Buildings.com Bottom Line Energy Issues

January 2009 - Vol. 4, Issue 1

Energy Management, CFO Style

advertisement


By Richard G. Lubinski

Some people mistakenly believe that energy costs are fixed – a fact of life – and that nothing can be done about them. This myth has been proven wrong millions of times by progressive businesses and government agencies. Energy costs *are* controllable, although controlling the cost of energy (rates and fuel costs) is a separate issue. Unfortunately, for most firms, natural gas and electricity cost increases weren't expected and, therefore, weren't covered in operating budgets. Now, finally, the C-suite executives (CEOs and CFOs) are paying attention to energy costs.

Supply-Side vs. Demand-Side Energy Management

Energy management can be broken into supply-side energy management and demand-side energy management. Since supply-side energy management doesn't require any capital investment, many companies start here. In regulated and deregulated electricity and natural-gas markets, utility rates are increasing by double digits each year. Hundreds of billions of dollars in extra expenses are hitting building owners. The first step in supply-side energy management is to purchase the energy commodities at a price less than the "shopping credit" (price to compare) for energy commodities. With the help of an independent energy consultant, electricity generation and natural-gas commodities can provide some relief against increasing rates. The result can be a net cost increase, but there is still avoided cost (i.e. savings) by buying energy commodities at a lower price in deregulated markets. In some cases, the states with traditional regulated energy markets have seen higher rate increases than those in deregulated markets. Everyone is paying more for energy, even when their consumption is the same year over year.

Supply-side energy management may lead progressive companies to start to track energy cost *and* consumption(by using a utility accounting system). Internal accounting systems can be expanded to serve this purpose, or the process of utility-bill payment and administration can be outsourced. The outsourcing approach generally results in a Web-based database complete with charts and PDFs of actual utility bills. Payments to the utility can be paid on time to avoid paying 12- to 36-percent annual interest for late fees on utility bills.

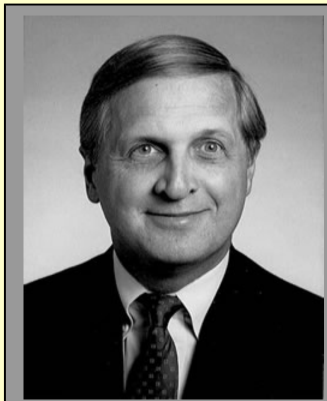
Eventually, companies mature to the point where they realize the need for demand-side energy management or the need to reduce energy consumption. This type of energy management can be considered permanent energy savings, since it will provide cost savings for many years. Investments in cost-cutting programs like energy management are evaluated by a CFO, just like any other investment. The CFO could care less about the technical merits of an energy-management project – only that it makes sound financial sense. The CFO starts with simple payback period, then return on investment (ROI), and then net present value (NPV). The NPV is a capital-planning tool that determines if the planned investment beats the company's internal rate of return (hurdle rate). If the NPV of a proposed energy-management project generates a positive NPV dollar value, then it should be considered. The CFO doesn't care about BTUs, kilowatt-hours (kWhs), dekatherms (Dths), quality of light, lumen maintenance curves, etc. As *Jerry Maguire* made famous, "SHOW ME THE MONEY!"

How to Get the CFO's Attention

Asset managers, facilities managers, directors of engineering, and contractors will be disappointed and frustrated if they follow the traditional methods of asking for funding for energy-management projects. While engineering aspects are important, they're of no interest to finance-driven people at the C-level of management. If you waste the CFO's time with technical merits of an energy-management project, he/she will lose interest in your proposal.

To get the CFO's attention, you need to have a compelling financial story to tell. Clear and straightforward financial justification of the project needs to be presented in a few pages as an executive summary. Ideally, the financial justification for an energy-management

BOMA International & BUILDINGS


Richard G. Lubinski

***Richard G. Lubinski** is president at Silver Lake, OH-based Think Energy Management LLC, a nationally recognized energy consulting firm. He is also a Life Member of the Association of Energy Engineers (AEE) and serves as the president of its Northern Ohio Chapter. Lubinski holds several national professional certifications including: Certified Energy Manager, Certified Demand Side Management Professional, Certified Sustainable Development Professional, Certified Energy Management Systems Contractor, Certified Business Energy Professional, and Certified U.S. Green Lights Survey Ally. In 2006, Lubinski was named Energy Manager of the Year, Region III by AEE. He writes and speaks regularly on a wide variety of energy-management topics.*

project is presented using conservative assumptions so the projected ROI of the project is attainable. Past performance and short case studies are helpful, particularly when the cost-savings estimates are independently verified. A conservative approach helps ensure that the project will meet its numbers and ideally outperform the projected results.

The Energy Policy Act of 2005 and other federal laws have provided tax incentives for certain energy-management projects that exceed the minimum energy-consumption benchmarks in *ASHRAE 90.1-2001*. Certain utilities and state energy offices also have demand-side management (DSM) rebates and low-interest loans to encourage energy-conservation projects. These financial incentives could be used in your project's financial justification. A word of warning, though: Since finance matters are technical in nature, it's best to get expert assistance and not assume anything about your organization's income taxes and accelerated depreciation opportunities.

Also, plan to track the cost savings so they can be reported back to senior management. Metering and independent tracking of utility bills are common tools used to document the before and after levels of energy consumption. An independent third party, like a Certified Energy Manager® (CEM), can track the utility cost savings. This process is called measurement and verification (M&V) of savings. M&V may be required to prove any guaranteed energy savings or document any performance-based contracts.

Energy-Management Tips

- *Focus on the big stuff.* Work on projects that will have the largest impact on utility bills.
- *Let ROI drive the process.* Energy management starts and ends with finance.
- *Don't settle for 5-percent savings.* Look for ways to reduce building operating expenses by 10, 20, 30, and even 40 percent.
- *Seek independent energy consulting assistance.* A CEM or a professional engineer (PE) can help with your energy audit.
- *Check references and past performance of consultants and vendors.* Take advantage of the experience of others and reduce your business risks.
- *Prepare a conservative financial analysis of proposed energy investments.* Do not rely on vendor's estimates of energy savings (these often favor the vendor, and can be based on unrealistic engineering assumptions).
- *Allow for the unexpected.* Things never go as well as hoped, so provide for some contingencies.
- *Gain senior management buy-in at the beginning of the process.* If the CFO thinks it's a good idea, then others are likely to support the effort.
- *Plan for independent M&V to document the project's actual performance.* Conservative energy-savings calculations and documenting actual savings are expected by the C-suite. If

you perform as expected (or better), senior management will learn to trust your future recommendations.

- *Get the process started now.* There is a cash cost for delaying an energy-cost-control project. The money that you could have saved might have paid for part of the energy-management improvement, or gone right to the company's bottom line.

By selling your energy-management project to CFO, you can impact your company's bottom line, get the country closer to energy independence, and help the environment. While being green has recently become a popular endeavor, you need to focus on the money (another kind of green) if your company is going to be successful with its energy-management investments.

Previous Issues

[December 2008] *Smart Green Buildings*
[November 2008] *The Obama Energy Plan*
[October 2008] *Nuclear Power Update*
[September 2008] *Solar Set to Soar*
[August 2008] *Charles Darwin and Energy Policy*
[July 2008] *Renewing Interest in Hydropower*
[June 2008] *Outsourcing Electric Reliability Standards*
[May 2008] *The Next Phase in Energy Conservation*
[April 2008] *Green Olympics … the Butterfly in China*
[March 2008] *More Smart Grid News*
[February 2008] *Smart Grid Momentum Surges*
[January 2008] *Survey Exposes Electric Reliability*

Don't forget to check out BuildingsTV and our Case Studies!

Newsletter Sponsorships

Want to reach more than 30,000 Facility Professionals each month?

Become one of our E-mail Newsletter Sponsors!
Call or e-mail your Area Account Executive

• @ The Moment - A weekly newsletter produced by Buildings.com.

• Roofing News - Monthly roofing newsletter.

• Greener Facilities - Monthly newsletter about green facilities.

• Security News - Monthly security newsletter.

THIS DOCUMENT AND OTHER DOCUMENTS PROVIDED PURSUANT TO THIS PROGRAM ARE FOR INFORMATIONAL PURPOSES ONLY. The information type should not be interpreted to be a commitment on the part of Stamats Communications and Stamats Communications cannot guarantee the accuracy of any information presented after the date of publication. INFORMATION PROVIDED IN THIS DOCUMENT IS PROVIDED 'AS IS' WITHOUT WARRANTY OF ANY KIND. The user assumes the entire risk as to the accuracy and the use of this document. Buildings.com newsletter e-mail may be copied and distributed subject to the following conditions:
1. All text must be copied without modification and all pages must be included.
2. All copies must contain Stamats Communications' copyright notice and any other notices provided therein.
3. This document may not be distributed for profit

Published by:
Stamats Business Media
615 5th Street S.E., PO Box 1888
Cedar Rapids, Iowa 52406-1888

(Return to Top)

From the publishers of BUILDINGS