



Standard EPC documents

Questions & Answers

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1 Chances with Energy Performance Contracting

EPC and energy services in general are often characterised as a win-win models.

In the past, the fact that the contractor takes over the investment has played a major role in the eyes of the implementing public clients as it meant a relief for the building owner's capital budget. As a matter of fact, however, implementation EPC projects means numerous other benefits as well for the potential clients:

- + **The building owner / client does not need to use own funds, in this way transferring its own investment risk.**
- + **Modernisation of the plants improves energy efficiency and thus also increases operating reliability and security of supply, while energy costs and environmental pollution are reduced.**
- + **The ESCO's technical know-how and professional energy management are used.**
- + **The building owner / client is relieved of essential planning and operating work. More time remains for its own core tasks.**
- + **Value, productivity and comfort of the building(s) are enhanced.**
- + **A number of individual areas (planning, financing, construction, operation, maintenance) are covered from one source. This enables a considerable reduction of the number of interfaces.**
- + **Additional services such as user motivation and training measures can be contractually stipulated.**
- + **Contract elements assign commercial and technical risks to the ESCO's to a large extent.**

In particular, the valuation of the saving guarantee is to be highlighted. It accounts for the essential additional benefit compared to solutions under own management and is the pre-eminent quality feature of energy saving contracting, which is also emphasised in the European Rules and Regulations.

Clients who do EPC on a regular basis additionally appreciate the model's flexibility, combining compulsory measures or other special requirements with EPC.

Of course, the ESCO also has advantages. It gains its entrepreneurial profit through the projects carried out and secures highly qualified jobs for designers, technicians and engineers. The local labour markets, in particular executing craftsmen and engineering firms, profit from the subcontracts which are usually awarded locally during implementation.

The use of EPC is not a guarantee of success but EPC provides a lot of options and chances. As with other projects as well, what finally matters is correct application and carrying out in the individual case.

2 Question and Answers

? Can any building possess the potential energy savings to make it a good candidate for an EPC?

In principle, saving potentials arising from economic and technical improvement can be found in almost any building. This has been verified by successful EPC projects in buildings which have been renovated just recently. For small buildings that have low energy costs it should be checked in a simple rough examination whether the expenditure for an EPC tender is appropriate in relation to the possible saving. The formation of pools of smaller buildings may be appropriate to create properties that make invitations to tender viable. Apart from the size of the project, continuous use of the building and guaranteed continued existence are essential criteria to determine suitability.

? Are long-term contracts a risk for the building owner?

An EPC usually lasts between 5 and 15 years, depending on the situation surrounding the building: i.e. how much is to be invested and to what extent the building owner can participate. It can generally be said that the longer the contract lasts, the further the energy saving investments go.

Competent selection of the building for EPC can prevent the occurrence of organisational problems during the contract term. Apart from that, long-term contracts may well be advantageous to the client: the ESCO's investment becomes more sustained as it has to guarantee for a long term the function of the installations brought in and the measures taken. Consideration of this fact is of high economic relevance and requires appropriately long terms of contract.

However the contract will only run smoothly if the tendering process and contract ensure a solid assessment of the current situation and form a clear definition of the tasks and obligations.

? Can energy saving measures be carried out just as well by the owner itself?

Certainly! Whether the implementation of energy saving measures by a public administration under its own management is possible or even more advantageous will usually depend on three factors:

- + *The liquidity of the capital budget*
- + *The building owner's expert know-how and capacities*
- + *The given purchase conditions for construction and planning services*

However, the conclusion of an EPC contract offers decisive advantages. Reduction of energy consumption and costs is contractually guaranteed, the ESCO bears the economic risk. It raises the capital for the investment and commits itself contractually to reduce the energy costs by a certain amount. Own management and EPC are by no means conflicting. On the contrary, a partnership of internal energy management with external ESCO may achieve an optimisation of the energy saving.

? Does purchasing the ESC service entail personnel cuts?

This argument is basically not inconsistent with performance contracting projects, as existing external know-how can be integrated into existing management structures without a problem. On the contrary, optimisation may thus be attained by combining internal and external energy management

Furthermore technical staff play a central role in project development and implementation because they are the interface between the building owner and the contractor. New areas of responsibility are added, such as project controlling. At the same time, employees are relieved, primarily with regard to maintenance and optimised operation of the energy saving measures. Technical staff is given more freedom to care for operating reliability and technical service.

? By outsourcing the energy management, does the building owner hand over control of building services and operation management?

On the contrary. The building owner becomes the owner of all new investments and remains in charge of overall operation management (as before). The ESCO is specifically responsible for incorporation and operation of the energy saving investments. However, when designing the contract the building owner may choose interfaces which are especially favourable to it, e.g. with regard to the maintenance of plants, so that just one partner is responsible for the building services instead of several maintenance companies.

? Are project preparation and development not much too complicated and time-consuming?

Successful implementation of an EPC project is critically dependent on careful project preparation and development. Already at the start of the project, all parties to it should be involved in the process in order to achieve transparency and acceptance internally. As in many cases, the following is true: The better the preparation, the more convincing the result. External consultants that have many years of experience with EPC tenders may help less experienced public clients. Usually, the expense required for project preparation is covered by the energy and operating cost saving of the first years gained through the EPC.

? What happens when energy prices change?

The contract provides for a so-called adjustment of prices. The ESCO is remunerated only against proof of the kilowatt hour saving which it actually achieves – at a fixed reference price. It does not have an influence on the supply contracts and the energy prices. The building owner (as before) will profit from lower energy prices in the same way as it will have to pay more if prices increase – however, with a guaranteed reduced energy consumption. In the likely event of energy prices rising in the long term, the model is even especially client-friendly. The client pays a fixed price today for the saving which may be worth twice as much in the future.

? What happens on expiry of the contract?

First, a final audit is performed at the end of the contract in which the building owner convinces itself that the plants and installations are in a technically perfect condition in accordance with their age. After that, it may take over the management of the plants and be the sole beneficiary of the saving. Experience has shown that subsequent operation management contracts or even a new EPC tender may help the client secure the saving level or even enable additional saving.