UNCOVER SAVINGS

WITH A TOTAL ENERGY STRATEGY



Energy makes up a critical portion of operating costs for most manufacturers. Manufacturing consumes 51 percent¹ of the world's energy and accounts for 30 percent² of consumption in the United States. With energy consumption so large, manufacturers know that they can't treat energy simply as a static and unavoidable expense.

As many manufacturers aim to reduce overhead costs and compete in today's global economy, any advantage they can create for their operation can be game changers. One major advantage can be to manage energy as a comprehensive plan that includes both the supply side (how you buy energy) and the demand side (how you use energy).

It can be easy to leave money on the table by failing to consider your energy needs holistically, and instead taking a piecemeal approach. Don't just run the drill of tracking commodity prices.

When it comes to energy efficiency, don't stop at upgrading lighting. Operations that practice smart energy management develop an energy strategy that's customized for their business and identifies opportunities for reducing risk and creating new value.

Its called Total Energy Management. It's a strategy that guides you to buy less energy and use what you buy more efficiently. Let's walk through some steps you can take to build this competitive advantage.

Establish a buying strategy to act on advantageous price movements

If your electricity usage and budget are large, so is your

opportunity in the energy market. An energy supplier can help you purchase energy at prices that maximize your budget based on terms defined ahead of time.

Two options for making transparent and informed buying decisions are solutions like PowerPortfolio® for purchasing electricity and GasPortfolio® for purchasing natural gas, both from Direct Energy Business.

With PowerPortfolio, a team of strategists helps you purchase power at wholesale market pricing, customizing the amount of your load that is fixed or floating based on the amount of risk your operation can tolerate. Similarly, GasPortfolio helps you react to the fast-moving NYMEX natural gas market, alerting you when buying is most advantageous.

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Strategies designed for large energy users

Buying strategies like these are designed for large energy users like commercial and industrial enterprises. That means that manufacturers with flexible operations can use these solutions to manage volatility and avoid peak usage periods.

This can mean employing a strategy to purchase energy in the day-ahead or real-time market when the price is most advantageous. Then, organize your peak energy usage for times of the day, week, or month when energy is least expensive. For example, if electricity prices are lowest during the night, a manufacturer may capitalize on those low energy costs by scheduling the heaviest operational load for evening and early morning hours.

Some energy buyers are experts at managing volatility and never lock in a fixed price. These enterprises float their entire energy load on the market indefinitely using an index price plan. To weather market volatility, they customize their consumption schedules every day to capitalize on the lowest prices available.

Try a layered approach

Manufacturers that need more budget certainty or with more rigid operational schedules may be precluded from optimizing consumption schedules based on price and find it difficult to ride out a volatile market on a long-term index price.

These buyers may choose instead to use PowerPortfolio or GasPortfolio to lock in portions of energy usage over time, a price management technique called layered purchasing. By taking a layered approach, enterprises may snag a lower price in a falling market without risking too much or too little in a volatile market.

Whatever energy strategy you choose, it should help you manage price fluctuations, address your risk tolerances and meet your budget goals.

Use an audit to optimize your facility's efficiency and energy demand

For an effective Total Energy Management strategy, you must implement energy reduction and efficiency measures in addition to your customized energy buying plan. How your plant does this depends on the age of your equipment, your load curve and other factors unique to your operation.

A smart first step is to work with your energy supplier to perform an energy audit. An audit will help your operation to uncover energy-saving opportunities, create a plan for next steps and set energy efficiency goals.

Many facilities then choose to upgrade lighting, improve pipes, ducts and fans, or shift HVAC loads. You may save additional energy by installing variable-speed drives, which can enable motor

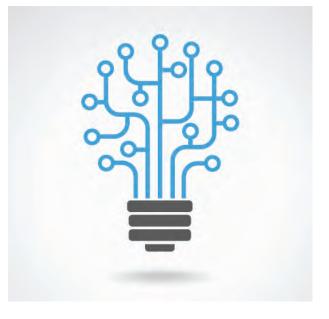
functions at a level in keeping with load requirements. For example, Direct Energy Business can also help you add an onsite combined heat and power (CHP) system. CHPs use one source of fuel to produce two forms of energy: electricity and heat.

Create the potential for new revenue with Demand Response

Another option popular for manufacturers is participating in a Demand Response program. These programs give businesses the opportunity to reduce usage and potentially earn new revenue through incentive programs. They are designed to help electric utilities curb energy use during periods of peak demand, but

can serve as a cornerstone of a manufacturer's energy strategy.

Here's how it works. If you're eligible to participate, you can get paid for even agreeing to curtail usage—even if no curtailment event is called. You'll receive an additional payment if and when a curtailment event occurs and you're called upon to limit your usage. Keep in mind, curtailing electricity doesn't have to impact your operations. It can be as easy as turning equipment down or off when it's not being used, precooling facilities or shifting production schedules to off-peak hours.



Use data-driven insights to guide decision-making

A complete Total Energy Management approach uses analytics to reveal consumption patterns and how those correlate to price variations and price movements over time. These insights can help manufacturers identify opportunities to match energy needs to the strategies that could potentially save money.

Take, for example, Panoramic Power® device-level energy monitoring from Direct Energy Business. Using small, self-powered wireless devices clipped at the breaker box, you can gain real-time visibility into the energy consumption of individual pieces of equipment. With a dashboard available from your desktop or mobile device, you have the insights necessary to find and eliminate energy waste, optimize your operations and even predict and prevent equipment failure.





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1 Favoriti Avenue, PO Box 2295, Newburgh, NY 12550 Phone: 845-562-0900 • Fax: 845-562-1020 E-mail: michael@orangepkg.com "In the past, our industry had to use its ears, literally listening to sounds and changes in sounds to tell us when there's a problem," says Panoramic Power user and recycling plant manager Bruce Harwedel. "Now with Panoramic Power, we can go even deeper to see what is actually happening inside the machine. And, I can react to it right away." For Harwedel and many other manufacturers, this can mean huge savings that aren't achievable with only highlevel performance data.

Remember, you have a choice of energy suppliers

Because you have a choice of suppliers for natural gas and electricity, you can shop around to find one who takes the full energy equation into account. A successful energy strategy often requires close attention, so employing the right supplier and strategists is key.



- 1. U.S. Energy Information Administration, "How much energy is consumed in the world by each sector?" Retrieved June 19, 2015
- 2. American Council for an Energy-Efficient Economy, "Outsourcing Energy Performance: Its Potential for Industrial Energy Efficiency Programs," March 18, 2014

Editor's note: Direct Energy Business and the Council of Industry have partnered together for 8 years to provide energy solutions to Hudson Valley Manufacturers. Direct Energy has a highly knowledgeable and experienced team that can create a Total Energy Management strategy customized for your facilities. They have a deep understanding of energy pricing, constantly track the market and can identify opportunities for energy efficiencies and savings allowing Council members to focus on their core capabilities while still getting the most from their energy budget.

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