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Financing An Energy Upgrade

A willingness by financial institutions to fund energy efficiency projects is helping facility executives get upgrades off the ground

— By Karen M. Kroll

Like an inventor who creates a better mousetrap but can't get anyone to buy it, a facility executive proposing a money-saving energy efficiency project may find it hard to get the idea approved. Often, it's difficult to shepherd an energy project through an internal capital appropriations process. Money may not be available or may be earmarked for other projects.

Fortunately, the ability to finance energy projects using outside funding has increased over the past decade. More financial firms are interested in providing financing, and often can tailor a solution to fit the project.

The market for energy efficiency projects is between \$1.5 and \$2 billion, says Terry E. Singer, executive director with the [National Association of Energy Service Companies](#), a Washington D.C.-based trade organization. While NAESCO doesn't yet have its database on industry activity in place, says Singer, "it does appear that project implementation seems to be thriving."

Others agree. "The business has really come to life in the last 10 years," says Jim Ertle, operations manager with Graybar Financial Services, St. Louis.

A decade ago, not many traditional financial institutions really wanted to finance energy upgrade projects, says Richard Costello, president of Westwood Energy Group, a Boston-based energy consulting firm. "Banks didn't understand energy conservation."

Several forces helped to change that. The energy rebate and efficiency programs developed by federal and state government agencies in the early 1990s helped jump-start the market for energy upgrade projects. In addition, advances in technology helped make the projects feasible, as companies found it cost effective to invest in new technology that used less energy.

As energy efficiency projects began to prove themselves and the promised savings materialized, financing companies became more willing to finance upgrades. “It’s just a matter of finance companies getting comfortable with certain types of projects,” says Mike Frawley, vice president of sales with ABB Energy Capital, Boston. “Five to eight years ago, many financiers may have considered them high-risk. That’s not the case anymore.”

Today, the industry continues to grow, as there’s still money to be made. “It’s one of the few industries where every side of the transaction is positive,” says Bill Garnett of Academic Capital, Chicago. Often, the projects are structured so that the savings generated are used to pay for the cost of the upgrade. That means building owners won’t need to dip into their pockets to get the project going.

As a result, a greater number of firms offer financing today. They include banks, the financing arms of such companies as General Electric or Dana Corp., and companies that focus specifically on energy upgrade projects.

For the building owner or facility executive, the growth in the industry and financiers’ increasing comfort level with energy upgrade initiatives means good news: It’s easier to access third-party funds to finance the projects.

Energy Service Companies

For many facility executives, an early step in an energy upgrade project is to talk with an energy service company. Energy service companies (ESCOs) are made up of engineers and designers who determine how a building can be made more efficient and what sort of savings might be achieved. “We work with our customers to mine the energy efficiency opportunities that exist in their facilities,” says Edward Liston, president of EUA Cogenex, an energy services company based in Lowell, Mass.

ESCOs can analyze energy consumption, specify equipment, manage the energy upgrade project and provide the ancillary services needed to make the project happen.

The process often starts with a “walk-through audit, where we come up with an estimate of what we could do to the building, how much it might cost, and what the savings might be,” says David Dayton, HEC Energy and Design Services, an ESCO based in Natick, Mass.

An “investment-grade audit” that more precisely spells out the potential savings and the upfront investment is next. Typically, the audit requires the input of representatives from energy and facilities management, the building owner and the financial director, says John S. Mallory, vice president of public finance with Government Capital Corp., Arlington, Texas. “Everyone can hear the scope of the project, and make sure it fits into the overall plans of the company.”

Once the project has been defined, the next step is to determine the best way to finance it. “Financing is the last, but not the least consideration,” says Bernard Brongniart, vice president of project finance with Exelon Energy Services, King of

Prussia, Penn. “The economics of any project will drive and define the requirements for the type of financial support. Who will provide capital? How? Why? What are the drivers and motivations?”

If a company can pay for the project from cash, it’s generally cheapest just to write the check. “All the cash flows are available immediately to the building owner, and you’re not paying for the performance and credit risk that ends up in the interest rate from a third-party financier,” says Frawley of ABB. Most times, projects with shorter payback periods, such as lighting retrofits, have an easier time being financed internally.

For projects that require more time before the investment is recouped, firms are likely to seek external funding, says Jerry Carter, sales and marketing manager with Dana Commercial Credit, Maumee, Ohio. “That’s because companies and owners can get better returns on their capital by investing in their own core business.”

Sometimes, a financing company is brought onto a project by the energy equipment vendor. On other projects, it’s the energy service company that brings in the financing company. While some financing companies specialize in a certain segment of the market, many work across all segments — government, commercial, municipal, retail, institutional and industrial. It takes between four and eight weeks to arrange outside financing.

In determining whether and how to finance a project, the finance company will review the project and the parties involved, says Frawley of ABB. The review usually covers:

- The credit risk of the company. The greater the risk, the less likely the company is to get funding.
- The type of technology going in. Is it proven or cutting edge? If it’s cutting edge, the financier will want to verify that the proposed savings are likely to materialize.
- The track record of the ESCO. Can the company bring projects in on time and within budget?
- The arrangements for monitoring savings and maintaining the equipment. For performance contracts, who will be responsible for these activities?
- Factors specific to the building and its market. For example, for a multi-tenant office building, the financing firm will want to check the rent rolls and occupancy rates.

While a financing package can be tailored to meet just about every need, leases and performance contracts are common financing vehicles today.

Contract Options

One of the most important decisions for a company that decides to lease equipment is whether to structure the lease as a capital or operating lease. A capital lease appears as debt on the company’s balance sheet. An operating lease won’t appear on the balance sheet, although certain information may need to be included in the footnotes to the financial statements.

Some companies prefer not to have lease obligations appear on their financial statements; they may have bank loans that prohibit them from taking on additional debt, for example. However, it's often difficult for energy efficiency projects to meet the criteria for an operating lease. "Operating leases lend themselves to projects that have a high residual value, and are stand-alone, such as a copy machine," says ABB's Frawley. Because energy efficiency projects often become an integral part of a building, it can be a tough fit.

Performance contracts are an alternative. In most cases, they give a building owner the option to finance an energy upgrade without affecting the balance sheet. The energy service company installs the equipment, generally without an investment required by the end-user. The end-user pays for the equipment with the savings that are generated on the project. Thus, if the energy bill is expected to drop by \$5,000 per month as a result of the upgrade, the building owner's payments back to the energy services company also would be \$5,000 per month. "We try to match the payment schedule to the savings schedule," says Susan White, director with Koch Financial Services, Wichita, Kan. That way, the building owner's cash flow remains untouched.

Performance contracts can be used on just about any project. Most performance agreements and leases today are written for four to seven years, says Charlie Peake, vice president, Energy Services Group, General Electric. In general, the longer projects end up costing more in total. However, they may allow the building owner to better match the payments with the cost savings generated by the energy project.

Tough Sells

Even though the market for energy upgrade projects is growing, the projects still can be a tough sell. The relatively low cost of energy at the moment can prompt some building owners to put efficiency projects on the back burner. However, "the cheapest kilowatt hour or BTU of gas is the one you don't use," says Jim Buck with Illinova Energy Partners.

In addition, the coming utility deregulation is causing some building owners to postpone energy projects, with the expectation that their energy bills will go down. However, deregulation is unlikely to produce any sort of windfall, says Frawley of ABB. He notes that only the generation of energy is being deregulated; the distribution or transmission activities will stay as they are. As a result, commercial energy users are likely to see no more than a 3 to 5 percent reduction in their bills. In contrast, conservation can produce savings of 20 to 30 percent, says David Anderson, senior vice president, NORESKO, Framingham, Mass.

Perhaps the most common argument against energy upgrades occurs in buildings where the landlord passes the energy costs on to the tenants. At first glance, building owners have less incentive to invest in energy projects. On the other hand, "whether the tenant pays the bill or the owner does, the investment increases the asset's value," says Anderson of NORESKO.

Options Increase

In the future, financing options are likely to continue to proliferate. For example, Doug Bell, managing director with ABN AMRO, Chicago, is seeing more performance contracts that include a number of different functions. “People used to think of performance contracts as just retrofitting equipment,” says Bell. “But we can combine energy conservation and utility and facility management to do an overall cost reduction.”

Frawley of ABB points to another trend: More utility companies, as well as independent firms, are agreeing to own and operate the entire energy plant for a particular building. “It helps the building developers to reduce their capital cost, in exchange for a longer-term energy management agreement.”

Given the increasing number of financing options available, “there’s only one thing that’s baffling: why people don’t do the projects more quickly, rather than continue paying the utility company,” says George Barlow, president of EnerSource Capital, Fort Worth, Texas.

Karen M. Kroll is a business writer with experience in financial and real estate issues.

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Sidebar

Energy Financing Companies

<p>ABB Energy Capital 2 Oliver St. Boston, MA 02109 617-574-1130 ABB Energy Capital provides comprehensive project financing for a wide range of projects. Products and services include performance-based project financing, leasing and construction financing. They have participated in more than \$1.2 billion of financing transactions for projects ranging from \$150,000 to \$380 million.</p>	<p>Dana Commercial Credit 660 Beaver Creek Circle Maumee, OH 43537 419-897-7500 Dana Commercial Credit provides financing for energy-saving projects such as lighting and HVAC retrofits, electrical transformer and switchgear changeouts, heat recovery and alternative fuel or utility options. Typical transactions range from \$250,000 to \$25 million.</p>	<p>GovernmentCapital Corp. Crestwood Center 1200 Walnut Hill Lane, #3400 Irving, TX 75038 972-518-1199 800-883-1199 Government Capital specializes in lease-purchase agreements with government entities, such as colleges and universities, states, counties and hospitals.</p>
<p>ABN AMRO - Leasing Department 208 South La Salle St. Chicago, IL 60604 312-855-5880 ABN AMRO Leasing and Financial Services offers lease origination services to equipment manufacturers and vendors serving municipalities, state and federal government units, commercial, industrial and financial corporations.</p>	<p>EnerSource Capital L.L.C. 3116 West 5th St., #105 Fort Worth, TX 76107 800-595-5115 817-335-5115 Enersource Capital was founded in 1995 and can manage financing from conception to completion. It works with energy service companies and equipment manufacturers.</p>	<p>Graybar Financial Services 11812 Borman Drive St. Louis, MO 63146 800-241-7408 314-214-2500 Graybar Financial Services is the equipment leasing and financing subsidiary of Graybar. They offer a broad array of financing programs for the commercial, state and local government marketplaces.</p>
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Making Sure Your Performance Contracts Perform

While performance contracts can be an effective way to finance energy upgrades, it pays to read the details. Here are four tips to getting a good contract:

1. “Look for reasonable and common-sense parameters, so that you can use your building as you need to, without worrying that a normal change in your use of the building voids the contract,” says John Mallory, vice president of public finance with Government Capital, Arlington, Texas.

“Most performance guarantees require that the equipment covered by the agreement be maintained to a certain level, and the use of the building falls within certain parameters.”

2. Make sure that you’re working with a vendor who will be around for a while, says Doug Bell, managing director with ABN AMRO, Chicago. The contracts can run for a fairly long time, linking together the various parties to the agreement.
3. Keep up with the daily maintenance on the equipment. “If you don’t, you won’t get the savings over time,” says David Dayton, founder of HEC Energy Services and Design, which is based in Natick, Mass.
4. Make sure that both the savings and the use of the building are in line with the parameters outlined on the performance contract, some ESCOs are employing third parties as auditors. “That way, you’re not grading your own paper,” says Roger Henson, vice president of technical services with Dallas-based Enershop. “This really helps both parties.”

Realize that calculating the savings achieved by the project isn’t always black and white and can vary with the temperature and occupancy of the building, among other things, says Henson.

Sidebar

Joining Forces

In what may be a harbinger of things to come, a national real estate management firm and an energy service company have joined forces. In June, Jones Lang LaSalle, Chicago, and PG&E Energy Services announced that they were forming a joint venture to facilitate energy efficiency projects.

“We’ll work together to bring expertise in both energy efficiency and real estate management to building owners,” says Joseph Stolarsky, senior vice president, Jones Lang LaSalle. The new consortium, which will be called Real Estate Energy Solutions, will provide financing for energy efficiency projects. Stolarsky expects self-funding projects — that is, those in which the owner pays for the project out of reduced energy costs — will be most attractive.

The consortium also will provide other services, including energy information management, billing consolidation, and rate analysis and optimization.

Additional Resources:

[Energy Upgrades: Fictions and Facts](#)

[The 10 Critical Steps of Successful Energy Upgrades](#)

[Getting the Go-Ahead on Energy Retrofits](#)

[Creative Financing for Electrical Systems](#)

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