

ESCO Facilitation Approach “Light Model”

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Benefits of Using a “Facilitator”

The ESCO model can offer a very good business model for a building owner to reduce energy consumption, reduce costs, and replace old equipment, requiring no capital and having very low risk.

- There is a long history of successful projects all over the world for over 40 years.
- There are also many examples of failed projects, conflicts, and even court cases
- It is a very complicated model with many risks

MAIN RISKS

1. Technical and Technology Risk

- ESCO recommending replacing equipment that hasn't reached the end of its life, technology that hasn't been proven, low quality technology, or technology that isn't suitable for the application

2. Financial and Costing Risk

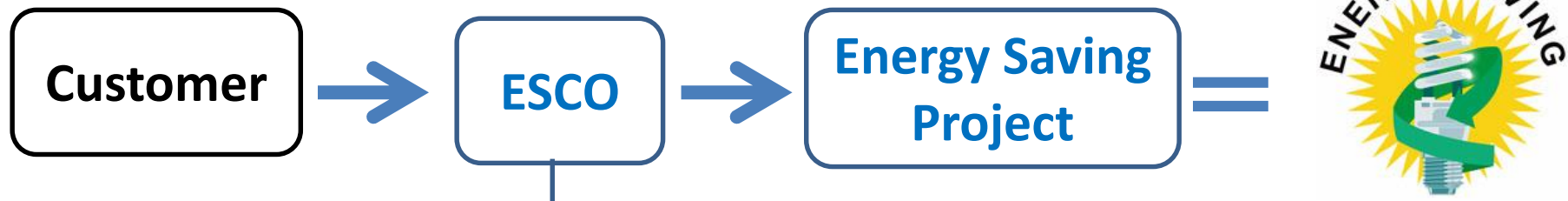
- Financial evaluation, cost savings calculations, Return on Investment, etc
- Access to financing
- Selection of most suitable ESCO model (Savings Guarantee, Shared Savings, Performance Guarantee).
- Pricing for recommended technologies, systems, and solutions ('market price')

3. Legal/Contract Risk

- What is the Baseline (normal energy consumption before the project)?
- What is the method for measurement and verification of savings? What if things change in my building? (eg production goes up in my factory, Occupancy goes up in my hotel?)
- What if the project doesn't meet savings promised by the ESCO?"

Role of a “Facilitator”

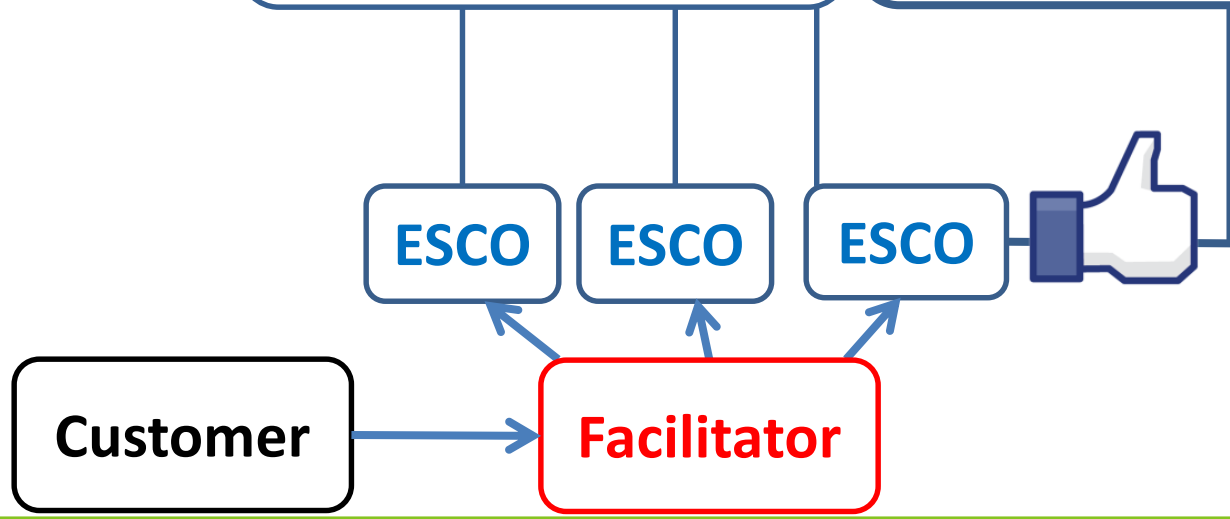
1. Represent the Clients’ (Building Owners’) interests
2. Establish procurement process, scope of works, and timeline for project
3. Gather all site information – energy consumption, operation hours, trends, list of equipment, etc.
4. Prepare all project documents (Pre-qualification, evaluation forms, agreements, Energy Performance Contract (EPC),
5. Undertake ‘Financial due diligence’ to ensure pricing represents fair ‘market pricing’
6. Undertake ‘Technical due diligence’ to ensure technical recommendations are ‘sound’ - [Best Available Technologies]
7. Undertake ‘Quality due diligence’ to ensure recommended manufacturers and brands are reliable, proven, warranties are clear, etc.
8. Identify and explore financing sources, options, and any added benefit (e.g. grants, tax exemptions, etc.)
9. Prepare summaries, options, and recommendations for Client to make well-informed decision
10. All project Communication, Co-ordination, and Project Management



CURRENT



Model 2



ESCO Process with Facilitator

1. Initial meeting with Building Owner and Facilitator



2. Data Collection and Baseline



3. EOI to select 3 ESCOs



4. 3 ESCOs undertake Preliminary Assessment of Building



5. Presentation and Evaluation of Prelim Assessments to select



6. 1 ESCO to undertake IGA (IGA Agreement signed)



7. EPC signed and Implementation



8. Measurement & Verification (M&V)

Preliminary Audit Report/Proposal Guidelines



1. Site description / Overview of site
2. Energy consumption breakdown
3. Brief description of Energy Conservation Measure (ECM)
 - Additional assumptions used
4. Estimated Investment
5. Estimated Energy Savings
6. Estimated Energy Cost Savings
7. Simple Payback
8. Project Summary
 - Total % savings from baseline
9. ESCO Model (GS, SS, PG)
10. Fee for undertaking IGA

Preliminary Audit Report/Proposal Guidelines



Baseline

- ✓ ALL Energy Cost Savings to use **X.xx** THB/kWh
- ✓ Basic operational parameters (hours of operation, days/week)
- ✓ List of major equipment
- ✓ Chiller plant operating hours
- ✓ Lighting operating hours
- ✓ Electricity consumption (24 months)
- ✓ Baseline Consumption (E.g. October 2014 – October 2015)
- ✓ Assumption that M&V will follow IPMVP
- ✓ Any other relevant matters
 - ✓ Renovation plans, equipment replacement plans, issues with breakdown, maintenance/servicing issues
- Prelim Proposal NOT MORE than **25 pages** (Word / Ppt/Pdf)
- Product Specification sheets submitted separately

List of Documents



1. Pre-qualification of ESCOs
2. Evaluation 'Sheet' for Pre-qualification
3. List of Information requested
 - Equipment list, hours of operation, issues with breakdowns/frequent servicing, replacement plans
 - Corporate targets, reporting requirements
4. Evaluation 'Sheet' for Preliminary Proposal
5. Investment Grade Audit (IGA) Agreement
6. Energy Services Performance Contract

Summary



- The Facilitator's main role is to 'Facilitate' the project
- Always understand and represent the Client's interests
- BUT – be fair to both parties [Win-Win]
- This 'light' model doesn't require a deep engineering focus
 - The Facilitator is not an absolute expert in everything about Energy Efficiency – the ESCOs are the experts
- Lower initial commitment for Client (especially those new to ESCO projects)
- Proven to be valuable and successful in many projects and many countries