



# Energy Management Ideas

Strong energy management is a strategic asset that creates a competitive edge by reducing energy costs. Below are a few ideas to get you started.



## Facility Energy Assessments

Organize facility walk-throughs to assess energy use and find energy saving opportunities. Assessments are powerful tools for involving facilities and encouraging buy-in. These events are also hands-on learning opportunities because energy team members may see best practices in action. However, the energy team will need to remember that annual energy assessments compete for time and attention against the business of the facility. After an assessment, an in-depth report should be written and a summary circulated internally.



## Sub-Metering Devices

In order to reduce energy, one must know how much energy is being used. Sub-metering can be an expensive investment, but there are simple, in-line, manual sub-meters available that are relatively inexpensive when compared to the digital, PLC based models. Sub-metering helps energy teams develop a more accurate baseline of the facility and develop clearer, more concise and attainable goals.



## Plug Load Management

Conduct an assessment of non-essential items being left on or plugged in during times of non-use or during times of temporary shutdowns (i.e. nights and weekends). Electrical power consumed by electronic appliances while switched off or in standby mode is called phantom load. Approximately 1-3% of the company's annual plug load usage is due to phantom load. Take inventory of non-essential equipment left on and address these items with the appropriate department teams.



## Equipment Shutdown/Load Strategy

Investigate equipment being left on during temporary shutdowns, longer shutdowns, and times of non-use. Take inventory of non-essential equipment left on and address these items with the appropriate department teams, which would cover the entire facility. Once equipment is identified, develop a policy to turn off or reduce the load on select equipment. By turning off process equipment when not in use, the company can reduce their energy usage and demand load. Identify the equipment that is critical to the production process first, and then consider ways to reduce the load from other equipment.



## Demand Reduction Strategies

High demand charges can result from a high rate of energy usage for short periods. Plant production schedules and the economics of each situation should be considered. One possible solution may be to distribute the facility's electrical usage over alternate shifts. Another possibility is to schedule the operation of high consumption electrical equipment to specific times and to stagger the scheduled employee breaks. Coordinating these times could reduce the amount of equipment operating at one time, thus decreasing the demand.

