

Powerful Business Conference 2011

**ENERGY PERFORMANCE
CONTRACTING:
Is It for You?**

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ENERGY PERFORMANCE CONTRACTING: Is It for You?

- If you have the money,
- If you have the expertise,
- If you have the time, and
- If somebody is not apt to reorder your priorities ...

Then, you should do it yourself.

*But if you can't say yes to all of the above,
what are you waiting for???*

Energy Efficiency

- A 2-year payback offers a 50% ROI
- Creates jobs; for 1 megawatt – 5 x as many jobs as generation; 1/8 of the investment
- Makes money while reducing pollution
- Is good for the customer, the market, the economy

SO WHY IS ENERGY EFFICIENCY

SUCH A HARD SELL?

MONEY!

Performance Contracting

- **Generates its own capital funding**
- **Is not new**
- **Is recession friendly**
- **Is risk management; a financial transaction**

PERFORMANCE CONTRACTING

Is a contract based on performance. If the contractor does not perform to a prescribed standard, the ESCO is not paid.

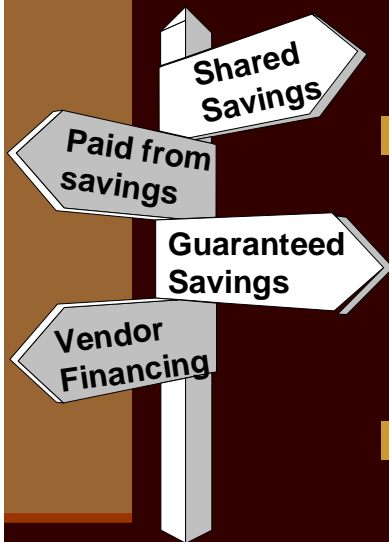
***It's a simple concept,
but a complex process !***

Pitfalls

- ❑ Guarantee \$1 and put \$33 million at risk
- ❑ Put client evaluator on proposed ESCO team
- ❑ Change evaluation criteria after proposals submitted to match one ESCO candidate
- ❑ Get sucked into Renewables vs EE
- ❑ Procrastinate

PERFORMANCE CONTRACTING

- What project choices do you have?
- What financing models are available? Can they be modified?
- Do you really know what risks you are taking and what options you have to deal with them?



PERFORMANCE CONTRACTING



Single measure

vendor financing

“paid from savings”

Shared savings

Guaranteed savings

Chauffage

Fixed fee, facility fee

Hybrids

PERFORMANCE CONTRACTING

SHARED SAVINGS

Shares % of energy COST savings

Usually off balance sheet

Equipment may be leased

ESCO typically carries financing; so *ESCO has credit and performance risk*

Customer has more payment exposure

GUARANTEED SAVINGS

Level of ENERGY saved is guaranteed

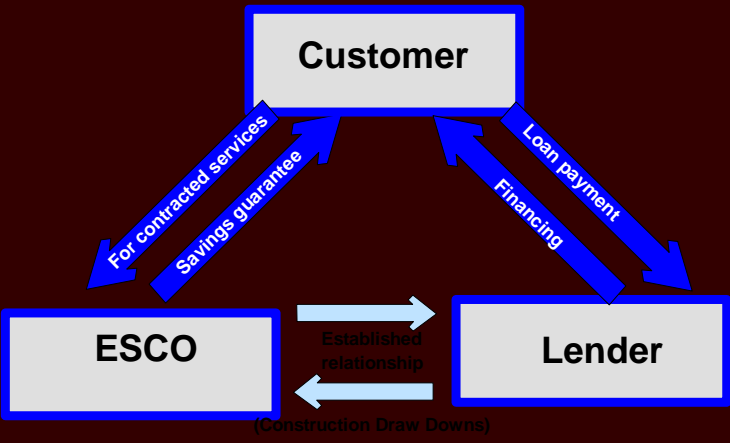
Value of energy saved is guaranteed to meet debt service obligation
down to a floor price

Owner carries credit risk

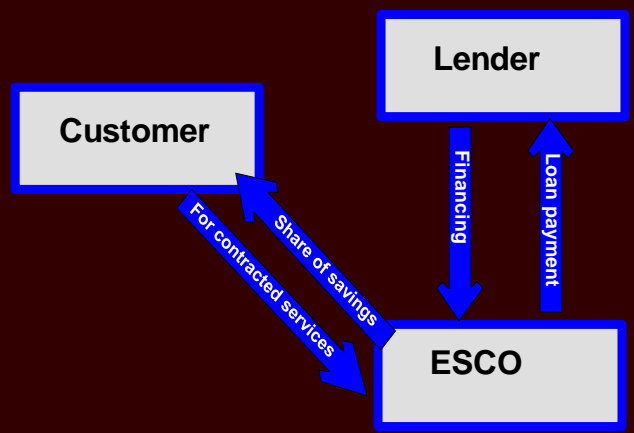
Tax-exempt institutions can use status for much lower interest rates

PERFORMANCE CONTRACTING

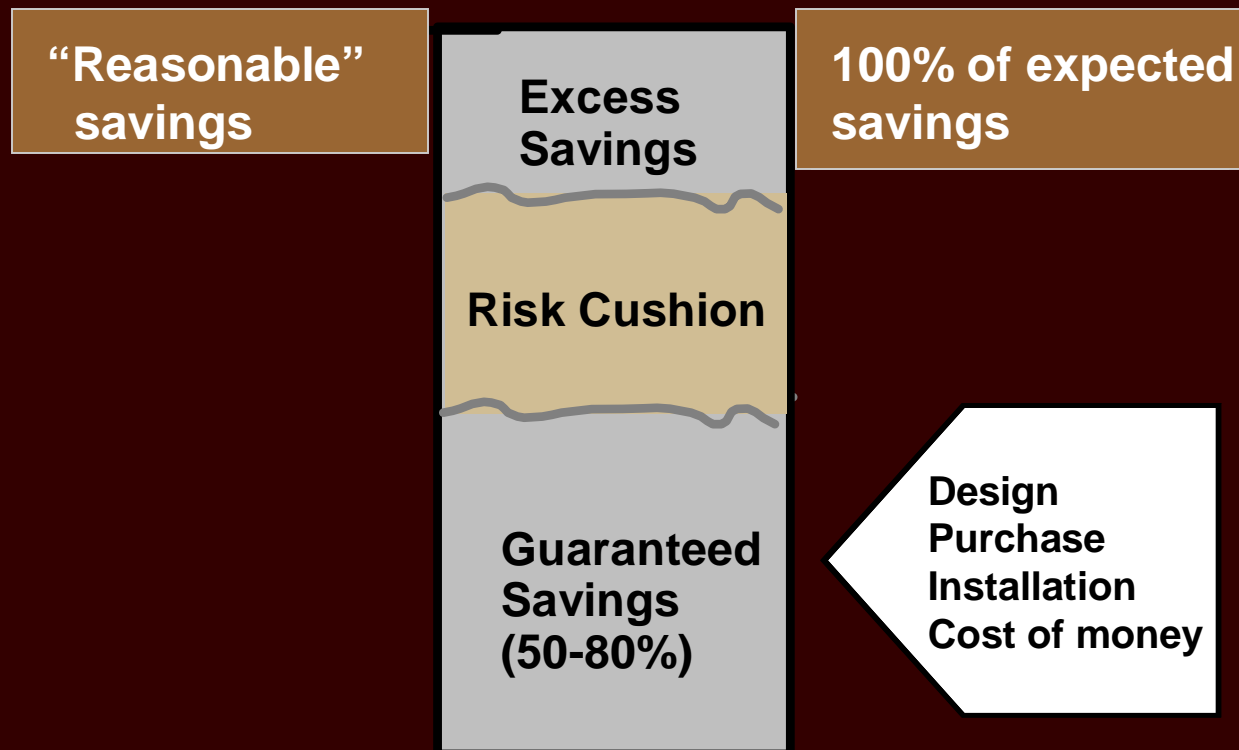
CASH FLOW: GUARANTEED SAVINGS



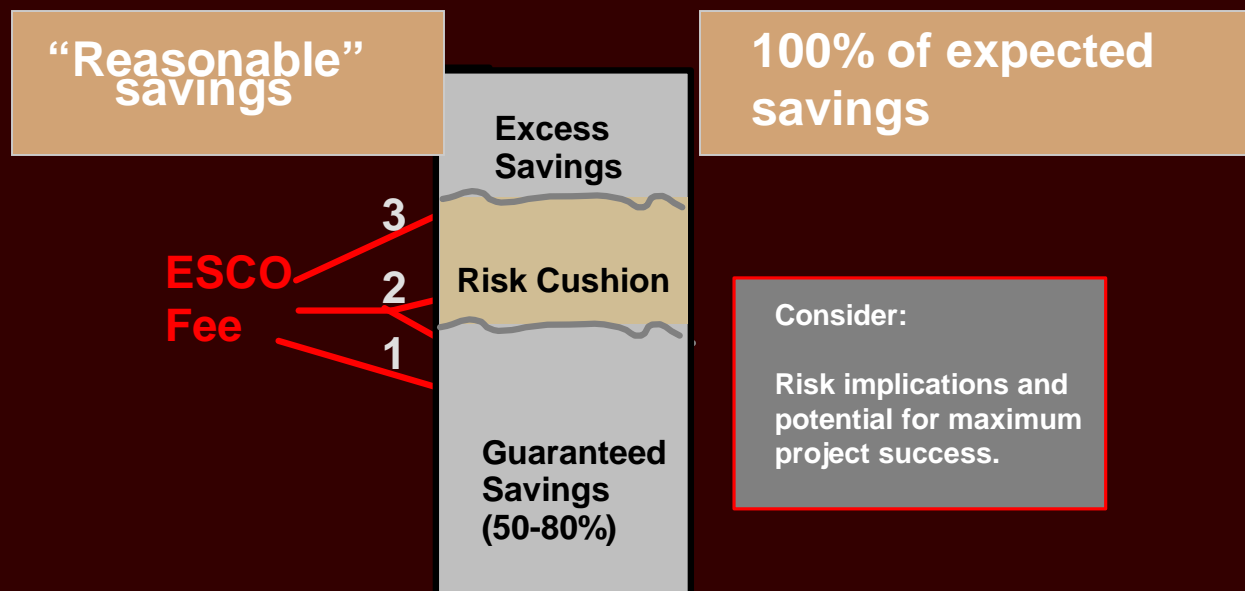
CASH FLOW: TYPICAL SHARED SAVINGS



PERFORMANCE CONTRACTING

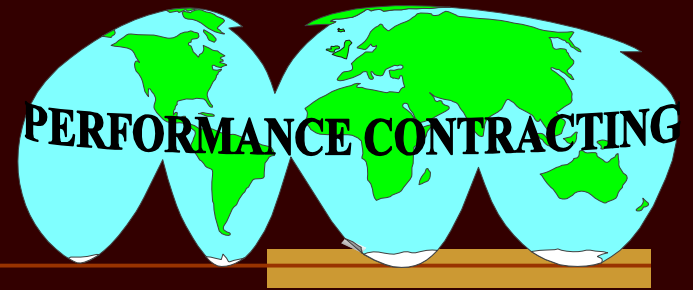


PERFORMANCE CONTRACTING



PERFORMANCE CONTRACTING

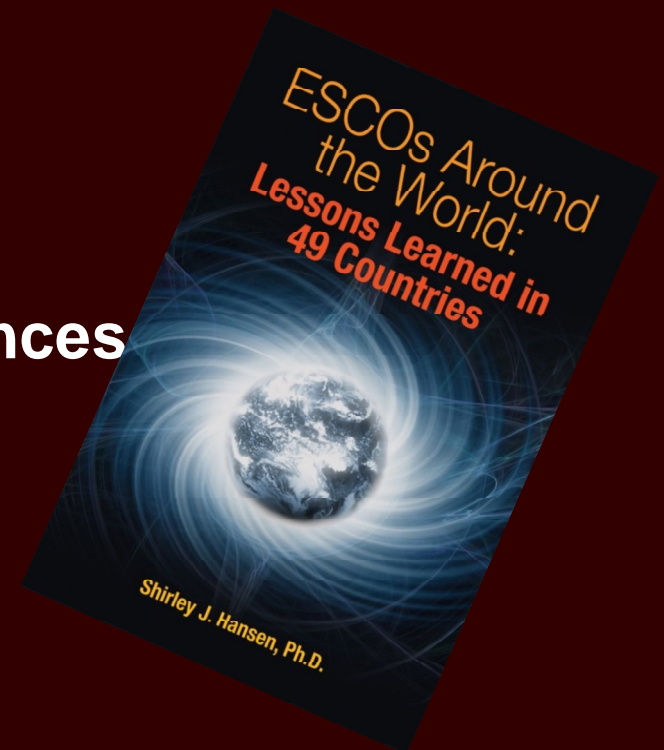
■ Pioneers take the most arrows



Performance contracting is not new! It's been around for over 100 years. Over time, ESCOs have learned what works ...

AND WHAT DOESN'T WORK.

We should learn from their experiences



Coming in 2012
World ESCO Outlook

Lessons Learned Around the World



1. WISHCOs are a major problem, especially for developing ESCO industries.

They fail to do their home work ...

risk management

financial implications

Typically exaggerate what they can accomplish

Lesson learned: One bad project impacts the industry and consumer confidence

Lessons Learned Around the World



2. Performance contracting is more than new equipment

Expertise and services are more important.

**Equipment should only be the vehicle to deliver
the services**

**Bidding based on price of equipment distorts
the process.**

**ESCOs make more money from services than
equipment sales.**

Lessons learned: RFP/proposal process and ESCO selection should be based on ESCO qualifications; not just the price of the equipment. Bid/spec defeats the essence of performance contracting.

Lessons Learned Around the World



3. The traditional audit is not good enough

- ❑ Traditional audits do not sufficiently consider how implemented measures will behave over time
- ❑ Traditional audits do not give the needed guidance to enhancing the physical/fiscal portfolio.
- ❑ Savings projections off by 25 percent are not good enough for investors ... or ESCOs ... OR CUSTOMERS
- ❑ An audit report should be more than a list of cost-effective energy measures. Auditors must consider the conditions under which measures will function during the life of the project.
- ❑ Audits do not save energy ... people do!!!! with money!!!

Lessons learned: An audit should serve as a financial investment guide that will show how the physical assets of an organization can be improved. AN INVESTMENT GRADE AUDIT.

Lessons Learned Around the World



4. Underestimating the importance of O&M

- ❑ Operations and maintenance personnel can kill a well-designed project.
- ❑ Energy efficient O&M practices can deliver up to 80% of the savings in an effective energy management program.

Lessons learned: Assess O&M abilities, practices, manpower, and attitudes. Provide training and update training as needed. Augment manpower as appropriate. ESCOs can be a source of additional manpower and expertise.

Lessons Learned Around the World



5. Measurement and verification (M&V) of savings are absolutely essential to energy efficiency programs and critical to performance contracting.

There is no way to tell what was saved, how effective a program is, or whether engineer's predictions are correct without M&V.

Broadly accepted protocols are best.

Lessons learned: Project reliability, financing, marketing, engineering growth, etc. all depend on effective, broadly accepted measurement and verification of savings strategies. However, the value and costs of M&V are often exaggerated.

Lessons Learned Around the World



6. Planned and credible communications is a key component of an effective program.

In the U.S. more ESCO projects go to court due to inadequate communications than any other factor.

Misinformation and misdirection are major problems. Creates resistance walls.

Lessons learned: ESCOs are not using information as effectively as they should.

ESCOs should make communications strategies part of project planning, and a key part of the project manager's responsibilities.

Where Are the Credible Solutions?

Hate to break up a beautiful romance with renewables

BUT ...

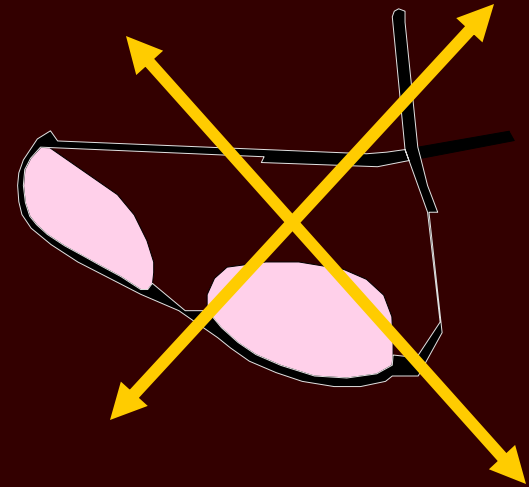
GREEN is not necessarily clean

And

CLEAN is not necessarily **green**

Wood

Nuclear
power



Want to be informed???

I strongly recommend you read:

Why We Hate the Oil Companies

by John Hofmeister

Lessons Learned Around the World



7. Performance contracting is RISK MANAGEMENT.

Guaranteed performance and savings-driven projects mean managing risks is the most critical component of PC. Effective ESCOs have learned to use the project financial structure to help manage the risks.

Lessons learned: Use risk management/mitigation.

- *Use REAL investment grade audit procedures; not just traditional audit with a new name.*
- *Limit guarantee to 80% until audit capabilities are proved.*
- *Understand that performance contracting is primarily a financial transaction.*

An Additional Thought ...

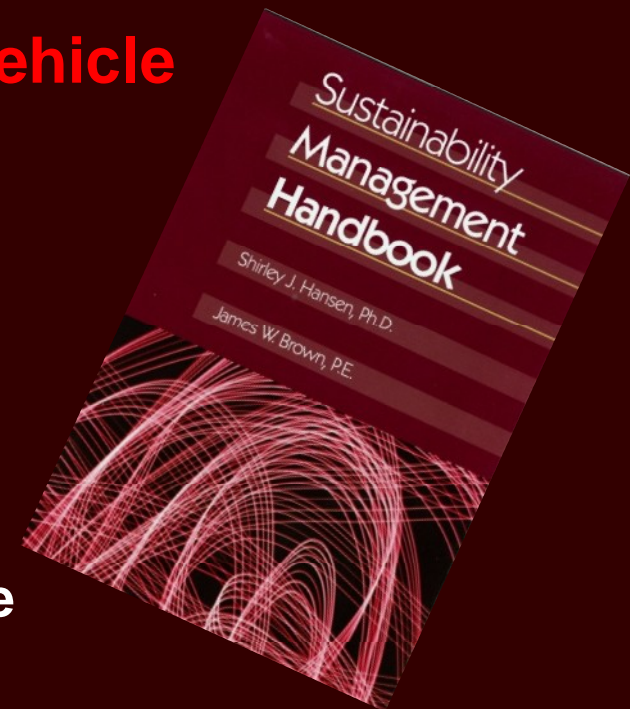
The ESCO model offers an excellent vehicle for sustainability

Sustainability is a critical need around the world.

Too often there are inadequate funds to support sustainable development.

Energy efficiency savings can help carry the project.

An excellent venue to “marry” renewable energy and energy efficiency -- and can incorporate other resource management procedures (water).



PERFORMANCE CONTRACTING

Pioneers take the most arrows

PC can reduce operating costs without capex

You can improve the environment while making money from existing facilities

Thanks for the opportunity ...

Any questions?

Shirley

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