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CHP OWNERSHIP AND EASY FINANCING OPTIONS

More and more businesses and institutions are installing combined heat and power, or CHP, as they realize its economic and environmental benefits. But some fail to investigate this tried-and-true option because they lack capital, assume financing will be expensive and difficult to secure in today's credit-tight market or prefer to invest their capital in projects more directly related to their core business (i.e., a new lobby for a hotel). In truth, a financing option exists that spares a facility owner from any upfront investment, makes paying for CHP as easy as buying electricity from a utility, lowers their energy costs and adds a no cost operations component to ensure the maximum efficiency and savings. Here we explore this approach, known as an On-Site Utility, as well as other financing and ownership methods.

First and foremost, it is important to note that a CHP system is installed at your place of business, where it provides heat, hot water and power from a single source of fuel. This makes CHP far more cost effective than the conventional approach of securing heat and hot water from on-site boilers and buying electricity separately from a distant power plant. CHP is highly efficient because it captures the heat created during electric production and uses it to heat space or hot water for your facility. A conventional power plant, on the other hand, just throws this heat away, letting it dissipate into the atmosphere.

But how do you take advantage of CHP's efficiencies if your company does not want to spend the capital to install a system or have the expertise to operate it? Even if your company has the resources, perhaps senior management is focusing on other parts of the business. What compelling financial options can you present? The following are four options.

OUTRIGHT PURCHASE

One buys the system and the cost savings from the CHP flow directly to your company. But ownership also means that your company pays for engineering,





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equipment, permitting and installation, and is responsible for system maintenance, fuel, repair and management of system operation. As the owner, the company takes the responsibility to ensure the system performs to meet financial goals. And finding the cash for a turnkey CHP project presents a challenge to many companies in today's economy. Your company must determine if outright purchase is the best use of its capital compared with the other needs of the business.

LEASE

If you lease, your company is spared making a large, upfront capital investment. Instead, you typically pay a monthly fee to cover engineering, equipment, permitting and system installation. But there are significant drawbacks to leasing, as well. Compared with other options, this one offers the least savings and your company remains responsible for costs of equipment maintenance, fuel and system operation and performance. Another downside, especially in today's economy, is that credit worthiness determines acceptance and the interest rate. In addition, all installation and operating responsibilities fall to your company. How does leasing work? A leasing group finances your capital expenses and retains ownership of the system until the lease is paid off. The difficulty under a lease arrangement is your monthly energy savings must exceed what you pay for the lease, otherwise you need to make up the difference.

SHARED SAVINGS/PERFORMANCE CONTRACT

Frequently used for energy efficiency installations, this approach splits the risks and rewards of CHP between the customer and a supplier, generally under a 10 to 20-year contract. You pay directly for equipment maintenance, fuel and operating fees, while a third-party supplier handles engineering, equipment and installation. Your company keeps a percentage of the actual energy savings (typically 10% to 25%) and the supplier keeps the remainder, which constitutes part of the supplier's payment. What are the advantages? Besides accruing some of the savings, your company makes no upfront payment. But at the same time this approach garners the second lowest net savings of any option. Further, your company fully shares the responsibility for the operating performance of the equipment. Poor system performance means poor financial results.

ON-SITE UTILITY

This approach offers the most benefits for your company. You pay no upfront or ongoing costs; instead they are assumed by a third-party supplier. You are not responsible for any of the costs for engineering, equipment, installation, maintenance and fuel. Instead your company pays only for energy (electricity



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and thermal) that it uses. So an On-Site Utility in many ways mimics the conventional way companies are billed for energy by their local utilities. But the price of energy is discounted (typically 5% to 20%) below local utility prevailing rates. An On-Site Utility offers the best cash flow and net income improvement of the various alternatives. You sign a long-term agreement, often 10 to 20 years, and have no ownership and operational responsibilities. You receive the savings before the supplier does. Since the third-party supplier is motivated to maximize the performance of the CHP system, often an On-Site Utility saves you more money than outright purchase. And, the best in class suppliers deploy a complete monitoring and control regime to ensure system performance (all at no cost).

WHAT'S THE BEST PAYMENT APPROACH FOR YOU?

Much will depend on your company's financial needs, technical competence, staffing and energy objectives. Before investigating financing, be sure to determine if your facility is right for CHP. You will need to consider the amount of heat and electricity you use, your energy costs and other factors. This is explained in more detail in *Is CHP Right for Your Property?*, part two of this series.

Whatever choice you make, be aware that installing and operating a CHP system requires experience. So it is important to engage a reputable CHP company with a solid track record. CHP, itself, has reduced the energy bills of businesses and institutions throughout the world for decades, and is increasingly being adopted by hotels, nursing homes, hospitals, colleges, fitness centers, multi-family complexes, factories and other facilities.

In part four of this series, *Sizing Your CHP System for Maximum Savings*, we will explain why your CHP system must be sized correctly to ensure you achieve maximum efficiency and cost savings.

MORE INFORMATION

Would you like to know more? [Register now](#) to receive the next installment of our six-part educational series. Or contact us at info@americandg.com or 877-292-2343.

