year long sustainability period)

- What can be improved:
  - Faster project application evaluation phase
  - More clear grant scheme conditions (with less frequent changes)
  - Grant schemes make impression, that energy savings are economical only with state support (which is unfortunate)
QUESTIONS?

Thank you for your attention.

Ing. Tomáš Voříšek
SEVEEn Energy, s.r.o.
(email: tomas.vorisek@svn.cz, tel.: +420 724 361 339)