Energy Efficiency Insurance

Presented by
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Agenda

- Brief introduction to Crombie Lockwood
- The move to Energy Efficiency
- Energy Services Companies and the product offering
- Typical model for an Energy Efficiency project
- The barriers to an EE project
- The insurance solution
- The benefits
- Breaking down the barriers to an EE project

Crombie Lockwood

- Founded 1978; acquired 2014 by Arthur J. Gallagher & Co (market cap USD$8 billion)
- Specialists in Corporate sector and innovative/niche product offerings
- Strategic alliance partnerships with top NZ and London insurers
- Only insurance broker on Ethisphere's World's Most Ethical Companies (4 years running)

The move to Energy Efficiency for buildings

- Corporate responsibility
- Government policy
- Rising energy prices
- Financial impact – efficient buildings are easier to:
  - sell (+12% sale value)*
  - rent (+5-6% rental value)*

* UK Experience

Energy conservation measures for buildings

- LED lighting
- Thermal window films
- HVAC optimisation
- Voltage optimisation
- Lighting controls/motion sensors
- Renewable technologies
  - PV panels
  - Biomass boilers
  - Ground source heat pumps

Energy Services Companies and the product offering

- While some companies want to control their own energy efficiency programmes, increasingly these are outsourced to specialist Energy Service companies (ESCO's)
- Typically the ESCO will undertake the energy management at the property on behalf of the end user / property owner
- Financing/funding (bank or private equity) through a loan, leasing (finance or operating) agreement or through a Special Purchase Vehicle (SPV)

Energy Services Companies and the product offering cont…

- ESCO/SPV owns the equipment and receives revenue for the contract
- Contract will incorporate a guaranteed minimum energy saving
- Profits are derived from savings over and above the guarantee
- The ESCO is exposed to the guarantee under the contract and also its ability to repay under the loan facility in the event of a “call” on the guarantee

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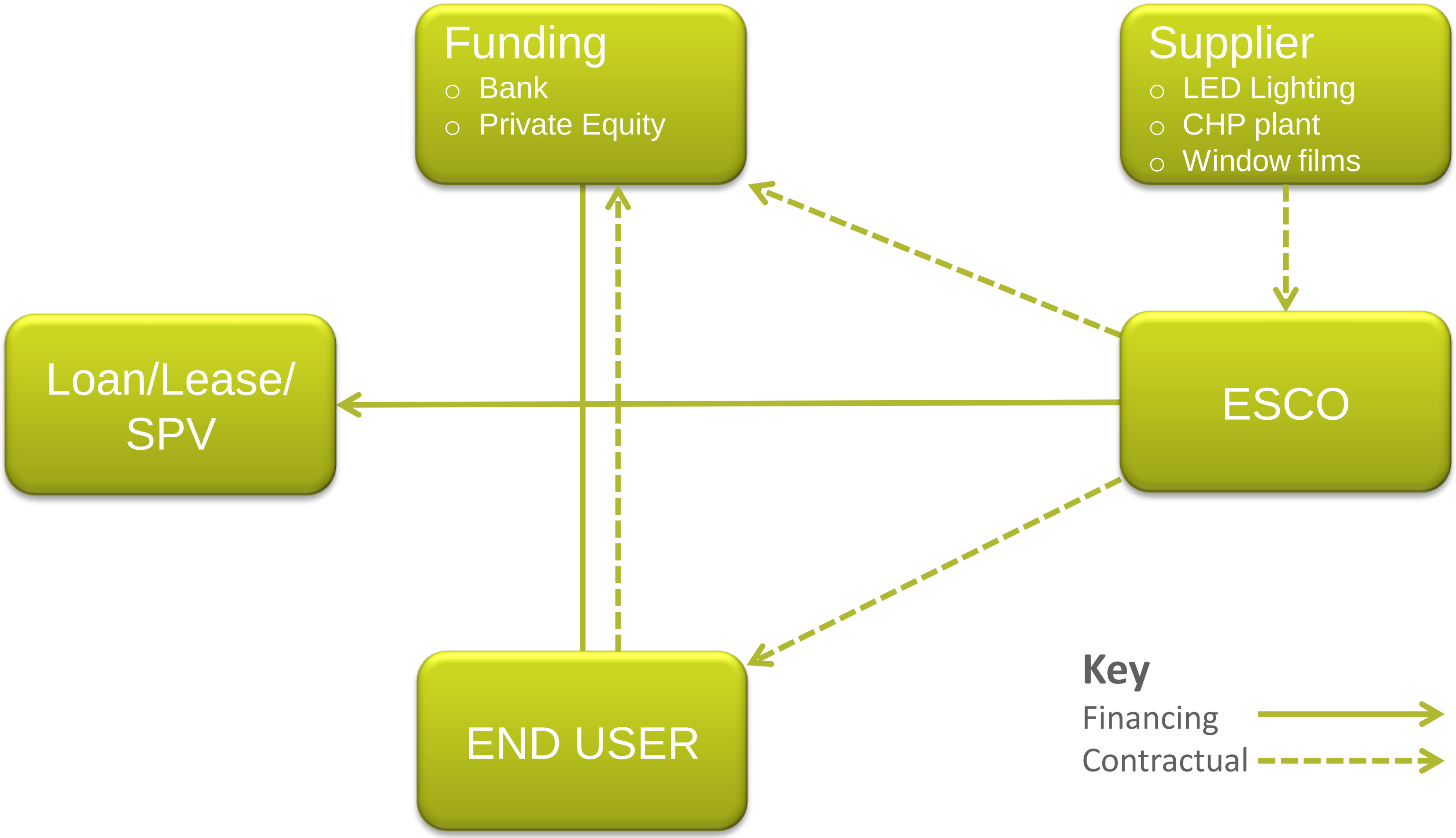
Typical model for an Energy Efficiency project



The barriers to an EE project

End User	ESCO	Funder
○ Securing funding for the project due to risk averse banking procedures ○ Doubt the EE measures actually deliver the promised savings ○ Asset performance is guaranteed under contract but in the event of a shortfall will the ESCO be able to pay, especially if a shortfall occurs every year of the contract	○ Securing project funding ○ Repayment based around asset performance leading to higher lending rates ○ Asset performance guarantee needs to be appealing to end user ○ No profit until guarantee achieved – asset and income protection required in the event of an incident ○ If the asset performance is below expectation ESCO is tied to guarantee penalties over the term of the contract (3+ years) ○ Aggregation issues over many projects could impact on company's financial viability	○ Banks still risk averse to long term exposures ○ No technical knowledge or experience of potential performance leading to "blind" lending ○ Loans typically "secured" by asset performance ○ Shortfall in performance could result in default on the loan ○ Financing typically over a long term (3+ years) so asset guarantee needs to perform over the entire period

The insurance solution

- Unique product offering backed by A++ (Superior) AM Best security
- Provides cover, under three sections, for:
  - the assets
  - loss of income (following an incident)
  - asset performance
- Cover available up to a period of 5 years – non-cancellable
- Policy can be tailored to meet the financing model
- Target market – Energy Service companies, local authorities, property companies and funders

Section A
Asset protection

What is covered

- Machinery and materials installed as part of the project (post installation and testing)
- All risks cover including machinery breakdown (can be limited to machinery breakdown if assets already covered by end user's property policy)
- New for old basis of settlement
- Public Authorities' requirements
- Debris removal
- Expediting expenses

What is not covered

- Wear and tear
- Routine maintenance
- Deliberate acts
- Breakdown covered by manufacturer warranty or maintenance

Deductible/Excess

- Dependent on machinery but can start as low as NZ$2,500

Section B
Business Interruption

What is covered

- Loss of earnings following an insured event under Section A
  - Contract fees from end user
  - Feed in tariffs or other renewable incentives
- Increased cost of working
- Customers and Suppliers extension
- Professional Accountants' charges

What is not covered

- As per Section A

Deductible/Excess

- Typically a minimum of 5 days

Section C
Asset Performance Insurance

What is covered

- The shortfall in actual savings realised compared to the insured savings
- Cover not dependent on loss under Sections A or B
- Subject to an Annual Review Date

What is not covered

- Regulatory changes, fines, damages or penalties
- Modifications to the project plan unless prior agreement by the insurer obtained

Deductible/Excess

- Variable dependent on independent project audit – sweet spot (premium v retention) suggests around 20-30%. Note the retention needs to be exhausted before the policy responds (i.e. it is not a co-insurance)

General exclusions

- War
- Terrorism
- Nuclear risks
- Pollution and contamination
- Electronic risk (virus, hack, DOS)
- Micro-organisms

The process

- Data capture – proposal form, data capture spread sheet, project plan and contracts
- Energy audit – completed by a third party on behalf of the insurer (note the cost for the audit is payable by the ESCO upfront and non-refundable and the audit report is not disclosed to any party in the project plan)
- Results of audit (range provided to insurer) generates premium through a patented algorithm for the asset performance. Assets and business interruption rated independently
- Terms provided including (where possible) a range for asset performance against retention levels. Premium payable at inception irrespective of policy period length

Underwriting considerations

Assets/Business Interruption

- Technology type
- Building construction
- Occupancy

Asset performance

- Audit results
- Number of initiatives
- Type of initiatives
- Insured Savings levels / deductible

Benefits to the ESCO/End User/Funder

- Provides a "sense check" against the ESCO's savings calculation – should eliminate "double counting", etc
- Provides certainty of protection across the project period – the asset performance insurance applies to **each** year of the project and hence savings from one year not carried over to the next
- Asset performance backed by A++ (Superior) AM Best security providing certainty to the end user
- Five year non-cancellable policy provides certainty to funders and hence credit enhances the project benefiting the ESCO
- Policy can be in joint names to include the interested parties
- May be possible to include a non-vitiation clause to protect the funder's interest

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Breaking down the barriers to an EE project

End User

- Securing funding for the project due to risk averse banking procedures
  - ✓ *Assists in negotiations due to long term contract and security*
- Doubt the EE measures actually deliver the promised savings
  - ✓ *Insurance protection eliminates this concern*
- Asset performance is guaranteed under contract but in the event of a shortfall will the ESCO be able to pay, especially if a shortfall occurs every year of the contract
  - ✓ *Insurance protection eliminates this concern*

ESCO

- Securing project funding
  - ✓ *Assists in negotiations with the funders*
- Repayment based around asset performance leading to higher lending rates.
  - ✓ *Assists in discussions with the funders to improve the credit worthiness of the project due to the A++ (Superior) rated backing*
- Asset performance guarantee needs to be appetising to end user
  - ✓ *Results from the audit will sense check the savings for the ESCO*
- No profit until guarantee achieved – asset and income protection required in the event of an incident
  - ✓ *Sections A and B provide the protection*
- If the asset performance is below expectation ESCO is tied to guarantee penalties over the term of the contract (3+ years)
  - ✓ *Non cancellable policy for up to 5 years provides certainty of protection*
- Aggregation issues over many projects could impact on company's financial viability
  - ✓ *Removes the large majority of the aggregation to a A++ (Superior) rated insurer*

Funder

- Banks still risk averse to long term exposures
  - ✓ *Up to five years of protection on a non-cancellable basis*
- No technical knowledge or experience of potential performance leading to "blind" lending
  - ✓ *Sense check by independent audit should provide comfort*
- Loans typically "secured" by the asset performance
  - ✓ *Asset performance, in the main, protected by the insurance market*
- Shortfall in performance could result in default on the loan
  - ✓ *Majority of risk eliminated by A++ (Superior) protection*
- Financing typically over a long term (3+ years) so asset guarantee needs to perform over the entire period
  - ✓ *Majority of risk eliminated by A++ (Superior) protection*

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Enquiries / Questions

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