LBE 101: Financing State LBE Efforts

Introduction:
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Financing State Lead-by-Example Efforts
Prepared for 2019 National Governors Association Lead-by-Example Workshop

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Why Financing?

• **Opportunity Cost**
  – Unlike many other investment priorities, energy efficiency is compatible with financing because the cost savings are often immediate, measurable, and reliable.

• **Scale and Speed**
  – Financing expedites and extends the reach of efficiency improvements beyond what is possible with appropriated funds.
Foundational Concepts

• Financing to Support Lead-by-Example (Public Bldgs.) vs. Private Buildings
  – Financing needs to be tailored to address barriers unique to the market it will serve.

• Financing Products vs. Financing Programs
  – A financing product addresses a unique set of finance barriers. A financing program can address both finance and non-finance barriers.

Potential Functions of a Financing Program

✓ Educate Users and Market Benefits
✓ Offer Technical Assistance
✓ Provide Quality Assurance and Quality Control
✓ Measure and Verify Outcomes

Barriers to Financing by Sector

Public
- Debt Limits
- Executive/Legislative Buy-in
- Split Incentives
- Uncertainty of Savings

Private
- Access to Credit
- Consumer Protections
- Short Time Horizon (Short payback period)
Energy Efficiency Financing Products

NOTES:
- Bond financing may be used for project financing or to capitalize a fund (e.g., revolving loan fund).
- Below-Market Loans include revolving loan funds and loan funds supported by a credit enhancement (e.g., loan loss reserve, loan guarantee).

Energy Efficiency Financing Products for Lead-by-Example


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- Bond financing may be used for project financing or to capitalize a fund (e.g., revolving loan fund).
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# Comparisons: Common Lead-by-Example Financing Options

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<th>Internal Funding</th>
<th>Loans</th>
<th>Tax-Exempt Leases</th>
<th>Bonds</th>
<th>Energy Savings Performance Contracts</th>
<th>Efficiency-as-a Service Agreements</th>
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<td><strong>Primary Advantages</strong></td>
<td>Always non-debt, well understood.</td>
<td>Expedient, well understood, maximum control over equipment.</td>
<td>Expedient, zero down payment, maintenance is standard, potential accounting benefits.</td>
<td>Often yields the lowest cost financing.</td>
<td>Guaranteed savings, low performance risk, no- or low-upfront capital payment.</td>
<td>Payment based on performance, potential accounting treatment benefits.</td>
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<tr>
<td><strong>Primary Disadvantages</strong></td>
<td>Competes with other funding priorities, limited funds reduce project size and potential benefits.</td>
<td>Often requires down payment, higher cost of borrowing, counts as debt.</td>
<td>May not serve smaller projects, no offer of performance guarantee.</td>
<td>Bond issuance is very complex, best suited for projects &gt;$1M.</td>
<td>Best suited for projects &gt;$.5M, long closing times from contract/legal negotiations.</td>
<td>Best suited for projects &gt;$1M, long closing times, limited equipment control.</td>
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<td><strong>Notes</strong></td>
<td>Funding may come from operating or capital budgets.</td>
<td>Revolving loan funds may offer lower borrowing costs, but this introduces other complexities.</td>
<td>There is no energy savings guarantee, but operation and maintenance services are standard.</td>
<td>May be structured as a non-debt revenue bond (e.g., backed by a performance guarantee).</td>
<td>The underlying financing is often tax-exempt leases or bonds.</td>
<td>Considered non-debt because payment only required if performance criteria met.</td>
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*Source: Adapted from “What are the Options: Pathways for Financing Energy Audits and Upgrades in Small and Medium Public Facilities.” Forthcoming DOE publication.*
Discussion

Questions to Consider....

1. What are promising practices for achieving **executive buy-in** to use financing? *i.e., How have states successfully engaged with their Governors on this topic?*

2. Which **financing products** have demonstrated a track record of success in your state? *E.g., ESPC, leasing or a master leasing program, a revolving loan fund, bond issuances.*

3. Which elements of a **financing program** have proven effective in your state? *E.g. technical assistance, pre-approved vendors and documentation, EM&V etc.*

4. What are the **barriers** to using financing to achieve lead-by-example energy efficiency upgrades in your state?
U.S. DOE Efficiency Financing Resources

• Understand and Explore All Financing Options
  – Better Buildings Financing Navigator
  – State and Local Solution Center: Pay for Energy Initiatives

• Access Specialized Lead-by-Example Financing Resources
  – Better Buildings Public Sector Energy Financing Primer \textit{Print copies available!}
  – Energy Savings Performance Contracting (ESPC) Toolkit
    • ESPC Financing Decision Tree
  – National Association of State Energy Officials (NASEO) Financing Resources

• Stay Engaged with DOE
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Thank You!

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State and Local Solution Center  
http://energy.gov/eere/slsc/state-and-local-solution-center
Source: Energy Saving Performance Contracting Toolkit, ESPC Financing Decision Tree
Annual Market Sizes Compared

Source: Slide prepared by Phillip Quebe, Cadmus, for 2018 Better Buildings Summit LBE Financing Roundtable