To Finance or Not to Finance: Pros and Cons of Third-Party Financing for Energy Efficiency

Tuesday, 3:45 – 5:00 PM
Third-Party Financing

- Today’s speakers:
  - Joyce Ferris, Nextility; Blue Hill Partners
  - Andrew Zech, Greenworks Lending
  - John Krappman, Structured Finance Associates
Better Buildings Summit
May 2016

To Finance or Not to Finance

Joyce Ferris
Blue Hill Partners
and Nextility Inc.
Blue Hill Partners
- Managing Partner
- clean energy investment and advisory firm

Forty West Evergreen
- Property Owner
- multi-tenant commercial office building

Nextility
- CFO/COO
- solar developer and energy brokerage firm
- focused on small to mid size commercial buildings
investments in energy efficiency companies to date

and reviewed hundreds of others
EXTENSIVE EXPERIENCE WITH PROPERTY OWNERS

Schools

Colleges and Universities

Government

Office

Small Commercial

Multi-Family
RECENT FOCUS ON SMALL TO MID-SIZE COMMERCIAL

Small Commercial
Tremendous technology innovation, including enabling data tools

Need for a range of innovative capital and business model solutions
LESSONS LEARNED

Finance solutions need to be suited to the technologies deployed

AND

to the business of the property owner or tenant/energy consumer
PROPERTY OWNERS PERSPECTIVE

Balance sheet treatment
Cost of capital
Personal guarantees
Credit risk for investors
Performance risk allocation
Simplicity and predictability
Integration with overall business objectives
RANGE OF OPTIONS

Traditional ESCO’s
Single measure service solutions
Multiple measure integrated solutions
Direct loans
Low cost loans, rebates, subsidies
On-bill financing
PACE
OPTIONS MOST RELEVANT TO COMMERCIAL CUSTOMERS

- Traditional ESCO’s
- Multiple measure service solutions
- Multiple measure integrated solutions

- Low cost loans, rebates, subsidies
- On-bill financing
- PACE
TWO INNOVATIVE EXAMPLES

On-bill financing – LED Plus
PACE – EE + Solar
ON-BILL FINANCING FOR SMALL COMMERCIAL

Your Local Market
Local, Organic & the Brands You Trust

LED PLUS

Blue Hill
ON BILL FINANCING EXAMPLE

Before and After Impact

<table>
<thead>
<tr>
<th>Rate</th>
<th>Usage (kWh)</th>
<th>Total Annual Charges</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.5¢</td>
<td>7,000</td>
<td>$19,404</td>
</tr>
<tr>
<td>11¢</td>
<td>5,880</td>
<td>$17,357</td>
</tr>
</tbody>
</table>

- No Upfront Cost
- 50 Bulbs Replaced
- Slight Rate Increase
- Monthly Usage - 16%
- $2,047 in Annual Savings
PACE PROJECT COMBINING EFFICIENCY AND SOLAR

**Project:** Energy and infrastructure upgrades on four large properties for a prominent church

**Challenges:**
- Monetize tax benefits from solar PV
- Use savings to finance structural work
- Retire traditional mortgage debt

**Solution:**
- $3 million in building upgrades, including solar PACE-secured PPA for 300 kW system, partial roof replacements, HVAC upgrades, smart thermostats & controls, LED lighting, low-flow water fixtures
Provides credit enhancement – effectively “scrubs” the credit

Favorable cost of capital – at or better than corporate rate

Simplifies underwriting – security is tied to the real estate asset, underlying business is less critical

Eliminates personal guarantees – very valuable to real estate owners

Flexible mechanism – can integrate multiple solutions, also include some roof and infrastructure repairs and upgrades
Financing Energy & Sustainability Improvements

The Owner’s Perspective

DOE 2016 BBC Summit
DRIVERS

• Create Asset Level Value
• Hedge future energy price increases
• Improve asset competitive position
• LEED Certification
• Improving Energy and Environmental Metrics
• Federal D.O.E. – Better Buildings Challenge
• Energy Efficiency upgrades and retrofits
• Energy related capital improvements
• Simplify compliance with mandated reporting requirements
CREATE VALUE

- Increase profitability
- Improve efficiency
- Reduce energy demand
- Reduce O&M expense
- Resolve deferred maintenance issues
- Improve level of service
- Improve customer/employee experience
- Refinance previous energy capital expenditures
- Comply with local, state and federal regulations
- Mitigate increasing utility electric rates
Commercial Real Estate Capital Stack with PACE

Required Return:
- 12% - 15% (plus participation)
- 5.0% - 6.5% (no participation)
- 5.0% - 10.0% (no participation)
- 4.5% - 5.5%

Use of Proceeds:
- Capital Expenditures
- Energy Efficiency
- Solar PV/Co-Gen
- Cost of Property (60% Debt; 40% Equity)

Equity
Preferred Equity/Mezzanine Debt
PACE
Leases
Bank Debt
<table>
<thead>
<tr>
<th>Feature</th>
<th>Lease</th>
<th>PACE</th>
<th>Loan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed-rate, long-term financing (up to 25 years)</td>
<td>No</td>
<td>✓</td>
<td>Sometimes</td>
</tr>
<tr>
<td>Non-recourse obligation</td>
<td>Sometimes</td>
<td>✓</td>
<td>Sometimes</td>
</tr>
<tr>
<td>Payments made with property taxes</td>
<td>No</td>
<td>✓</td>
<td>No</td>
</tr>
<tr>
<td>100% financing available</td>
<td>✓</td>
<td>✓</td>
<td>Sometimes</td>
</tr>
<tr>
<td>Flexible Structures to accommodate REIT status</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Potential “pass-through” to tenants</td>
<td>No</td>
<td>✓</td>
<td>No</td>
</tr>
<tr>
<td>Off balance sheet</td>
<td>Sometimes</td>
<td>✓</td>
<td>No</td>
</tr>
<tr>
<td>Owner retains all tax incentives and rebates</td>
<td>Negotiated</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Approval required upon transfer of the property</td>
<td>Negotiated</td>
<td>✓</td>
<td>No</td>
</tr>
<tr>
<td>Multiple financings available on same property</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>New construction</td>
<td>No</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Refinance of improvements previously completed</td>
<td>No</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Lowest Cost of Capital</td>
<td>?</td>
<td>?</td>
<td>?</td>
</tr>
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</table>
Greenworks is a rapidly growing company that finances energy-saving upgrades in commercial, industrial, non-profit and multi-family buildings. Our mission is to improve the energy efficiency of our country by creating a new normal for financing energy upgrades in buildings.
Property Assessed Clean Energy (PACE) is a government financing policy that classifies energy-saving upgrades as a **public benefit** – like a sewer, road extension, etc.

100% of hard and soft costs are funded by private capital and repaid via a surcharge on the property tax bill.

Payback periods match equipment life (often 20+ years)...

...this makes **most projects cash flow positive from day one**.
PACE REMOVES BARRIERS

- Lack of funding?
- Plan to sell building?
- Payback period too long?
- Tenant pays energy bills?
- Unsure if savings will appear?

+ 100% upfront, 20+ year financing
+ Obligation transfers with property
+ Positive cash flow in year 1
+ Assessment/savings pass to tenants
+ Third party technical review
## THE DAY 1 PAYBACK

Sample $2M, Multi-Measure Project w/ ~6.25 Year Simple Payback

<table>
<thead>
<tr>
<th></th>
<th>Cash</th>
<th>Bank Loan</th>
<th>PACE Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Down payment amount</td>
<td>($2,000,000)</td>
<td>15% - ($300,000)</td>
<td>$0</td>
</tr>
<tr>
<td>Loan amount</td>
<td>$0</td>
<td>$1,700,000</td>
<td>$2,000,000</td>
</tr>
<tr>
<td>Loan term</td>
<td>NA</td>
<td>5 yrs</td>
<td>20 yrs</td>
</tr>
<tr>
<td>Interest rate</td>
<td>NA</td>
<td>4.50%</td>
<td>6.25%</td>
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</table>

### Annual Cash Flow

<table>
<thead>
<tr>
<th></th>
<th>Cash</th>
<th>Bank Loan</th>
<th>PACE Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual payment</td>
<td>NA</td>
<td>($382,295)</td>
<td>($180,978)</td>
</tr>
<tr>
<td>Annual energy savings</td>
<td>$320,000</td>
<td>$320,000</td>
<td>$320,000</td>
</tr>
<tr>
<td>Net annual cash flow</td>
<td>$320,000</td>
<td>($62,295)</td>
<td>$139,022</td>
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</table>

### 5-Year Financial Performance

<table>
<thead>
<tr>
<th></th>
<th>Cash</th>
<th>Bank Loan</th>
<th>PACE Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-Year Net Cash Flow</td>
<td>($720,000)</td>
<td>($611,475)</td>
<td>$695,110</td>
</tr>
<tr>
<td>5-Year NPV @ 6%</td>
<td>($840,766)</td>
<td>($530,574)</td>
<td>$585,611</td>
</tr>
<tr>
<td>5-Year IRR</td>
<td>-16%</td>
<td>NA</td>
<td>Infinite</td>
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</table>

1. Assumes no utility cost escalation and no performance degradation to simplify case study
New hot water heater, three high efficiency boilers and replacement of a single, inefficient steam boiler saved this 95,000sf theater over $1.2M. The theater was pleased with C-PACE’s ability to offer an upgrade with no capital outlay at a time when they were searching eBay for spare parts.

**Total Project Cost:** $650,000  
**Money Down:** $0.00  
**Incentives:** $266,000  
**C-PACE Financing:** $384,000  
**Term:** 20 years  
**Annual C-Pace Assessment:** $30,411  

**Annual Energy Cost Savings:** $58,674  
**Lifetime Energy Cost Savings:** $1,173,479  

Hartford, CT
## BUSHNELL CENTER FINANCIAL ANALYSIS

<table>
<thead>
<tr>
<th>Year</th>
<th>PACE Payment</th>
<th>Energy Efficiency Savings</th>
<th>Interest Deduction*</th>
<th>Depreciation Cash Impact</th>
<th>Annual</th>
<th>Cumulative</th>
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<tr>
<td>1</td>
<td>($30,412)</td>
<td>$58,674</td>
<td>$0</td>
<td>$0</td>
<td>$28,262</td>
<td>$28,262</td>
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<td>$0</td>
<td>$0</td>
<td>$28,262</td>
<td>$56,525</td>
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<td>$0</td>
<td>$28,262</td>
<td>$565,248</td>
</tr>
<tr>
<td>Subtotals:</td>
<td>($608,232)</td>
<td>$1,173,480</td>
<td>$0</td>
<td>$0</td>
<td>$565,248</td>
<td></td>
</tr>
</tbody>
</table>

### Summary

- **Sum of Income and Energy Savings:** $1,173,480
- **Savings to Investment Ratio (SIR):** 1.93
- **Sum of Expenses:** ($608,232)
- **Net Income + Savings:** $565,248
• **Debt Service Coverage Ratio:** Almost all PACE projects have a project DSCR (SIR) >1 and often significantly enhance the building’s overall Net Operating Income (NOI).

• **Debt to Value Ratio:** PACE structure ensures value increase far outweighs the debt increase.

  **Debt:** As a property tax, the annual PACE payment becomes a liability in the year it is due. Mortgage lenders typically add one year’s payment to the property debt.

  **Value:** Projects are almost always accretive to the property value – either via improved cash flow or completion of deferred maintenance projects.

• PACE helps **Defuse the “Deferred Maintenance Time Bomb”** – reducing the mortgage holder’s risk from surprise costs that could harm a borrower’s ability to pay.