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SPECIAL REPORT PROJECT FINANCE

Lenders Stand Ready to Fund Energy Projects

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DANBURY, Conn.- Energy-efficient technologies often offer compelling cost-saving reasons to perform installations as quickly as possible. In fact, many sales arguments focus on such financial evaluation techniques as simple payback, present value and discounted cash flows, net present value, and internal rate of return. These tools help companies prioritize capital investments.

Unfortunately, in spite of often attractive returns on investment, capital dollars aren't always available. Budgets may be limited by declining markets, economic slowdowns, or even internal corporate growth that strains liquidity. If money isn't available, financial justifications for energy projects can be futile.

What can an energy manager do if there is a freeze on spending but the cost of not completing an energy-efficiency project is too great to ignore? Fortunately, there is a host of both conventional and nontraditional lenders and third-party investors willing to fund projects for creditworthy borrowers.

Creditworthiness

Making credit decisions is an art,

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not a science. In order to obtain quick credit approval, potential borrowers must understand how the conventional credit community evaluates creditworthiness.

The five "C's" of conventional credit analysis are capital, capacity (or cash flow), collateral, conditions and character. Capital and cash flow are determined by an analysis of the company's balance sheet and operating statements. Collateral is related to the recovery value of the asset being purchased, presuming it would have to be sold quickly by an investor if the borrower defaults on the loan. Conditions focus on the intended use of the financing. Character speaks for itself.

Financial Statement Analysis

Financial statement analysis relies on data furnished in external reports, supplemented by information provided by management. Proper analysis will identify strengths and weaknesses, plus major changes or trends, amounts, and relationships. Financial statements prepared by an

outside accountant are the starting point. The data must conform to the guidelines of generally accepted accounting principles and the Financial Accounting Standards Board (FASB).

There are three levels of financial statements: audited, reviewed, and compiled. An audited statement means an outside accountant has tested the information and vouched for its accuracy. In reviewed statements the accountant reviewed their basis but relied on management to provide accurate data. Compiled statements consist of information provided by management; the accountant puts it into the correct form.

For credit purposes, audited statements are preferred; they are also the most expensive to generate. Audited statements are needed by companies that are publicly traded or that receive public funds. Often creditors require them as a condition of a loan. Reviewed statements are commonly used by closely held companies. Compiled statements frequently need to be presented along with tax returns, to insure the quality and treatment of the information they contain.

Creditors always ask for complete sets of financial statements. Many borrowers think it's enough to present an operating statement or balance sheet, but credit analysis requires more information. A complete set of financial statements

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includes the accountant's cover letter explaining the type of statement presented; a balance sheet; an operating statement; a statement of cash flows; and notes.

Information from financial statements is the basis of all analyses. Horizontal analysis compares data and performance from one period to another. Vertical analysis converts items appearing in statement columns into percentages of a base figure. This shows the relative significance of items and facilitates comparisons. Both analyses are used to compile the data required for an informed credit decision.

Ratio analysis provides common financial analytical benchmarks. For a ratio to be useful the elements that constitute it must be meaningful. For example, there are relationships between accounts receivable and sales, net income and total assets, and current assets and current liabilities. Ratio analysis can disclose conditions and trends that may not be apparent from simply reviewing individual components of the ratio.

Ratios become significant when compared with previous ratios of the same company, a predetermined standard, or ratios of other enterprises in the same industry. While ratio analysis is insightful, ratios have limitations. They reflect past conditions, transactions, events, and circumstances; and book values, not real economic or market values. The computation of ratios is not completely standardized and the application of accounting principles may vary.

Nevertheless, ratio analysis is an accepted methodology. There are four basic types of ratios: liquidity, activity, profitability, and overall (debt and equity).

Liquidity Analysis

Short-term liquidity refers to a company's ability to meet current obligations as they mature. Liquidity implies an ability to obtain cash; short-term refers to one year or the normal operating cycle of the business, whichever is longer. Long-term obligations extend beyond this period.

Working capital is the excess of current assets over current liabilities. The amount of and changes in working capital from period to period are important measures of a company's ability to meet its debt obligations.

The current ratio - the most common measure of liquidity - consists of current assets divided by current liabilities. Ideally, lenders like to see a current ratio of twice as many short-term assets as short-term liabilities. Truly meaningful evaluations come from comparing a company's ratios with those of its competitors, but a current ratio less than one-to-one is usually a clear danger sign.

Working capital has a special relationship to sales, especially through accounts receivable, inventory, and cash. The ratio of sales to working capital is a measure of the effectiveness of a company's use of working capital to generate sales, and is computed as follows: working capital turnover equals net sales

divided by average working capital.

Ratios

Activity ratios evaluate a firm's operating cycle and how quickly current assets can be converted into cash.

Inventory turnover is the relationship between the volume of goods sold and inventory. It varies considerably by industry; a grocery store may have an average turnover of 20 while a specialty machine tool reseller would normally have a much smaller rate. Inventory turnover equals the cost of goods sold divided by average inventory.

Generally, high inventory turnover indicates the company is operating effectively, but very high turnover may suggest it isn't keeping enough stock to meet sales needs.

The accounts receivable turnover ratio expresses the relationship between credit sales and accounts receivable and reflects how often the average receivables were collected during the period. It is calculated using net credit sales when available (cash sales don't produce receivables): accounts receivable turnover equals net credit sales divided by average accounts receivable.

A high turnover ratio suggests receivables are being managed effectively. When the turnover of accounts receivable is known, the average collection period (average time funds are tied up as accounts receivable assets) can be calculated. It is expressed as "days' sales" and equals 360 days (a bankers year)

divided by accounts receivable turnover.

The accounts payable ratio provides

Figure 1

Term (months)	Energy Savings	Maintenance Savings	Monthly Financing Cost	Cash Flow
24	\$3800	\$400	\$4,568.47	(\$368.47)
36	\$3800	\$400	\$3,170.97	\$1,020.03
48	\$3800	\$400	\$2,488.5	\$1,711.50
60	\$3800	\$400	\$2,075.83	\$2,124.17

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insight into a company's management and payment habits compared to the credit terms given by suppliers. It is calculated as accounts payable divided by the average day's purchases.

Profitability ratios are mainly concerned with the income statement and reveal a company's ability to convert sales dollars into profit. Ratios measuring the profitable use of assets include the return on assets, which equals net income divided by total assets; return on equity, which equals net income divided by owners' equity; the gross profit ratio, which equals operating profit divided by sales; and return on sales, which equals net income divided by sales.

Solvency, overall, or debt-to-equity ratios help determine the relative claims of long-term creditors compared to those of owners. Too much long-term debt involves a heavy interest and fixed-charge burden and adds risk to creditors. These ratios are similar to the rule of thumb that says a house payment shouldn't exceed a certain percentage of the owner's income. The proportion of a company's income needed to pay interest and other fixed charges varies among industries.

The more common ratios used to evaluate solvency are times-interest-earned, which equals earnings before interest and taxes divided by interest expense; fixed-charge-coverage, which equals earnings before interest and taxes divided by interest expense plus lease payments; and debt-to-total-equity, which equals debt divided by total liabilities plus stockholders' equity.

Cash Flow

Cash flow is the measure of a company's ability to generate discretionary funds through its operations. Determining acceptable cash flow levels is an important

calculation done by all lenders. It indicates the company's ability to meet current obligations plus the new debt. Cash flow coverage equals earnings before interest and taxes, plus depreciation, plus amortization expenses, divided by the current portion of long-term debt plus new debt.

Even when capital budget limits are a problem, the positive cash flow generated by an energy project may be compelling enough to persuade management to perform it without delay. Project cash flow equals savings during a given period as a result of the project, minus the cost of



financing it, plus any offsetting maintenance or other savings for the same period.

Cash flow is usually expressed in monthly amounts that can be targeted to offset financing costs. Most third-party lenders won't extend repayment time beyond the useful economic life of the equipment. Positive cash flow and creditworthiness are keys to obtaining third-party financing.

For example, the cash flow consequences of a facility borrowing \$100,000 at 9 percent simple interest for a project that yields monthly energy savings of \$3,800 and maintenance savings of \$400 during the first year, are shown in Figure 1. In this example, it's easy to argue that money to finance the project is buried in the existing expense budget. Third-party financing can offer a way to use

expense dollars to help implement projects that otherwise might not receive limited capital investment money.

Determining the Financing Vehicle

A variety of methods may be used to fund energy projects, ranging from conventional loans to leases and energy service agreements. It is important to understand the underlying differences of each because payments may be calculated differently; the cost of funds changes based on how much risk is assumed by each party; and each option may have substantially different tax consequences and accounting treatments.

A conventional loan is an obligation that will be repaid over a fixed term at a predetermined interest rate, fixed or variable, with variable rates usually tied to the prime. If the project generates energy savings, it may be possible to link them directly to payments with a special agreement.

In conventional financing, the higher the risk, the higher the cost of funds. Conventional lenders deal with and understand credit risk. Energy service companies and installers quantify and understand performance risk. Some specialty finance companies may understand both.

Because balance sheet analysis is used to obtain credit, tax and accounting consequences of a financial obligation may become an important part of the decision. For example, a basic rental agreement implies no ownership on behalf of the renter; the payment is an expense deducted from profits before taxable income is determined. This type of agreement has common tax and accounting treatment.

A simple loan agreement implies ownership transfers to the borrower.

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The asset must be depreciated over its useful economic life; interest incurred is an expense item. This type of loan has common tax and accounting treatment, but not every financing vehicle is straight-forward. A true lease - a long-term rental agreement with a fair-market-value purchase option - may be an expense item for tax purposes, but accountants may require the asset be treated as if it belonged to the lessee for balance sheet purposes.

If a company has a loan covenant with a lender, the ability to leave an asset on or off the balance sheet can be critical to the decision to undertake the project. Accountants or tax counsel should always be consulted to determine specific treatment.

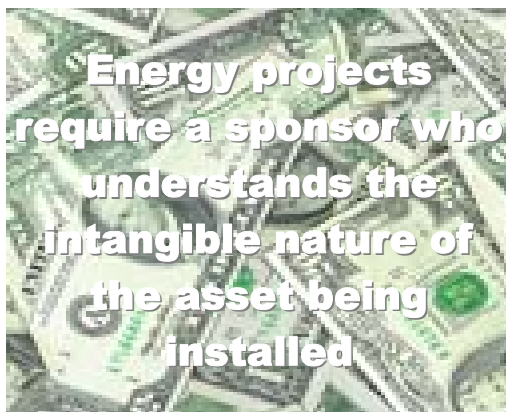
Here are some important financing vehicles used to fund energy-related equipment and projects:

Commercial Loan: A formal agreement in which a lender provides funds for a stated purpose, backed by the full faith and credit of the borrower. It may be secured by the asset being purchased or by other assets of the company.

Conditional Sales Agreement: An agreement to buy an asset in which the borrower is treated as the owner for federal tax purposes and gains such tax benefits as depreciation, but doesn't legally own the asset until terms and conditions of the agreement have been met.

Federal Lease: A financing alternative for federal entities in which the government usually provides the terms and conditions of financing transactions that customarily contain termination-for-convenience clauses (the ability to cancel the lease for no apparent reason).

Finance Lease (Lease-Purchase): A rental agreement backed by the full faith and credit of the lessee,



characterized by bargain purchase options (typically for \$1) that may be exercised at the end of the term.

General Obligation (G.O.)

Bonds: The traditional municipal bond vehicle, these bonds are backed by the full faith and credit of a state or local government and, unlike revenue bonds, repayment isn't tied to income derived from use of the facility they financed.

Guaranteed Savings Agreement:

This program takes the lower rates of a commercial loan; the installer or an insurance program also guarantees savings generated by the new equipment. A cost-effective alternative to a true shared savings agreement, it is available for larger transactions.

Master Lease: A contract in which the lessee leases currently needed assets and can acquire other assets under the same basic terms and conditions without negotiating a new contract. Similar to a line of credit, a master lease can earmark a certain dollar amount that the lessee can use as needed over a given period.

Municipal Lease (Tax Exempt Lease): A conditional sales contract disguised as a lease and available only to municipalities, states, counties, and certain special authorities. Because the interest is tax-exempt to the lessor, rates are lower than those of conventional leases. This lease structure can direct

operating funds into capital purchases and is a good alternative to a bond issue. Unlike a conventional lease, which is noncancelable, a municipal lease typically allows the municipality to return the asset to the lessor without penalty prior to the end of the term if funding becomes unavailable.

Operating Lease: A lease that has the characteristics of a usage agreement and also meets certain criteria established by FASB. Operating leases need not be reflected on the lessee's balance sheet. The phrase also refers to leases in which the lessor has a significant residual position in the lease pricing and therefore must salvage the equipment for a certain value at the end of the term in order to earn its rate of return.

Shared Savings Agreement: The installer also finances the equipment and receives payments based on resulting energy savings. There are two types of agreements, fixed and true shared savings. Fixed contracts define savings based on engineering studies or a one-time verification performed at project completion; the payment can't change after the project is accepted. True shared savings contracts require that savings be verified periodically; the savings-based payment may change. Shared savings agreements are considered by many to be off-balance-sheet financing.

True Lease: Similar to a finance lease, this long-term rental agreement has a true fair-market-value purchase option at the end of the term. Because the decision to buy the leased equipment is deferred until the end of the contract, monthly rental payments are usually expensed for tax purposes.

Figure 2 compares some of the components of each type of transaction. Terms and conditions

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will vary based on the investor.

Finding a Lender/Investor

Different lenders have different product preferences, levels of risk acceptance, and dollar-size preferences. It's unlikely a leasing company that normally handles transactions in the \$5,000-\$100,000 range would be interested in, or even understand, a \$500,000 energy service agreement.

Outside funds for energy projects come from two basic sources: traditional and nontraditional lenders. Traditional lenders consider risk using vehicles such as leases, loans, or mortgages. Nontraditional sources will consider more diverse financing avenues, accept higher risk, and/or include social consequences of a project or borrower as an approval criterion.

Traditional lenders include

banks, commercial financial institutions, leasing companies, insurance companies, and brokerage houses. They divide the market into segments based on transaction value. While market segments aren't rigidly defined, reasonable definitions are, small ticket: less than \$150,000; middle market: \$150,000-\$1 million; large ticket: over \$1 million.

Nontraditional sources of funds are numerous and diverse. Energy projects require a sponsor who understands the intangible nature of the asset being installed. These lenders may include utilities; energy service companies; special-purpose finance companies; revolving loan funds; private investors; churches; foundations; and federal, state, and local government loan programs.

If your company has neither the time nor the inclination to determine which financial path is best,

investment banking organizations can help coordinate the credit and capital procurement process. When such groups understand and have prior experience in financing energy projects, they can shorten an often-frustrating experience created by the unconventional aspects of using energy products as collateral.

Third-party financing is an option that often makes sense if capital is limited. If this approach is pursued, the process can be hastened by determining your company's creditworthiness and the type of financing that best meets your needs, and by identifying the source of funding that is the best match. The process may sometimes be frustrating, but the financial and environmental rewards are usually worth the effort.

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Figure 2 - Common Energy-Efficiency Financing Options

	Direct Purchase (cash sale)	Bank financing (loan)	Lease-Purchase	True Lease	Guaranteed Savings Agreement	Fixed payment shared savings	True shared savings (performance contract)
<i>Initial Payment</i>	100% of project cost	0-50% of project cost	1 or 2 monthly payment	1 or 2 monthly payment	Negotiable	\$0	\$0
<i>Periodic payments</i>	None	Variable	Fixed	Fixed	Fixed % of energy savings	Fixed % of energy saving	Variable % of energy saving
<i>Performance risk</i>	Owner 100%	Owner 100%	Owner 100%	Owner 100%	ESCO or insurance co.	ESCO/owner	ESCO
<i>Contract termination options (end of term)</i>	N/A	Principal payoff	Fixed buyout \$1,10%, etc.	Fair Market Value	Varies with agreement	Varies with agreement	FMV buyout, renew, or return
<i>Ownership</i>	Building Owner	Building Owner	Building Owner	Lessor	Varies with agreement	Varies with agreement	ESCO/Investor
<i>Tax deductions*</i>	Depreciation	Depreciation & Interest	Depreciation & Interest	Lease Payment	Varies with agreement	Varies with agreement	Shared savings payments
<i>Finance term</i>	N/A	1-5 years	1-5 years	1-5 years	1-10 years	1-10 years	1-10 years
<i>Minimum \$ amount</i>	N/A	N/A	\$3,000	\$3,000	\$100,000	\$5,000 ((\$50,000 for tax-exempt)	\$250,000

*Subject to change in tax laws; consult with tax advisor regarding eligibility.

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