

Task 45 Large Systems

ESCo models – General

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| Subject: | ESCo models – General description |
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| Description: | General description of models for Energy Service Companies |
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| Download possible at: | http://task45.iea-shc.org/fact-sheets |

Energy Service Companies (ESCo)

ESCos are companies that provide a full range of energy services with repayment in generated savings. They offer a complete package, from design, finance and installation to operation, including maintenance and fuel supply.

Energy service companies (ESCos) could be a way to increase the uptake rate of large scale solar heat projects in larger buildings in the public and private sector.

ESCo models

An example of the main components and ESCo working scheme construction is given in fig. 1.

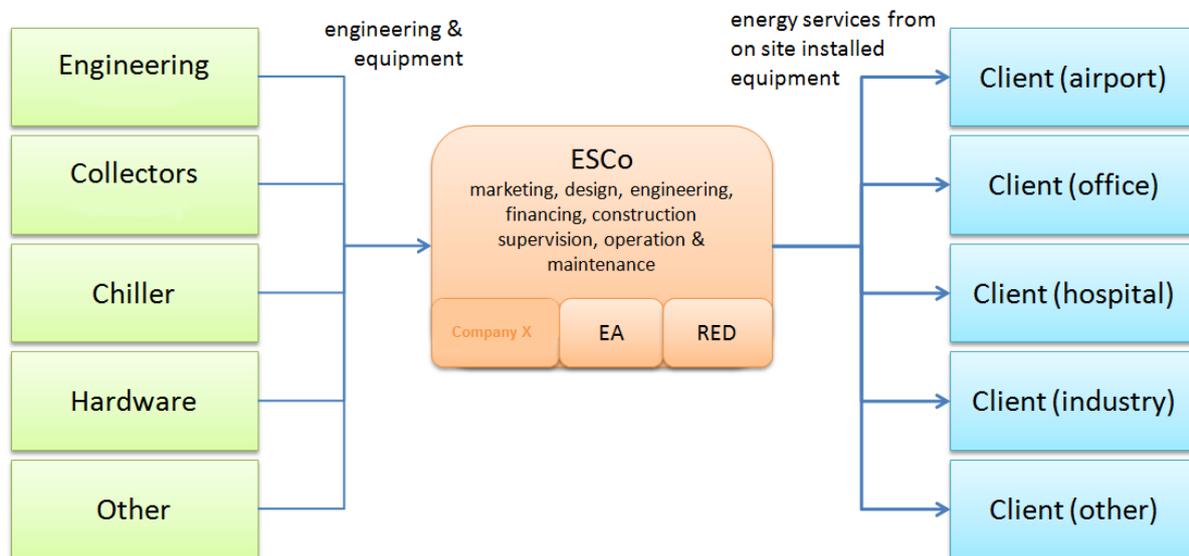


Figure 1. The main components and working scheme of the ESCo's theoretically process

There are three different schemes for billing the solar energy between the customer and the ESCO. Most schemes which are implemented in real projects follow one of these schemes or a mix of these:

- **Energy price only:** the customer pays a certain energy price per kWh of solar thermal energy. The energy is usually billed once every month or once every two months.

- **Energy price and basic price:** Additionally to the cost per kWh, the customer is also charged a basic monthly price which he is asked to pay regardless of the energy delivered. In return, the energy price for the kWh of solar energy is lower.
- **Energy price and connection fee:** Similar to the installation fees which a customer is charged for being connected to a district heating net, in this scheme the customer pays (some share or 100% of) the installation cost of the system.

Independently of the model chosen, a certain amount of money (penalty fee) should be agreed upon in the case the customer wants to exit the energy supply contract before the agreed validity period of the contract.

Figure 2 shows an example of the contracting links between the involved partners.

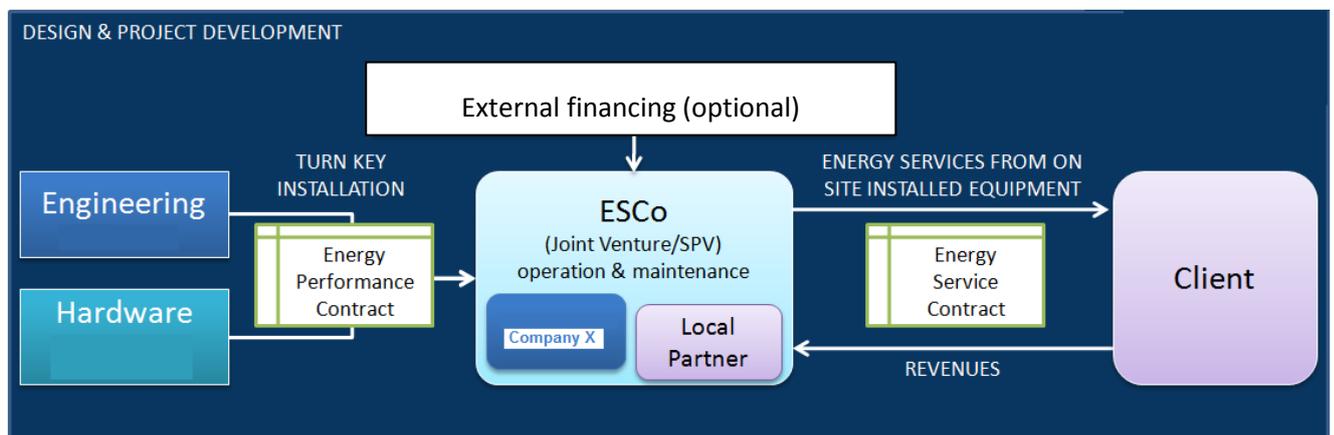


Figure 2 The principal Energy performance contracting (EPC)

Detailed descriptions of ESCo models, contracting templates and best practise examples are given in IEA-SHC TECH SHEET 45.C.2.1, - C.2.2 and C.2.3, available from <http://task45.iea-shc.org/fact-sheets>.