



STEPPING

Supporting The EPC Public Procurement IN Going-beyond

Module 6 – Estimation of investment needed



Financial and investment plans



The next step is to estimate the **potential of savings and the investment volume**.

Financial and investment plans define indeed the level of *economical sustainability of an EPC project*.

They are aimed at → **formalising the amount of payment yearly due to the ESCO, possible instalments, and overall amount of investments**.



Funding options and approaches

Funding is a critical part of any EPC and Customers generally understand that the energy savings are used to pay for the equipment and services provided by the ESCO.

However, the Public Body may not be aware of the finer points. It is important to understand that ***paying for the investment from savings is a function of the total investment costs, the terms of the contract, financing, and the savings generated.*** If the cost of the ECMs installed under the contract is to be paid from savings, *the accumulated savings over the life of the contract need to be equal to ,or be greater than, the total cost of the project, including financing costs.*

Once the project costs have been determined, and the level of savings agreed, the ESCO needs to establish the source, determine the applicable terms, and establish whether project financing can be structured to meet the Public Body's needs. Obviously this will be done in consultation with the Public Body, and if it is providing the capital, may require additional work on Public Body's part.



Funding options and approaches

In any EPC project, there are basically three sources that can be used to fund an ESCO project:

- *direct financing* provided from the balance sheet of the ESCO (rarely done);
- *third party financing*: leveraged by the ESCO, equipment suppliers, or leasing firms; or
- *direct financing* by the Customer using traditional sources of project funds.



Funding options and approaches

The source of funds depends on a number of factors, including:

- the type of EPC being entered into (guaranteed or shared savings);
 1. under a guaranteed savings contract the Customer is typically the borrower and has the financing repayment obligation. The creditworthiness of the Customer will be a major determining factor on the terms of any financing;
 2. under a shared savings contract, the ESCO is typically the borrower and accepts technical and financial project risks. In this case the creditworthiness of the ESCO will establish the terms of financing;
- available terms from the different sources;
- tax implications; and
- availability of funding from the source.



Funding options and approaches

- If the performance contractor provides the financing, it is termed 'off balance sheet' or 'non-recourse' financing. The contractor can use its own funds, borrow money, or sign a leasing arrangement. The Public Body has no debt, and its only obligation is to pay the contractor all or a share of the savings during the contract period.
- If the Public Body finances the investment, it has a debt. However, the contractor guarantees that the savings will provide enough cash flow to repay the loan as well as to cover fees and costs.
- Intermediate situations (financing is provided partly by the Public Body and partly by the contractor) can of course occur (in Italy this is a common option).



Investment Grade Audit (IGA)

There are four levels of analysis pertaining to energy audits:

Level 0: **Energy benchmarking** examines the historic utility data of the building and compares it against similar buildings. This uncovers inefficiencies of the building and allows for an educated decision on whether an audit is worthwhile.

Level 1: A **walk-through audit** is a brief assessment to identify low cost energy improvements and areas where more detailed future audits can focus.

Level 2: A **general audit** is a comprehensive evaluation of the building and potential energy conservation measures through detailed information collection, in-depth interviews with facilities or operations managers, and the analysis of energy profiles created through interval metering.

Level 3: An **investment-grade audit** is a comprehensive analysis of potentially pricey energy efficiency improvements with a distinct focus on financial concerns and return on investment.



Investment Grade Audit (IGA)

Investment-grade audits are often done as a part of an energy performance contract conducted by an energy services company (ESCO).

An investment grade audit should cover at least the following:

- Operating hours analysis
- Inventory of all energy consuming equipment
- Energy rates and cost figures for all utilities
- Analysis of at least one year of historical utility billing data (3 years are the ideal timeframe)
- Energy balance analysis
- Identification of the major energy consuming equipment and processes in the building
- Analysis of opportunities for energy efficiency measures and their potential savings and payback periods
- Identification of suitable retrofits and technology for these measures
- Identification of potential measures in similar buildings, which are not feasible for the building in question.
- Baseline for the reference consumption.
- Identification of required service level agreements by the customer.



End of Module 6

