



#### Introduction to Energy Performance Contracting (EPC) and Energy Service Companies (ESCOs)

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## Glossary



CAPEX	Capital expenditure
СВА	Cost Benefit Analysis
Due diligence	Research and analysis of a company in preparation for a business transaction
EPC	Energy Performance Contracting
ESCO	Energy Service Company
Forfaiting	Sales of future receivables
HVAC	Heating, Ventilation and Air Conditioning
NPV	Net present value
OPEX	Operational expenditure
Step-in rights	The right of a lender to replace the ESCO in the EPC contract



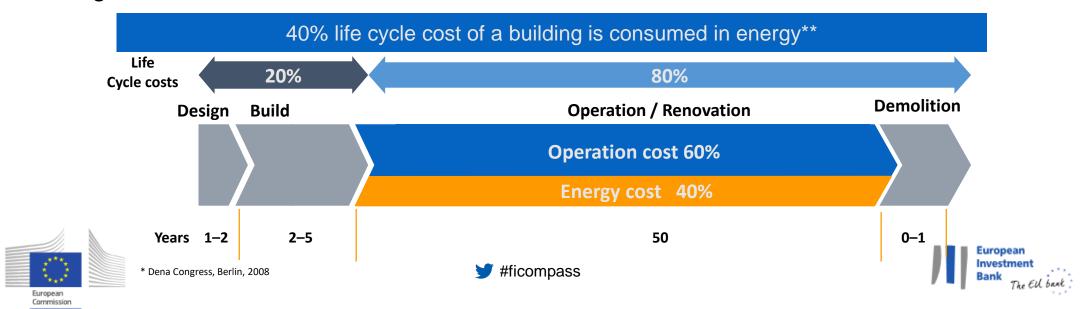




# **Energy consumption in buildings**



- > 40% of energy consumption and 36% of CO<sub>2</sub> emissions in the EU come from buildings
- ➤ About 35% of the EU's buildings are over 50 years old and 75% is energy *in*efficient,
- ➤ Renovation rates are low with only 0.4-1.2%
- ➤ Life-cycle approach can significantly reduce energy consumption and operating cost of a building













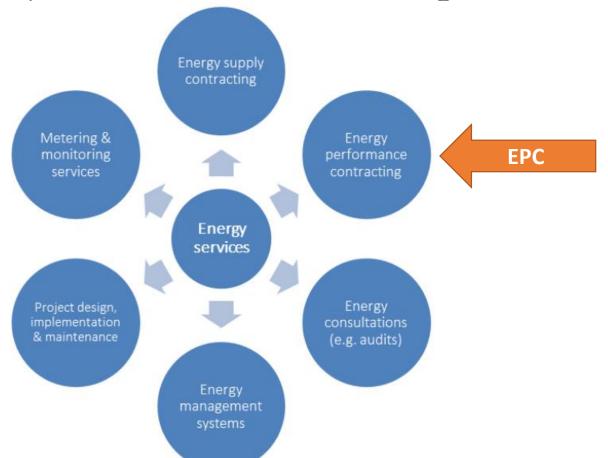




# **Energy Service Companies (ESCOs)**



 Energy services – services provided by specialised companies (Energy Service Companies - ESCOs) to clients in form of outsourcing



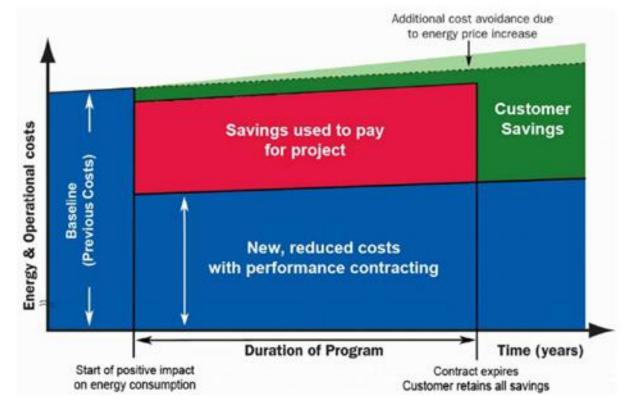




### What is EPC?



**Energy Performance Contracting** – energy efficiency investments in buildings and infrastructure are undertaken by specialised companies, **EPC providers**, with performance guarantee during the time of the contract. EPC providers are paid from achieved savings.







## **Advantages of EPC**



- >Energy performance contracting offers a number of advantages for clients:
  - ➤One partner, one contract for different types of deliveries and services
  - >Guaranteed energy savings and greenhouse gas emissions
  - >Energy efficiency investments financed directly from cost savings
  - >EPC providers takes on the performance risks of works and technology
  - ➤ Energy management by EPC provider
  - >EPC helps the client arranging the financing of the project
  - Additional savings measures and increase of achieved savings during contract



















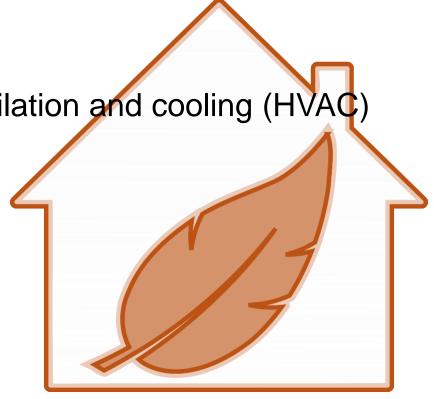
## **EPC: Typical Measures**



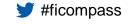
> Energy management equipment

> Equipment for lighting, heating, ventilation and cooling (HVAC)

- ➤ Occupant training programs
- ➤ Building envelope insulation
- > Renewable energy systems
- ➤ Traffic and street lighting



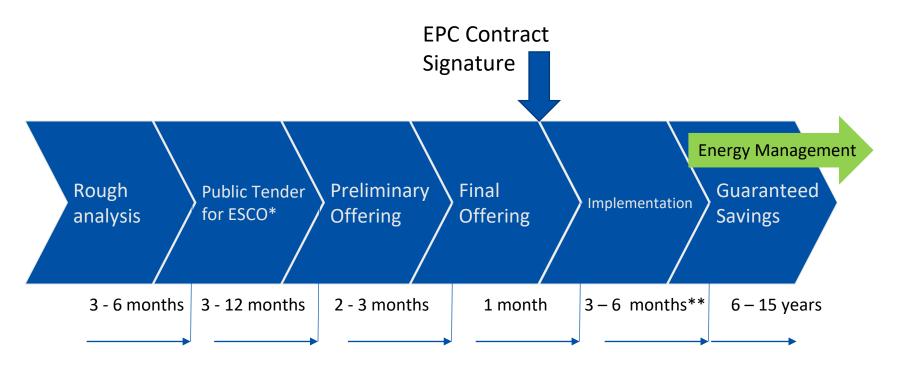






### Implementing an EPC





<sup>\*</sup> Experience shows that competitive dialogue is the most suited procurement method for EPC

<sup>\*\*</sup>Note: depends on number of measures, scope of work and conditions on customer side (in some cases this phase can have duration time up to 12 months or even longer)









Commission



Q&A













