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Powering Profits: How Companies Turn Energy Efficiency into Shareholder Value

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Slowly but surely, energy efficiency is becoming more than merely a "beyond compliance" measure for most companies. Increasingly, it is becoming a mandate for firms seeking to remain competitive and in shareholders' and activists' good graces. By Joel Makower

Slowly but surely, amid an era of unstable energy markets and increased concern about climate change, energy efficiency is becoming more than merely a "beyond compliance" measure for most companies. Increasingly, it is becoming a mandate for firms seeking to remain competitive and in shareholders' and activists' good graces.

That's the conclusion of a growing body of evidence linking strategic energy management with shareholder value.

This month's story draws from two resources that recently explored the link between shareholder value and energy efficiency: a briefing paper, Energy Management and Shareholder Value, written by GBL editor Joel Makower and published this month by GreenBiz.com; and a panel discussion on this topic moderated by Makower at the recent Ceres annual conference in Boston.

The briefing paper (which can be downloaded [here](#)) begins with the notion that "a body of evidence suggests that companies that take a systematic and strategic approach to energy management can enjoy a broad array of tangible and intangible benefits of interest to investors. As financial analysts and institutional investors come to understand this energy-value connection, energy management is becoming another measure by which they assess companies."

Among the tangible and intangible benefits identified by various studies:

- **Reduced operating costs**, including savings of up to 90% of the energy used for lighting, fan, and pump systems; 50% for electric motors; and 60% for heating, cooling, office equipment, and appliances.
- **Increased productivity and sales** through enhanced employee productivity and reduced absenteeism, and increased sales in retail environments.

- **Reduced regulatory costs** from government mandates on companies to reduce air emissions. Such mandates began in the U.S. with electric utilities but are expected to extend to commercial and industrial facilities. Companies that make reductions on their own terms and schedules will occupy a superior competitive position compared to competitors.
- **Enhanced image** among customers, employees, regulators, the media, and others, leading to a variety of benefits, including reduced pressure from activists, increased ability to attract and retain employees, improved community relations, enhanced reputation as a well-managed company, and increased appeal to socially responsible investors and portfolio managers -- a \$2.1 trillion market comprising \$1 of every \$9 invested in the U.S.

These and other measures and benefits are starting -- just starting -- to garner the attention of financial analysts. Some are heeding the research and counsel of people like Matthew Kiernan, founder and CEO of Innovest Strategic Value Advisors, Inc., an environmental investment research advisory firm based in New York, Toronto, and London. "Investors are just beginning to use energy management as a proxy for larger management capability," he told the Ceres audience. "The logic of this is obvious to a ten-year-old child, but you never have a ten-year-old child when you're meeting in J.P. Morgan's board room."

Kiernan's logic goes like this: "When we look at a company at Innovest, what we're basically looking for is management quality. And the metaphor we use is how well or poorly you can manage the complex welter of sustainability issues. If you can do that, you can do anything. What we're telling our clients is that if you're building large-cap portfolios, you want to be paying a lot of attention to energy management as a proxy for management, which is a proxy for how well the company is going to be doing over time."

Kiernan will be among the first to admit that getting Wall Street to "get it" is no small matter. But he points to hard numbers -- the language of Wall Street -- that offer compelling evidence that even hard-bitten analysts will be hard-pressed to ignore: in a diversified portfolio of large-company stocks, the most energy-efficient companies outperform their competitors by 200 basis points, or 2%. That's real money in a world in which the real rate of return on corporate ownership over the last century has been approximately 6%.

'How Many Buildings?'

Speaking the language of Wall Street makes sense when dealing with financial analysts. But when it comes to instilling an energy-efficiency ethic inside a company, sometimes other measures are more effective, says Fred C. Schoeneborn, an independent consultant who spent 38 years constructing and operating facilities worldwide for Mobil. "It took Mobil about \$40 million to build a 300,000-square-foot building, soup to nuts," says Schoeneborn, who now consults to Alcoa, Toyota, and other companies. "Do you know how much it costs to maintain that building over 35 years? Over \$400 million. I put a graph up for our CFO. He looked at me and asked, 'So, how many buildings do we have?'"

One problem for many companies is an apparent disconnect between the development side and operations side of the organization -- that is, the people who construct buildings and those who must operate them, says Greg Brown, vice president of operations for Hines, a global developer, operator, and manager of commercial buildings. "Architects build beautiful buildings but don't know always how they function," he says. "It's the same with construction managers. They do an excellent job of putting things together but don't always

understand the relationship of how different parts fit together in the operating environment.”

One challenge, says Brown, is that “Companies are putting more bodies in the space today than they used to, so it requires more HVAC, more plugs for computers, and more energy overall.” Still, he says, good management strategies can allow building operators to accommodate such growth without having to add new equipment.

The Magic of Management

The efficiency gains to be had from properly managing buildings seems to be ripe with low-hanging fruit, according to all of the Ceres panelists. In the case of commercial buildings, good management can have a significant impact on a building’s overall costs and, therefore, its profitability -- a fact that is getting notice from investors in the roughly \$6 trillion worth of institutional-grade real estate in the U.S., according to Stuart Brodsky, national program manager for commercial real estate partnerships at the U.S. EPA’s [Energy Star](#) program.

“Energy represents about 30% of an office building’s operating costs, so when you’re comparing net operating expenses to net asset value, you can start to calculate what the impact is on the value of that asset,” says Brodsky. “If you’re a publicly traded REIT [real estate investment trust], you can calculate what the impact is on asset value all the way down to earnings per share. If you’re looking at a company that has tens or hundreds of millions of dollars of outstanding shares, and the impact of energy efficiency is .001 cents per share, that has a real dollar value for the company.”

Brodsky points out that institutional investors are just beginning to view their portfolios through the lens of energy efficiency. Example: CalPERS and CalSTRS, the first- and third-largest U.S. pension funds (representing California’s public employees and teachers, respectively), last year set a goal to reduce energy consumption in their \$16 billion, 200-million-square-foot core real estate holdings by 20% within five years. Working with their real estate partners, both funds will assess the current energy use of the properties they own, identify buildings where investments in efficiency can yield positive returns, and design retrofit programs to capture those energy and cost savings.

California state treasurer Phil Angelides estimates that it would cost CalPERS and CalSTRS a combined \$200 million to retrofit the pension funds’ core real estate portfolios, but that they would save an estimated \$40 million annually in energy costs, achieving a five-year payback of their original investments and an internal rate of return of approximately 14% over 10 years. The move would also create approximately 4,300 jobs and reduce energy demand by 72 megawatts, enough power to supply about 72,000 typical California homes.

But the investment paybacks may be even quicker. Says Brodsky: “I’m trying to help them understand that a great deal of that 20% improvement can be had through management strategies, and not by investing in new technologies.”

Consultant Schoeneborn points out that the ability to substantially lower energy use simply through changes in management practices isn’t limited to commercial buildings -- the opportunities are just as plentiful in industrial operations. In his work with Aloca, for example, where he has conducted assessments at more than 50 of the company’s plants

around the world, he says the facilities are awash with savings potential, most of which have an investment payback of two years or less. And about 20% of the opportunities he discovers are no-cost measures: lowering temperature setpoints on various processes, powering down standby equipment, and the like.

Selling the CEO

Schoeneborn and others point out that the biggest challenge inside companies -- whether they're managing commercial real estate or factories -- isn't necessarily a shortage of available capital so much as a shortage of high-level commitment. He refers to his experience at Mobil as a case in point in how to get senior-level attention.

"You cannot get the person at the top unless you can talk dollars," says Schoeneborn. "You can't talk BTUs; you've got to talk in ways that the company understands it. I converted my savings into how many gallons of gasoline Mobil would have to sell to equal the profit from my energy program.

"The first year I saved the company \$15 million. I found out that in order to make \$1, we had to sell 32 gallons of gasoline; this was in 1995. That meant we had to sell 545 million gallons of gasoline to make the same money I would make from my energy program. That's the kind of information people understood."

Talking dollars, not BTUs, is but one key to success. Other keys to elevating energy efficiency to the level of corporate strategy include:

- **Educating and keeping contacts updated.** Personal relationships are important to the success of energy management programs and the ability to communicate how such programs are contributing to corporate value. If senior management is engaged, selling efficiency projects internally can be far easier.
- **Engaging the investor relations staff.** This can help overcome internal resistance. Some energy managers meet regularly with IR departments to help them understand the value of energy management initiatives to socially responsibility investors and overall reputation.
- **Gaining recognition for company efforts.** Company participation in EPA's Energy Star program, for example, provides an easily understood "success story" that can be communicated to senior management, employees, customers, and investors.

Will energy efficiency truly catch on as a strategic management issue? Not surprisingly, the participants in the Ceres panel were unanimous in believing that it will. "A lot of companies I work with are influenced by what's going on in Europe," says Schoeneborn. "A lot are looking at energy efficiency as an opportunity much more than ever before. Carbon trading is definitely helping." He points to Toyota as one example. "They have in every plant an energy management organization -- a person who owns energy consumption at that plant. They have one person on every shift who owns energy consumption."

He concluded: "You don't have to be a genius to understand where barrels of crude are going in this world. Top people have recognized that unless they can grab hold of energy -- which is the one operating area that can truly impact the bottom line -- unless they grab hold of it, they'll be history."
