Sustainable Profitability Group

Financing Strategies for Renewable Energy and Energy Efficiency in Commercial Buildings

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Obstacles to Financing

- Government incentives are still sporadic and insufficient
- Significant incentives are tax-based and require tax appetite to monetize
- Building owners do not benefit from energy cost savings if tenants are submetered

Obstacles to **F**inancing (con't)

- Complexity of structuring deals
- Multiple participants
  - Project proponent
  - Building owner
  - End-user(s)
  - Financing entities

Overcoming the Obstacles

- Potential Project Finance Strategies:
  - Create innovative financial products that aggregate and monetize diverse incentives
  - Finance energy projects via Power Purchase Agreements (PPAs) and Efficiency Services Agreements (ESAs)
  - Allocate instruments/investor constituencies to deal with tax appetite/ tax credit incentive issues

Basic Deal Structure

- Split into tiers of low-risk debt, higher-risk debt, equity
  - **Low-risk**: Typically based on tax credit/ accelerated depreciation
  - **Higher-risk debt**: Bond with return based on turning energy savings into hypothetical cash flow
    - User pays fixed coupon plus amortization to 3rd-party investors, and retains any additional returns if cash value of energy savings > coupon + amortization
    - Risk premium is based on difference between actual and estimated savings
  - **Equity**: Typically contributed by project proponent

Sample Project: Chiller Retrofit in Large Manhattan Residential Building

- Project Cost: $700,000
- Financing Methodology:
  - Equity investment $150k (high-risk, financed by demand reduction, PON, gov’t incentives)
  - Debt investment $300k (medium-risk, financed by electricity savings and ESA IRR)
  - Tax equity/depreciation write-down $300k

The Problem: Capturing the $$

- Owners incentives tenant incentives
- Ideal financing structure allows owner to:
  - Access part of coupon revenue stream
  - Collect premium from tenants (unlikely)
  - Create net-net lease structure to directly absorb energy costs (and thus savings)

Possibilities for **I**mproving **I**mplementation of **RE**/**EE F**inancing

- Create:
  - A "fast track" for permitting energy saving/ renewables retrofits across the board (Buildings Dept, etc.)
  - New lease structures that allow both owner and tenant to share in energy cost savings/ benefits
  - A regulatory structure that allows utility participation in decision-making/benefits