
A Guide to Energy Efficiency

Reduce energy consumption in your manufacturing operation with simple and practical ideas.

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Companies continue to search for ways to combat the high price of utilities, which, for most in the food-processing industry, is the second-largest direct conversion cost behind only the cost of labor. Becoming more energy efficient is possible for every organization, and doing so can save money in more areas than just your utility bill. In order to help your organization as well as the environment, we've written this guide to show you how to become more energy efficient by outlining the opportunities available, identifying target areas, setting goals, taking action and monitoring progress.

In the last few decades, deregulation in energy markets has opened up many opportunities to save money by managing your procurement processes. Deregulation along with technological advancements, incentives and attention to global warming has also made alternative energy sources such as combined heat and power (CHP), fuel cells and renewables more economical. Although creative energy-sourcing strategies can be effective methods to reduce energy costs,

those initiatives usually require major human and capital investment. Instead, this article will focus on reducing energy consumption in your manufacturing operation with simple, practical and even no-cost ideas that maximize your energy efficiency.

THE OPPORTUNITIES

As in any business venture, it is important to decide if the opportunities are worth pursuing before simply diving in. The same is true with energy conservation. The first step is to collect general data and identify the billing structure as well as the delivery and metering of your utilities. Next, figure out the amount of money spent and the amount of the utilities used (Figure 1). This would include looking in a general perspective as well as identifying costs and consumption on a per-unit basis. To do this, start with the utility bill and utilize the interval data (more about this later). Then you can identify how consumption varies across different spectrums such as by time or by product. You must also ask how utilities are currently managed: are they treated as a fixed cost, or are they considered controllable? There ➤



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