

Definition of an ESCO (Energy Service Company)

A consultancy group engages in a performance based contract with a client firm to implement measures which reduce energy consumption and costs in a technically and financially viable manner.

This may include the following steps that may characterize the nature of an ESCO and describe an ESCO's functions:

1. Appraisal of the energy conservation potential in a client firm.-**C***
2. Preparation of a detailed project report (financial grade paper) and listing of recommendations to reduce energy consumption and costs. -**C**
 - 2.1 Joint selection of measures from the list for implementation. – **C**
 - 2.2 Establishment of clear PMV protocol for individual projects and overall facility impact-**C**
3. Detailed project engineering of selected measures by ESCO.-**C**
4. Financial closure through ESCO.-**O***
 - a. Option-1: Bank borrowing by the client with performance bank guarantee, support from ESCO
 - b. Option-2: Direct investment by the ESCO with payment security from client
5. Implementation of selected measures by ESCO.-**C**
6. Joint monitoring and verification of impact and observation of reduction of energy costs over a specified agreed time period; Or 3rd party verification by an accredited organisation-**C**
7. Payment of ESCO by client based on investment costs, interest, professional service fees, as well as performance based success fee-**C**
8. Hand over of project to client after recovering of all costs, as well as other payments, or as per a termination settlement as per mutual agreement-**C**

Essential skill and competency pre-requisites for an ESCO to meet the above requirements:

- a) Energy audit -normal and investment grade
- b) Baseline and PMV methodologies
- c) Multi-discipline design and engineering-at least in few areas like lighting, HVAC, water pumping, fuel management, steam system, power generation, building energy dynamics.
- d) Project management
- e) O&M of energy efficient equipment and systems
- f) Financial and risk analysis and management
- g) Contract management
- h) Monitoring of energy savings and analysis of impact
- i) HRD of client staff to manage, operate and maintain energy intensive equipment.

***C- compulsory**

***O - optional**