

Energy Performance Contracts & Emerging Energy Controls

...Cost Effective Route to Energy Savings



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Introduction

- Ascough Consulting Engineers formed in 2006, Xperen in 2011
- Background in building physics and M&E design
- Developed reputation as ‘building doctors’ to resolve complex technical issues, even for our competitors
- Proven track record in achieving first class results for our customers
- 100% satisfied clients
- Involved in the design of eircom’s award winning 1HSQ

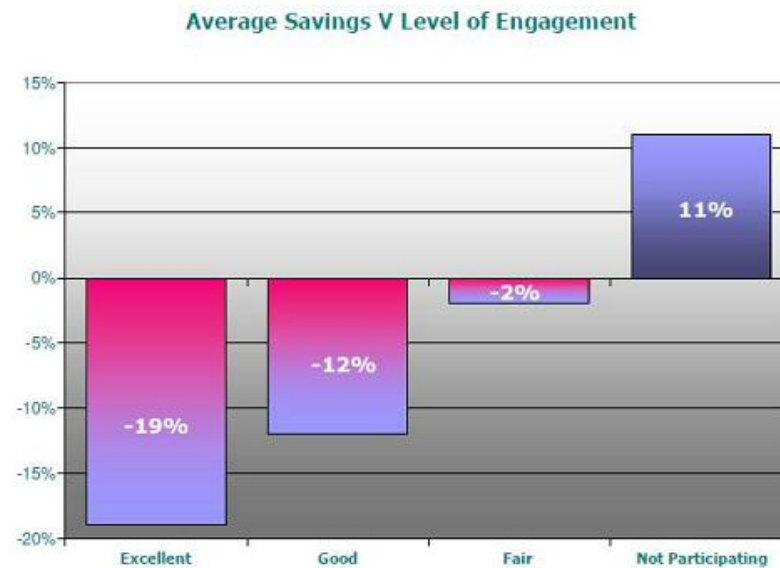


What is an EPC?

- Obliges an ESCO to 'put its money where its mouth is'
- Success through incentive – oil drilling
- Client outsourced risk
- Means of project finance
- Long term commitment from ESCO

'The greater the commitment, the greater the Savings' ...

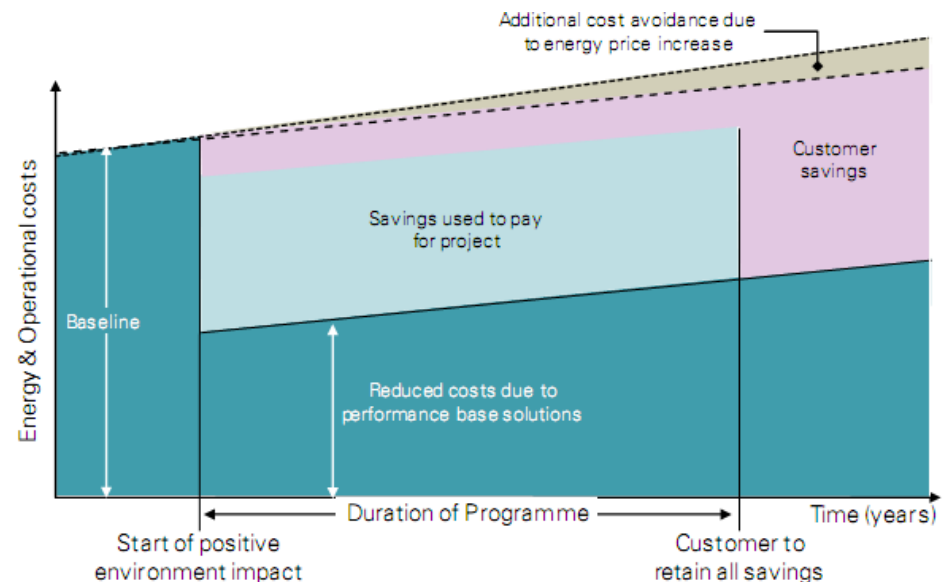
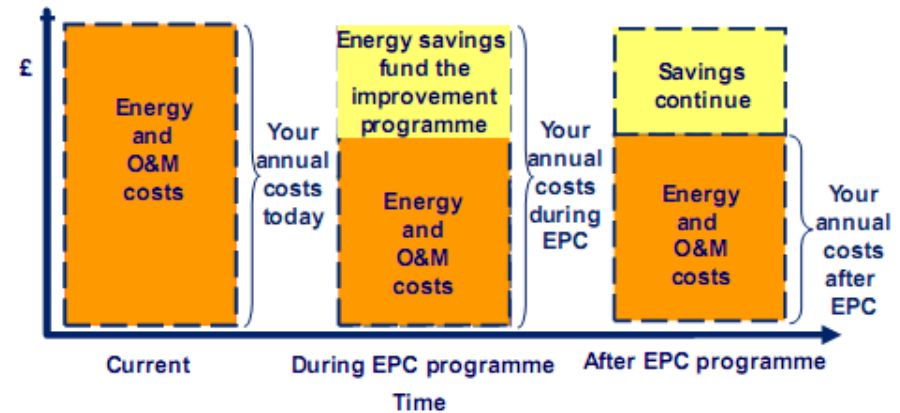
Levels of Engagement:



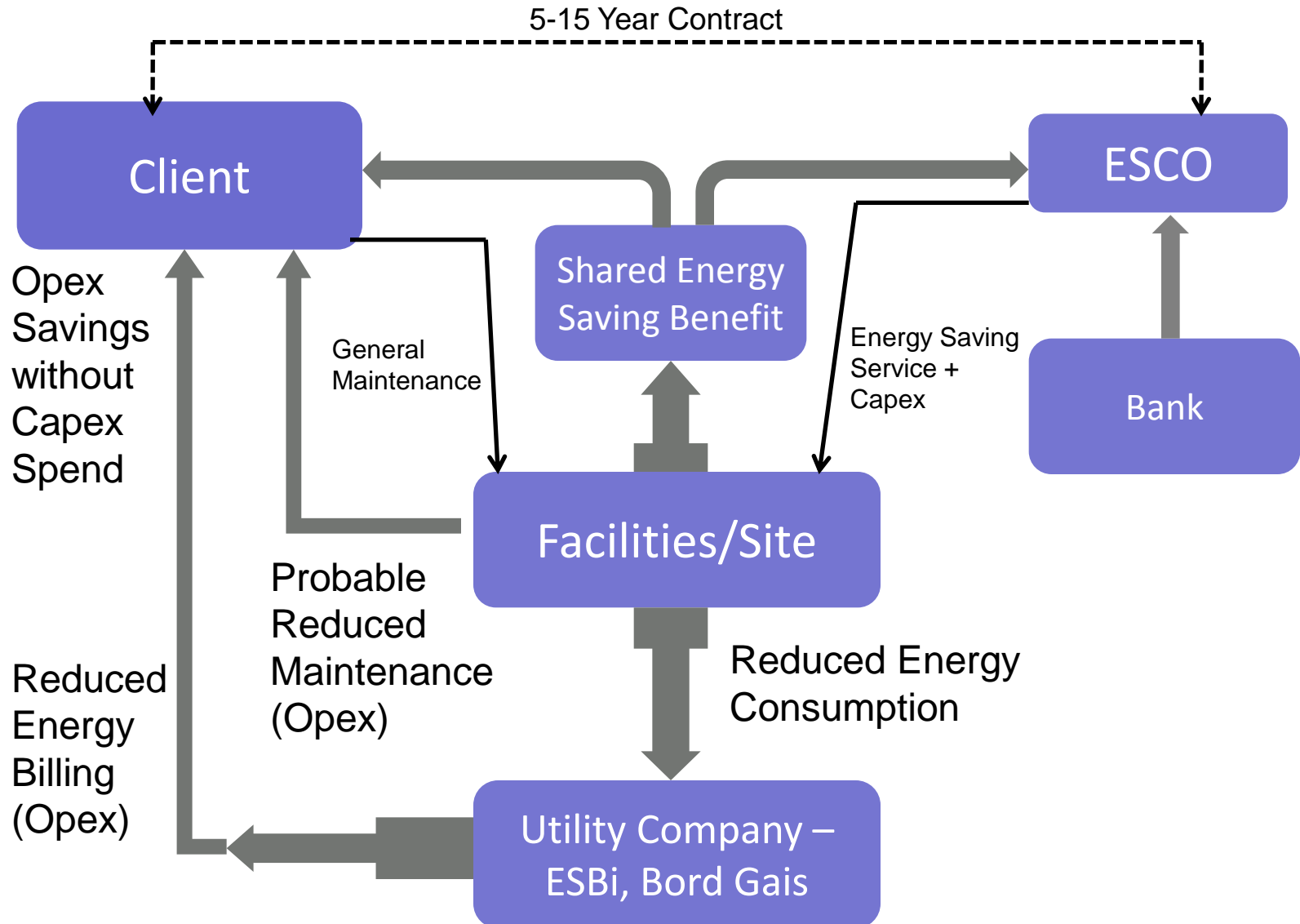
Optimising Power @ Work

Typical EPC Model

- Energy Savings - Typical ESCo takes all or most of the savings to make a return on its investment during the contract period
- Energy Supply - ESCO provides cheaper energy rather than reduced consumption



Typical EPC Model



Banking Finance

- Bank's Key Concerns:
 - Quality of the Client (ability to repay over the term)
 - Quality of the ESCO (ability to achieve its targets ... track record)
- Bank is likely to want ESCO to finance 20% of each project itself
- Acceptable terms are cost of funds and length of term
- Banks need to see energy savings as an asset rather than using traditional asset based lending procedures
- Banks may 'kick to touch' with exorbitant interest rate and short term only offer



When is an EPC the Best Option?

- For complex, integrated solutions
- When capex is in short supply
- Where incentive can achieve bigger savings
- Where it benefits to have an EPC contractor committed to making it work year after year
- Where post completion performance matters a lot
- Avoid for works involving basic competency and where you already have the capex



Birth of an EPC Contractor ... Xperen

- Growing up in the 80s 😊
- Energy efficient design from the beginning
- **Gap** between Controls Contractor & Consultant
- 1HSQ complexity required 'beyond the call of duty' controls integration
- Specialisation in efficiency
- Realisation that existing building stock could benefit from same approach
 - ✓ Offered EPC on consultancy services
 - ✓ Then offer fully financed turn key EPCs
 - ✓ Now offer with fully integrated energy control system



Birth of an EPC Contractor ... Projects

- Friends First HQ, Cherrywood, 2010
 - ✓ Fee based EPC
 - ✓ 40% gas & elec savings
- PwC, 2012
 - ✓ Fee based EPC
 - ✓ 30% gas & 30% elec savings
- Royal College of Surgeons (Smurfit), 2012
 - ✓ Fee based EPC
 - ✓ 40% gas & 60% elec anticipated
- Friends First HQ, 2013
 - ✓ Client financed turnkey EPC
 - ✓ 3 year term
- Harbourmaster 2, IFSC
 - ✓ Xperen financed turnkey EPC
 - ✓ 3.5 year term, 30% savings



EPC Contractor - Challenges

- Cost of proposal/tender (up to 12 man-months!)
- Eager but indecisive clients
- Poor understanding of how EPCs work
- 'Traditional' banking
- Clients ability to compare EPCs for complex projects as solutions are often different



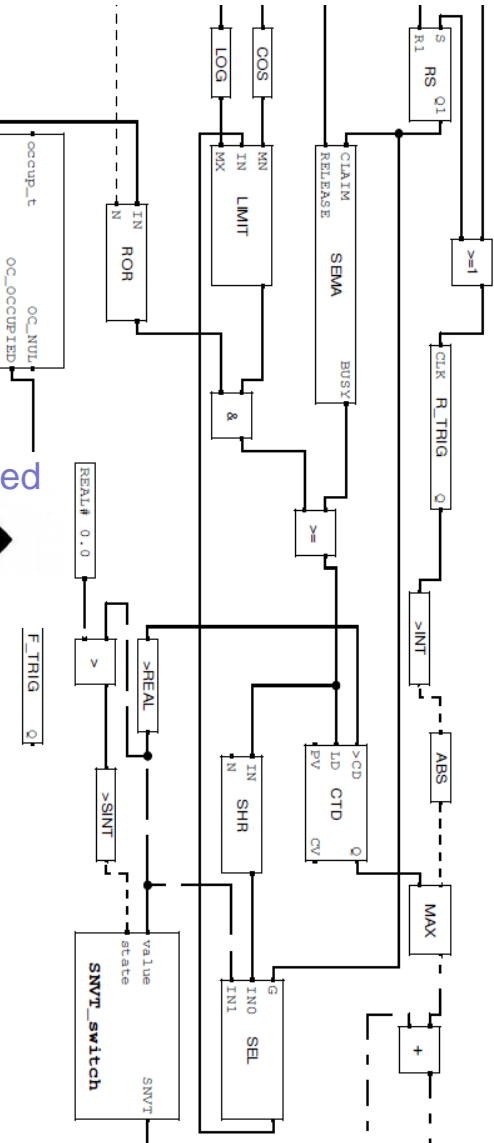
EPC Contractor – Ideal Solution for Clients?

Clients want:

- Guaranteed performance ... or someone else to pay for shortfall
- Big savings
- Payback of less than 3 years?
- Option for fully financed solution
- *Simple user interface to complex solutions ... know that your buildings are operating at max efficiency but simple, effective and rapid intervention can be achieved if necessary*



Pre-programmed



EPC Contractor - Solutions

Xperen solution – Straight offer:

- Integrated Energy Control System & associated plant upgrades
- Max efficiency, max client control
- 30% savings guaranteed
- 2.5 year payback if client funded
- 3.5 year payback if Xperen financed
- Refund/receive/share the difference
- Early commitment based on above offer



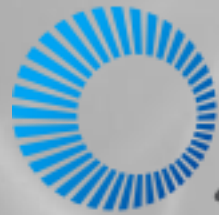
Symphony Energy Control System



- SMART Tool for Facilities Managers
- A first in the world solution for maximum efficiency yet ultimate control
- Loytec Technology
 - leader in open BMS systems
 - High grade PLC



Thank You



Xperen

energy efficiency experts

... delivering **value** through **expertise**