

Energy efficiency renovation by EPC in public buildings in Czech Republic

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MINISTRY OF
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Effective tools for energy efficiency

- ➔ Implementation of energy management
 - ▶ **systematic monitoring of energy consumption, evaluation and verification**
 - ▶ managing energy consumption to reduce environmental impacts in the long run while **reducing operating costs** for the operation of buildings
 - ▶ possibility of **implementing energy management** according to CSN EN ISO 50001
- ➔ Energy Performance Contracting – energy services providing (EPC)
 - ▶ specific and very **effective form of implementation of energy management**
 - ▶ achieving **energy savings**, the volume of which is **contractually guaranteed**

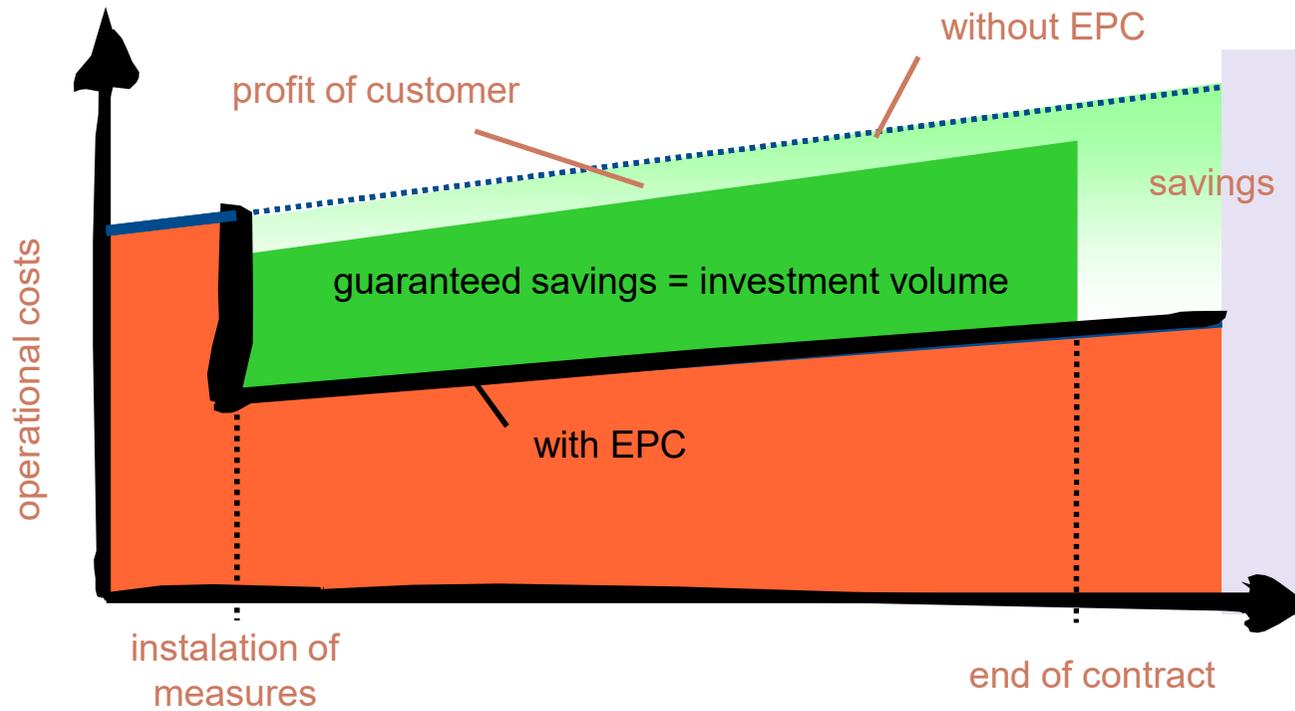
Characteristics of the EPC projects

- ➔ usual duration of the contract – from 6 to 10 years
- ➔ usual **content of the project**:
 - ▶ final preparation and **design of project** documentation for implementation
 - ▶ **installment of energy efficiency measures** described in details in contract
 - ▶ primary payment of investment costs (payments covered by guaranteed savings)
 - ▶ **energy management** including monitoring and verifying of savings
- ➔ usual **range of energy savings** – from 15 to 50%
- ➔ usual **investment volume** – from 50 thousand to 5 million EUR

Characteristics legal adjustment in tender law

- ➔ first version of **Act on Public Contracts** in 1995
- ➔ **first methodical instruction** for energy services provision in state sector in 1999
- ➔ specification of **supplier credit** as EPC application in 2000
- ➔ **negotiating procedure with disclosure** (from 2005)

Essence of the EPC projects



A little history of EPC projects in the Czech Republic ...

- ➔ every year, on average, **more than 10 EPC projects have been produced annually** in the public sector
- ➔ projects were gradually established **in state contributory organizations** (hospitals, clinics, theaters, universities, etc.)
- ➔ **establishment of the Association of Energy Service Providers** in 2010 to support the quality of energy services
- ➔ following the amendment of the Public Procurement Act in 2005 – the possibility to use the **negotiating procedure with disclosure**

Examples of the projects – municipalities and regions

- ➔ Hlavní město Praha
 - ➔ Město Moravská Třebová
 - ➔ Město Litoměřice
 - ➔ Město Písek
 - ➔ Město Chrudim
 - ➔ Město Jablonec nad Nisou
 - ➔ Město Hronov
 - ➔ Město Jihlava
 - ➔ Město Český Těšín
 - ➔ Město Litomyšl
 - ➔ Město Jeseník
 - ➔ Město Liberec
 - ➔ Město Most
 - ➔ Městská část Praha 13
 - ➔ Městská část Praha 3
- a další místa...

- ➔ Pardubický kraj
- ➔ Moravskoslezský kraj
- ➔ Kraj Vysočina
- ➔ Královéhradecký kraj

<http://mapa.apes.cz/>

Examples of the projects – state institutions

- ➔ **psychiatric hospitals** in Dobřany, Kosmonosy, Jihlava, Kroměříž
- ➔ **hospitals** in Jeseník, Jihlava, Nové Město na Moravě, Chomutov, several in Prague and others
- ➔ **cultural facilities** as National Theatre, Stavovské Theatre, State Opera, Rudolfinum and Congress Centre in Praha
- ➔ **universities** as Technical University in Liberec, Southern-Bohemian University in České Budějovice

Awards for Czech companies and projects

→ European Energy Services Award

- ▶ in 2009
 - energy service provider – ENESA
 - project in private sector – project of SIEMENS
(in factory of Siemens Elektromotory Mohelnice)
- ▶ in 2008 – project in lighting sector – Hotel Marriott in Prague
- ▶ in 2005 – energy service promoter – SEVEN

→ E.ON Energy Globe Award CR

- ▶ 2011 – category FIRE – EPC project in Psychiatric Clinic (AB Facility)
- ▶ 2010 – category FIRE – EPC project in National Theatre (ENESA)



EPC support by the state for the past years ...

- ➔ processing of **standard documents** (for the first time in 2012, updated in 2014 and again) – publication on the website of the ministry
 - ▶ **model contract** (provision of energy services „with guaranteed result“)
 - ▶ **methodology of application of EPC** projects in the public sector
 - ▶ description of the **process of preparation and organization** of the EPC project
 - ▶ **code of conduct** for the EPC projects

link: <http://www.mpo.cz/dokument105425.html>
- ➔ **grant support** from program EFEKT – preparation of the EPC project in the form of the suitability analysis in the selected buildings (from 2012 to date)

Current support for EPC by the state ...

- ➔ **requirements of a contract** for the provision of energy services with a „guaranteed result“ in the amendment to **Act No. 406/2000 on energy management**
- ➔ proposal for **certification of energy service companies** and introduction of **list of energy services companies** pursuant to Act 406/2000 on energy management
- ➔ **list of energy service providers** on the website of the ministry
link: <http://www.mpo.cz/dokument170967.html>
- ➔ preparation of **EPC pilot projects in state administration buildings** in conjunction with Article 5 of the Directive on Energy Efficiency
- ➔ **combination of the subsidy from Operational Program Environment with EPC projects** – with this combination bonus of 5% of subsidy

Possibilities of using innovative approaches

→ use of financial instruments

- ▶ development at Ministry of Regional Development (IROP) and Ministry of Industry and Trade (OPPIK)
- ▶ involvement of the Ministry of Industry and Trade in the preparation of further steps (co-operation with Ministry of Finance)
- ▶ consideration of **preparation and establishment of a revolving fund for energy savings**

→ emphasis on the application of all types of energy services with a guarantee

- ▶ advantage is **great experience in the EPC market** – the necessary support and the example of the state
- ▶ can be **applied even without the necessity of financing the necessary investment** => preparation of the program

→ identifying other energy saving tools

- ▶ further support for the preparation of EPC projects and other **involvement of "soft" non-investment tools**
- ▶ communicating with the private sector and **finding other models for reporting savings** (design & build)

Thank you for your attention

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