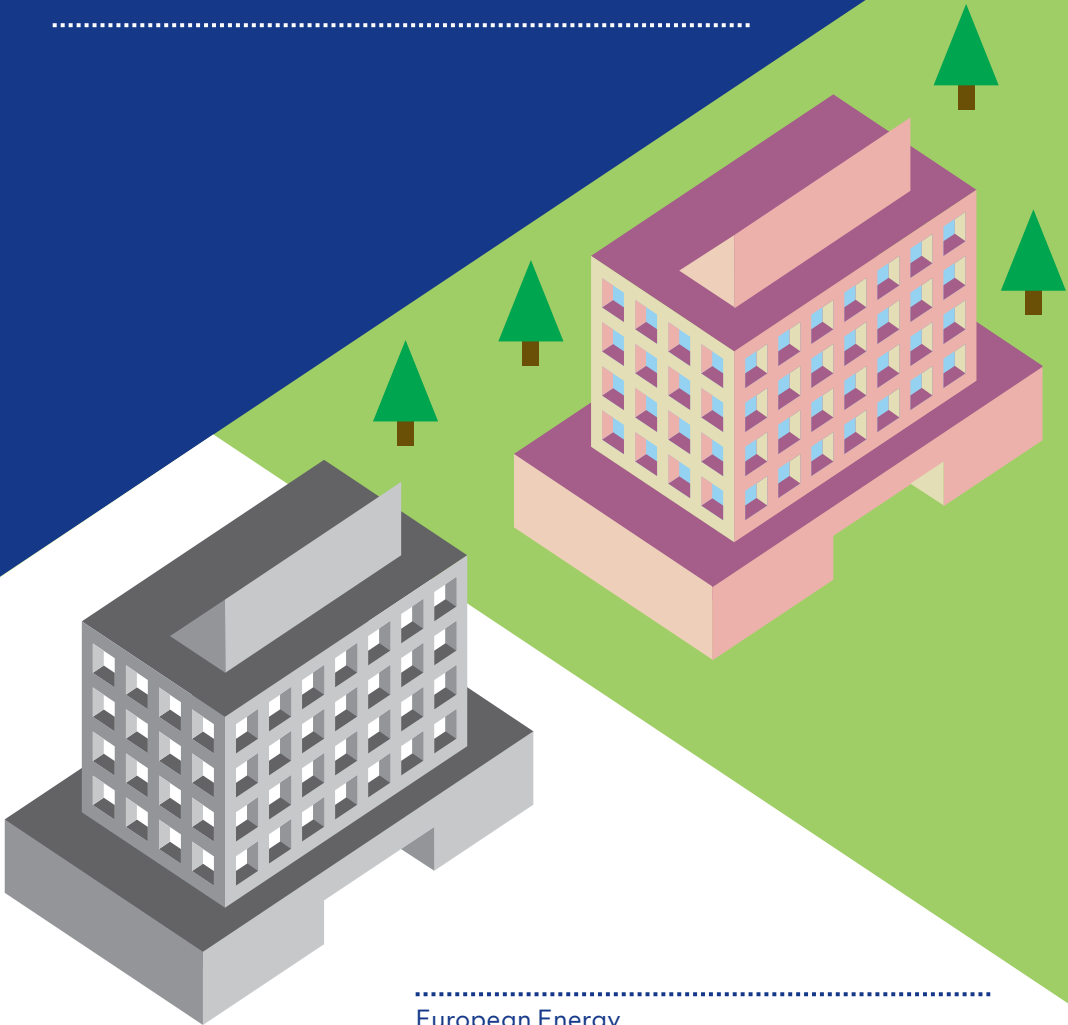

A Guide to Energy Performance Contracting in Public Buildings

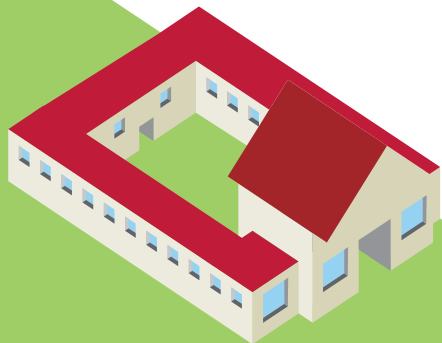


WHAT IS EPC?

Energy Performance Contracting (EPC) is the provision of energy services with guaranteed energy savings. All energy saving measures are implemented by an Energy Service Company (ESCO) and financed from the resulting savings with no risk to the building manager as energy savings are contractually agreed.

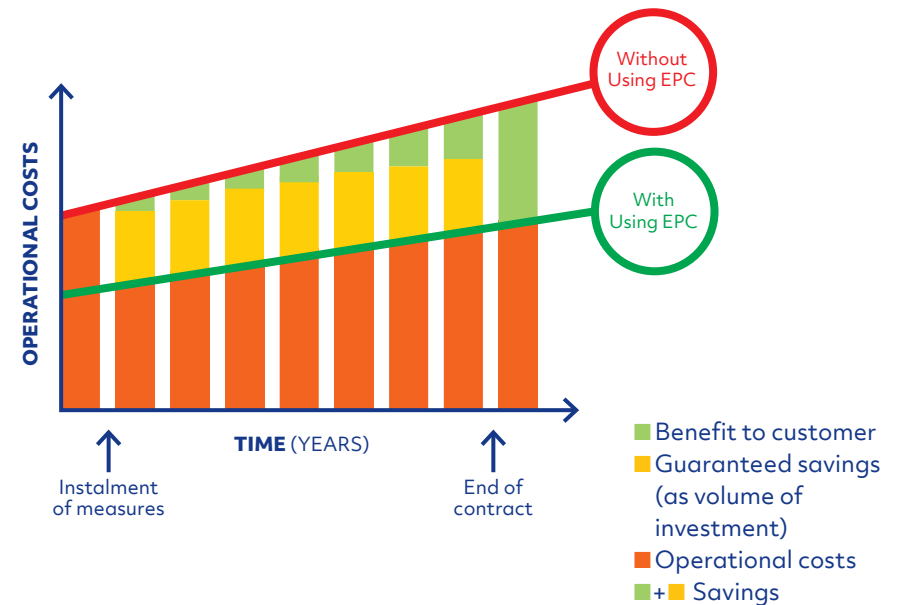


KEY PRINCIPLES



BENEFITS OF EPC

- ✓ Long-term **reduction of energy consumption** and other operational costs
- ✓ **Improved comfort levels** in your buildings
- ✓ Significant **reduction of CO₂ emissions**
- ✓ More time to manage **core businesses**

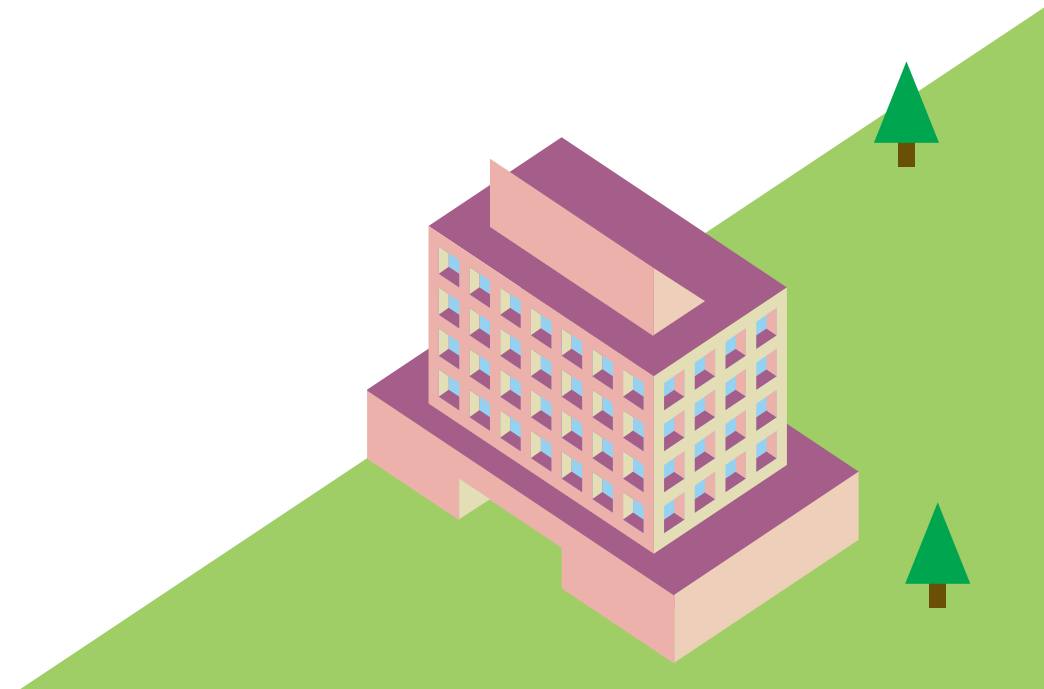


TRADITIONAL ENERGY SERVICES VERSUS ENERGY PERFORMANCE CONTRACTING

TRADITIONAL ENERGY SERVICES	VS	ENERGY PERFORMANCE CONTRACTING
Expertise Building Manager must have expertise in Energy Management / Upskilling may be required	→	Expertise Energy Expertise is provided by the ESCO
Savings Energy Savings may not be achieved	→	Savings Energy Savings contractually guaranteed
Risk Technical risk with building manager	→	Risk Technical risk with ESCO
Contractors Contact many energy service providers (e.g. electricians, plumbers, solar experts, ventilation experts)	→	Contractors Contact a single supplier (ESCO)
Approach Contractors work in isolation	→	Approach Holistic approach to energy management
Motivation Contractors provide energy service at a cost and leave once they have been paid	→	Motivation ESCO and building manager have the same motivations to achieve maximum energy savings
Management Project Management with building manager	→	Management Project Management with ESCO

TRADITIONAL ENERGY SERVICES VERSUS ENERGY PERFORMANCE CONTRACTING

TRADITIONAL ENERGY SERVICES	VS	ENERGY PERFORMANCE CONTRACTING
Finance Finance comes from own budget or loan	→	Finance Finance can be provided by ESCO, own budget or loan
Contract Once-off contracts for works	→	Contract Long-term contracts (6-15 years)
Value Short-term reduction of energy	→	Value Long-term reduction of energy
M&V No measurement & verification of savings likely to be performed	→	M&V Measurement & verification of savings



EPC PROCESS STEP-BY-STEP



STEP 1 Assess Suitability of Your Building

- Building assessment by EPC Facilitator
- Check saving potential and estimate volume of investment



STEP 2 Select ESCO through Public Procurement

- EPC Facilitator helps with EPC tender document
- Publication of EPC tender on eTenders
- Pre-qualification of ESCOs
- ESCOs receive technical info on building and assess potential
- Negotiation Process with ESCOs
- Select the winning ESCO



STEP 3 Sign the Contract with ESCO

- Guaranteed savings are agreed
- Financing mechanism is agreed

- Duration of contract is agreed
- EPC Facilitator assists with process



STEP 4 Implementation of Energy Conservation Measures

- Implementation of agreed energy conservation measures
- Comprehensive testing of equipment functionality
- Training of operators for the installed equipment



STEP 5 Monitoring & Assessment of Energy Savings

- Achieved energy savings assessed on annual basis
- ESCO commences with monthly assessments of measured values and controls any discrepancies
- ESCO is obliged to cover any difference between guaranteed and achieved savings

WHAT IS AN EPC FACILITATOR?

The EPC Facilitator provides the necessary know-how and experience to support the building manager with the successful implementation of an EPC project. The EPC Facilitator acts as a mediator between client and ESCO to build up a sustainable relationship and to create trust between the future contract partners.

Tasks of the EPC Facilitator usually include:

- ✓ Initial assessment of project suitability for EPC
- ✓ Initial assessment of potential energy savings and investment required
- ✓ Initial technical analyses
- ✓ Support client during procurement process
- ✓ Provide advice throughout the project



THE EESI2020 PROJECT

Codema is a project partner on the European Energy Service Initiative (EESI2020), which is co-funded by the Intelligent Energy Europe Programme. As part of this project, Codema has gained valuable experience from countries where the

EPC market is well-developed such as Germany, Austria, Czech Republic and Norway. Successful EPC case studies can be found on the project website:

www.eesi2020.eu



Co-funded by the Intelligent Energy Europe
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european energy
service initiative 2020

HOW CODEMA CAN HELP

As the energy agency for Dublin, one of Codema's functions is to act as an EPC Facilitator. We can help with the initial assessment of public buildings to evaluate suitability for Energy Performance Contracting.

- ✓ Energy data and baseline calculation of your building
- ✓ Training on EPC process
- ✓ Presentation to senior management
- ✓ Preparation of tender document & decision

For more information, please contact Codema at **01 707 9818** or email codema@codema.ie. We would be delighted to discuss Energy Performance Contracting with you!

CODEMA

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