

Finding Money for Energy Efficient Projects

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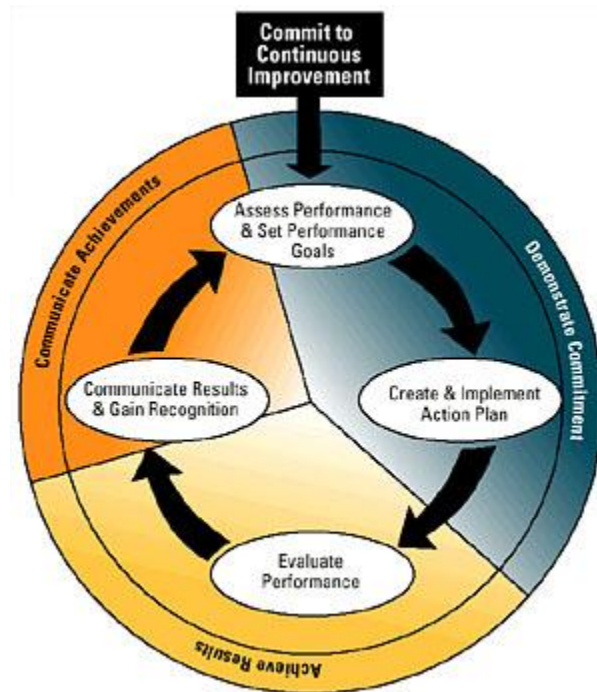
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ARTICLE TOOLS

A primer for public sector energy, facility, and financial managers

In today's economic environment, most public sector organizations are faced with increasingly tight operating and capital budgets. Managers are challenged to do more with less. Meanwhile, maintenance and infrastructure needs continue to grow.

The utility budget can be viewed as a source of funds for making improvements. The U.S. Environmental Protection Agency's (EPA) Energy Star program estimates that up to 30% of the dollars spent on energy every year are wasted because of system inefficiencies. These wasted funds can be used to help pay for much needed improvements.



Maintaining an energy-efficiency budget requires constant evaluation and communication.

Financial barriers to energy conservation measures often include:

- No budget line
- Equipment improvements must be paid from the capital budget.
- Paying lower interest (by floating bonds) or no interest (by delaying the project and planning it into future budgets) saves more money
- Taxes or fees will have to be increased to pay for these improvements.
- Performance contracting with an energy service provider (ESP) is expensive and unreliable.
- Tax-exempt lease-purchase agreements don't lend themselves to energy projects and are expensive alternative funding solutions.

Such conclusions are, in fact, common misconceptions.

exempt lease-purchase agreements as the financing vehicle provided the best, most cost-effective solution. Other public agencies undertaking similar energy efficiency projects include:

- Pennsylvania's Allegheny County, which turned to performance contracting when its capital budget was reduced by 20%
- Mississippi, Virginia, and Maryland, which initiated statewide Energy Efficiency Master Lease Programs (MLPs)
- Florida's Miami-Dade County School District, which added energy efficiency projects to an existing lease-purchase Certificates of Participation (COPs) program as the lowest cost alternative

Operating versus Capital Expenses

	CASH	BONDS	MUNICIPAL LEASE	PERFORMANCE CONTRACTS
Interest Rates	N/A	Lowest tax-exempt rate	Low tax-exempt rate	Can be taxable or tax-exempt
Financing Term	N/A	May be 20 years or more	Up to 10 years is common; up to 12-15 years possible	Typically up to 10 years; may be as long as 15 years
Other Costs	N/A	Underwriting legal opinion, insurance, etc.	None	May have to pay engineering costs if contract not executed
Approval Process	Internal	May have to be approved by tax payers or public referendum	Internal approvals needed. Simple attorney letter required	RFP usually required, internal approvals needed
Approval Time	Current budget period	May be lengthy, process may take years	Generally within one day	Generally within 2-3 days once award is made
Funding Flexibility	N/A	Very difficult to go above the dollar ceiling	Can set up a Master Lease, which allows you to draw down funds as needed	Relatively flexible. An underlying Municipal Lease is often used
Budget Used	Either	Capital	Operating	Operating
Largest Benefit	Direct access if included in budget	Low interest rate because it is a general obligation of the public entity	Allows you to buy capital equipment using operating dollars	Provides performance guarantees which help approval process
Largest Hurdle	Never seems to be enough money available for projects	Very time consuming	Identifying the project to be financed	Identifying the project to be financed and selecting the ESCO

Each financing method must be analyzed before implementing energy-efficiency improvements to realize maximum savings.

The disadvantages of using the capital expense budget for energy-efficiency projects include:

- Capital dollars are often already committed to other projects
- Capital dollars are usually scarce, so your projects are competing with others
- The approval process for requesting new capital dollars is time consuming, expensive, and typically requires voter approval

Energy-efficiency projects are different from most other capital projects in one crucial way: the source of repayment is already in the utility line item of your operating budget -- you just need to redirect the money to a third party. Some utilities, like Xcel Energy in Minnesota and Colorado, offer customers "on-the-bill-financing" to take advantage of this distinction.

Performance Contracts

In many parts of the United States, performance contracting is a common way to implement energy-efficiency improvements. Performance contracts frequently cover financing for the new equipment, if internal funds are not used. Properly structured performance contracts can be treated as an operating expense. Common financing options under a performance contract include:

- ESP-based financing
- Tax-exempt lease-purchase agreements

A facility manager can overcome time and expertise barriers by outsourcing the work to qualified, reputable energy service providers using a performance contract. Under such a contract, the ESP insures that the actual energy savings will match the projected savings, and the contract identifies the procedures by which these savings will be measured and verified. In a guaranteed savings agreement (GSA)-- the most popular type of performance contract used in the public sector--the ESP or an insurance company, which agree to reimburse the sponsoring organization for any shortfalls, guarantees the energy performance of the equipment. A GSA bundles equipment purchasing and performance guarantees; it may also include financing, energy costs, and maintenance. While ESPs usually borrow at taxable interest rates, public agencies are able to issue lower cost tax-exempt obligations. As a result, GSAs usually incorporate tax-exempt lease-purchase agreements as the underlying financing instrument.

Tax-Exempt Lease-Purchase Agreements

Tax-exempt lease-purchase agreements are the most common public sector financing alternatives to traditional debt financing (bonds, loans, etc.), allowing a public organization to pay for energy upgrades with money already set aside in its annual utility budget. When properly structured, this

financing mechanism draws on dollars to be saved from future utility bills to pay for new, energy-efficient equipment today.

A tax-exempt lease-purchase agreement, also known as a municipal lease, is like an installment-purchase agreement rather than a commercial rental agreement because the equipment ownership transfers to the lessee. Interest rates are appreciably lower than those on a taxable commercial lease-purchase agreement because the interest paid is exempt from federal income tax for public sector entities. In addition, a tax-exempt lease-purchase agreement usually does not constitute a long-term "debt" obligation because of the non-appropriation language written into the agreement. This language limits the payment obligation to the organization's current operating budget period. If future funds are not appropriated, the equipment is returned to the lender, and the repayment obligation is terminated at the end of the current operating period without placing any obligation on future budgets.

Public organizations should consider using a lease-purchase agreement to pay for energy efficiency equipment when the projected energy savings will be greater than the cost of the equipment plus financing--especially when a reputable energy service provider guarantees the savings. Decision makers don't need to worry about exceeding operating budgets because the lease payments can come from the dollars saved on current utility bills once the energy-efficiency equipment is installed. The financing terms for lease-purchase agreements are usually less than 10 years and limited by the useful life of the equipment.

Debt Defined?

Debt can be interpreted from three perspectives--legal, credit rating, and accounting. Because of the non-appropriation language typically in tax-exempt lease-purchase agreements, most of these agreements are not considered legal debt, which may eliminate the need for local voter approval. However, credit rating agencies, such as Moody's and Standard & Poor's, do include some or all of the lease-purchase obligations when they evaluate a public entity's credit rating and its ability to meet payment commitments ("debt service"). These two perspectives (legal and credit rating) may, in turn, differ markedly from the way lease-purchase agreements are treated by your own accounting department (i.e., which budget is charged) and your organization's external auditors.

In general, lease-purchase payments on energy-efficiency equipment are small compared to the total operating budget of a public organization. This means that the accounting treatment of such payments may be open to interpretation. Organizations recognize that energy savings cannot occur if the energy-efficiency projects are not installed. As such, the projects' lease-purchase costs (the financing costs for upgrades) can be paid out of the savings in the utility budget. Outside auditors, however, may take exception to this treatment if these payments are considered material from an accounting perspective. Determining when an expense is "material" is a matter of the auditor's professional judgment. As a practical guide, a charge could be considered material when it equals or is greater than 5% of the total operating budget. Energy budgets for typical school districts are around 2%; therefore, energy-efficiency improvements will rarely be considered material.

Know State Rules

Many public entities already lease something (copiers, school buses, etc.). Adding an energy project to an existing lease agreement may be surprisingly easy, especially if a Master Lease is in place with a lending institution. Governing statutes vary from state to state, and the use of tax-exempt lease-purchase agreements may differ across schools, municipalities, and counties even within the same state (see the sidebar). Public sector organizations should always consult legal counsel before entering into lease-purchase agreements.

Lease-purchase financing is not advisable when:

- state statute or charter prohibit such mechanisms from being used
- the approval process may be too difficult or politically driven
- other funds are readily available, e.g. sufficient bond funding will soon be accessible, or excess money exists in the current capital or operating budgets.

The Costs of Delay

Quantifying the costs of delaying installation of an energy-efficiency project adds a new dimension to the financial decision. School district and local or state government officials often feel that postponing equipment upgrades until the operating or capital budget dollars are available--rather

than financing the installation immediately--is a better financial decision. They reason that if internal budget dollars are used, they can completely avoid paying interest. However, the energy dollars wasted by delaying the project for one year frequently are greater than the entire financing cost for the full financing period.

This cost of delay calculation is more complicated when comparing two different financing alternatives with different interest rates and terms, but the result is no less stark. The key question becomes: How long will it take for the lost energy savings to consume the total savings realized from the lower interest rate financing? Energy Star's "Cash Flow Opportunity" Calculator (Excel Spreadsheet) helps quantify these alternatives.

Conclusion

Energy-efficiency equipment differs from other capital equipment. Because the dollars saved by installing energy-efficiency equipment can be used to pay for its financing, this equipment can be installed without having to increase operating costs or use precious capital budget dollars. As long as the lease payments are lower than the energy dollars saved, a positive cash flow is created that can be used for other projects. Extending the repayment terms will reduce the monthly payment, providing even more cash.

In today's tight economy, with uncertain and often increasing energy prices, a good energy-efficiency policy is a necessity. As stewards of significant assets, public sector facilities and finance managers must aggressively manage costs and maintain effective cash management programs. Accelerating the installation of energy-efficiency equipment will improve not only the facility but also the financial statement. In addition, it will demonstrate that public sector managers are acting responsibly as stewards of their constituents' resources.

Energy Star has resources and tools available to assist in developing a roadmap to better energy performance. To learn more about Energy Star, please contact Melissa Payne, Energy Star National Manager at payne.melissa@epa.gov. Neil Zobler can be reached at 203-790-4177 or nzobler@catalyst-financial.com.

States Take Advantage of Energy Savings to Fund Energy-Efficiency Projects

Many states have recognized that the savings realized by installing energy-efficiency equipment can be used to finance the equipment.

In Pennsylvania, public sector organizations are authorized to use funds designated for operating expenses, utility expenses, or capital expenditures to meet lease-purchase or installment payments under performance contracts.

School districts in California are authorized to enter into energy efficiency financing relationships that "can be repaid from energy cost avoidance savings."

In Florida it is the policy of the state to encourage school districts, state community colleges, and state universities to reinvest any energy savings resulting from energy conservation measures into additional energy conservation efforts."

In Minnesota, a district annually may transfer from the general fund to the reserve for operating capital account an amount up to the amount saved in energy and operation costs as a result of guaranteed energy savings contracts."

In Texas, lease-purchase payments are to be "made from maintenance taxes" and "shall not be considered payment of indebtedness."

Many other states support the idea of funding energy-efficiency projects from future utility bill savings. Obtaining your accounting department's cooperation may be easier than you think, especially if determining the legal precedent in your state is a matter of doing a little research.

Getting the Best Deal

Why are some public organizations reluctant to use tax-exempt lease-purchase financing to fund energy-efficiency projects? One reason may be the higher stated interest rate when compared to that of a bond. Every borrower seeks the best deal and bonds at 3% interest sound better than a lease-purchase agreement at 5%. However, lease-purchase agreements do not have any extra costs or fees outside the interest rate whereas a bond can have legal and issuance costs that can easily exceed \$50,000. Adding issuance costs to the cost of energy efficiency upgrades can dramatically change the economics of smaller projects. Therefore, the financing alternative that

generates the lowest total repayment (the net interest cost) is the best deal--and this may not be the one with the lowest stated interest rate.

Political issues affect the decision; frequently, political costs have dearer consequences than financial costs.