

Energy Service Providing and ESCO activities in the Czech Republic

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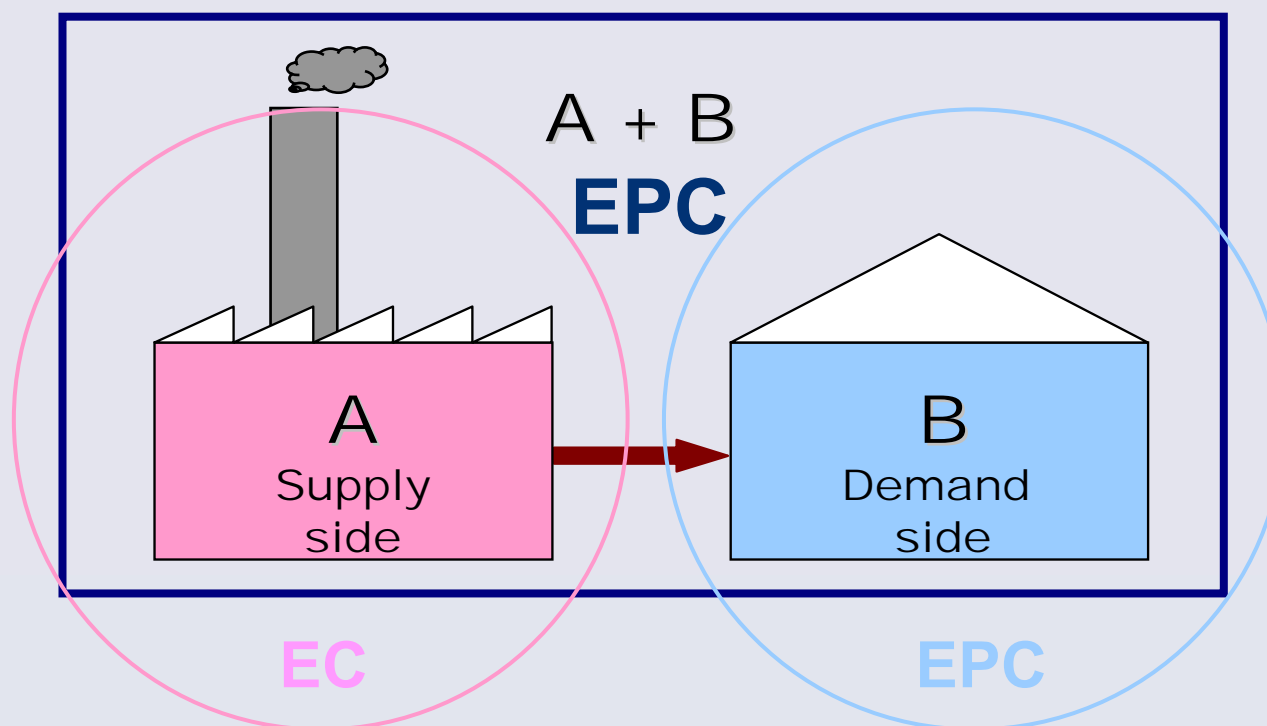
Contribution of SEVEn on EPC

- **SEVEn introduced EPC methodology in Czech Republic in 1992**
- **Longtime dissemination of information on EPC and energy service provision**
- **Education of energy services companies in „nineties“**
- **Assistance in tendering process in public sector to prepare EPC projects (from 1999)**

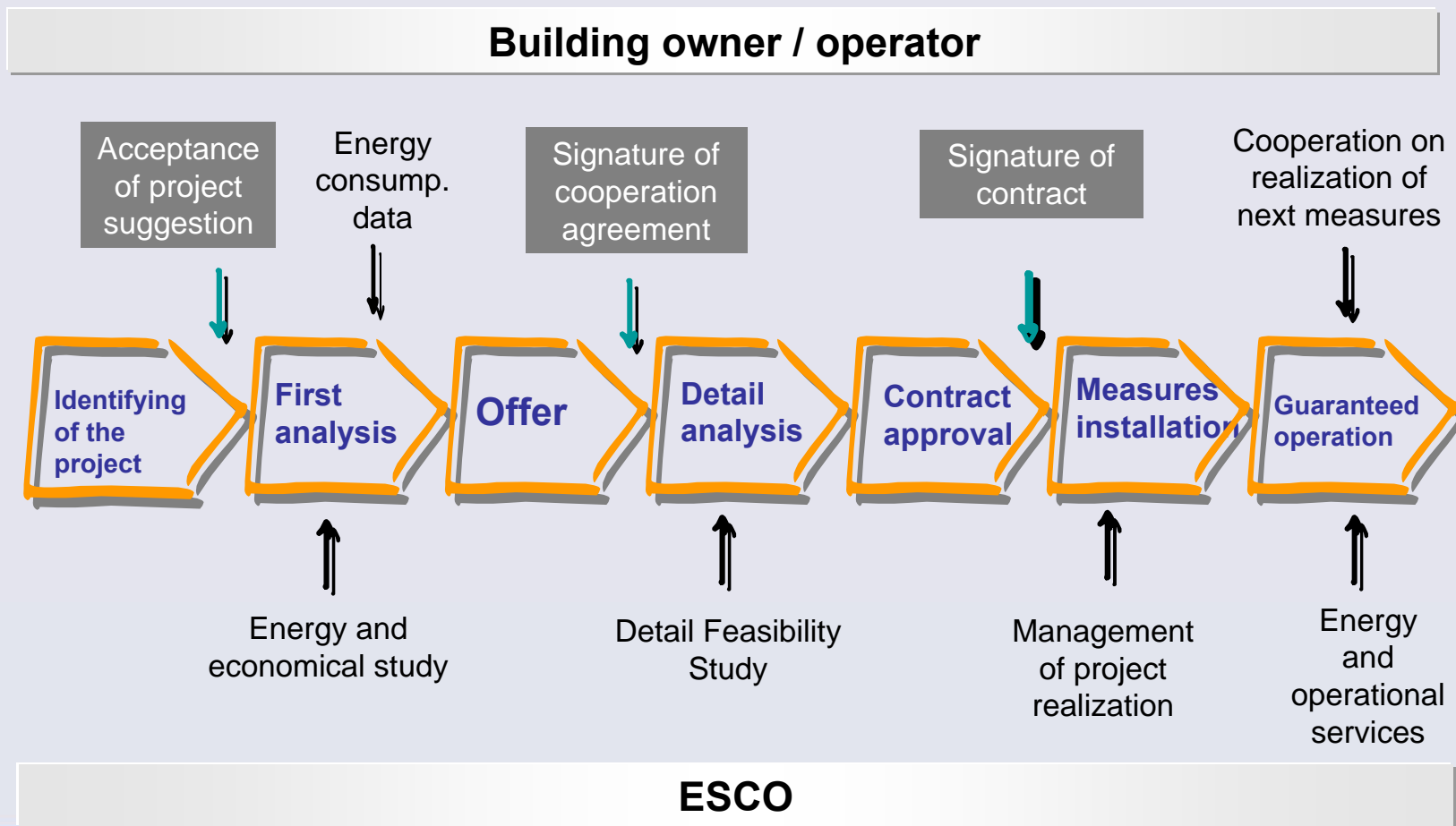
Types of Energy Services

- **Consultancy**
- **Documentation**
- **Implementation of energy saving measures**

Energy Services Provision



Project Processing



Energy Services in the Czech Republic

- **Long period of duration**
 - First project in 1993
 - Totally 150 - 200 implemented projects
 - Estimated investments over 3000 Mio CZK (100 Mio EUR)
 - Estimated total savings roughly 800 TJ
- **Legal adjustment in tender law**
 - First version of Act on Public Contracts in 1995
 - Methodical instruction for energy services provision in state sector in 1999
 - Specification of supplier credit as EPC application in 2000

Review of Czech ESCOs

SIEMENS

ENESA 

Středisko pro úspory energie

 **MVV** · Energie · CZ

 **AB facility**

 **Dalkia**
Česká republika

EVČ


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Project example – Clinic in Kosmonosy

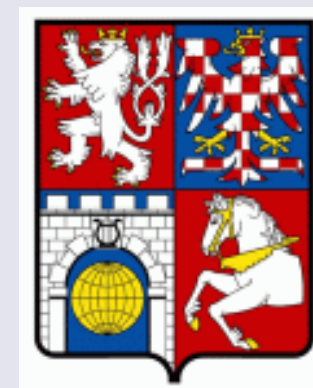
Reconstruction of heat systems
Contract signature – August 2003
Term of savings from May 2004
Total investment – 553 thousand EUR
Annual savings – 15 576 GJ (29,7%)



Own source of water (wells) + new laundry
Contract signature – June 2006
Term of savings from October 2007
Total investment – 1,3 Mio EUR
Annual savings – 184 thousand EUR (32%)

Project example – Region Pardubice

- 15 schools
- 4 hospitals
- 3 welfare homes
- 1 special school
- 1 hostel



Public tender – spring 2006

Implementation – 2007

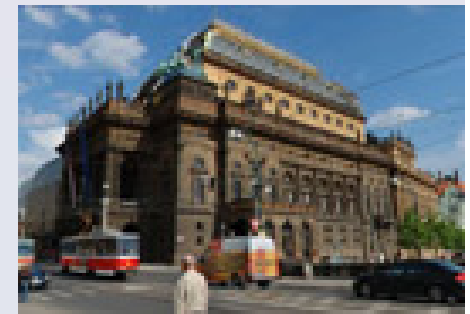
Term of savings from January 2008

Total investment – 3,75 Mio EUR

Annual savings – 669 Mio EUR (23%)

Project example – National Theatre

- Longtime savings of costs for heating air conditioning – contract for 10 years
- **Energy saving measures:**
 - Use of heat waste from pressure station at stage technologies for prewarming of water
 - New reversing cooling unit
 - Heat recuperation from air-conditioned premises
 - reconstruction of central boiler room condensing boilers
 - modernization of metering and regulation system
 - Installment of static frequency converters
- Total investment 1,16 Mio EUR
- Expected annual savings 22%

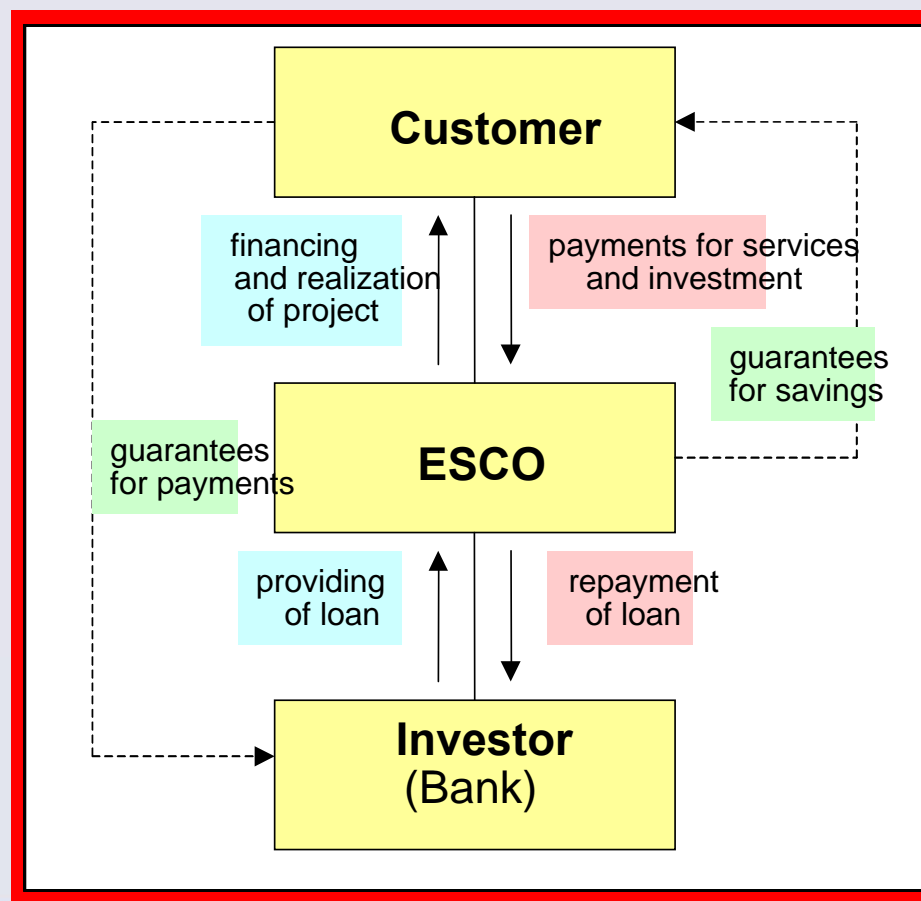


Financial Sources in the Czech Republic

In relation to energy savings

- Commercial and bank credits and loans
- Czech subsidy programs
- International subsidy programs
- Energy services provision (ESCO activities)
- Own financial sources

Usual Financing Scheme of EPC Projects



Subsidy Forms – support of energy savings

- **Czech Subsidy Programs**
 - State Housing Development Fund
 - **program PANEL**
 - **loans for municipalities (modernization of flats)**
 - **programs of Ministry of Industry and Trade** (Program EFEKT – State Program on Support of Energy Efficiency and RES application)
 - State Fund of Environment
- **International Subsidy Programs**
 - Operational Program Industry and Enterprise (**EKO-ENERGIE** – through Ministry of Industry and Trade)
 - **Operational Program Environment** (through State Fund of Environment) – several areas of interest (e.g. air protection)
 - other Operational Programs
 - another subsidy forms – **program IEE (projects ChangeBest, EESI etc.)**

Subsidies for Energy Saving Projects

Operational Program of Environment

- **support in public sector – about 570 projects** (till this time)
(schools, hospitals etc.) by thermo-modernization
insulation of building surface, exchange of windows and insulation of roof
- **financial support about 240 Mio EUR** (till this time)
- **possibility of energy savings increasing**
additional energy services provision in technology equipment renovation

Combination of Financial Sources

- **technology equipment renovation**
 - payback period 4-10 years
 - the best solution by energy services provision (EPC)

- **constructional measures**
 - payback period minimally 15 years
 - convenient using of subsidies (for example structural funds)

combination of both forms

owner of the buildings have to co-finance in range 20-40% of total investment

Project Example

Secondary School in Prague



- reconstruction of technology equipment by EPC + boiler room operation
investment 312 thousand EUR
(financing from future energy saving operational costs)
- insulation of building + exchange of windows
investment 520 thousand EUR
(co-financing by subsidy from OPE)

co-financing by owner of the school only up to 36,4 %

Project Example

15 schools in one part of Prague



- reconstruction of technology equipment by EPC
investment 1,6 – 2,4 MIO EUR
(financing from future energy saving operational costs)

- insulation of building + exchange of windows
investment 10 MIO EUR (co-financing by subsidy from OPE)

co-financing by owner of the schools only up to 28 %

Thank you for your kind attention

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