

Rethinking the ‘Price of Doing Business’

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How to effectively manage your restaurant’s energy usage while minimizing efforts and costs

Many restaurants consider energy costs to be an uncontrollable “price of doing business.” Historically, energy management systems have been designed for much larger, more complex facilities, such as office towers, factories and big-box retailers. Today, with the convergence of low-cost communicating controls and sensors, ubiquitous Internet connectivity and cloud based software, it is economically viable to control energy, and to recoup the profits lost from wasting it.

Why should this matter to restaurants? On average, restaurants incur 250 to 350 percent higher energy costs than other commercial buildings, according to the U.S. Energy Information Administration. With newfound access to real-time control and visibility of a facility’s energy usage across multiple locations, restaurateurs can improve operations and save money.

A more complete and robust understanding of the equipment—for example, by pointing out when equipment schedules are not followed, when equipment is running excessively and when temperatures are out of range—results in a reduction in energy bills. Restaurant managers can also ensure greater customer comfort through remote thermostat programming and control for peak and off-peak hours. Temperature control and analytics through energy management systems can also dramatically reduce repair and maintenance costs by detecting equipment malfunctions early.

Embracing EMS 2.0

Energy management systems, though relatively new to the restaurant industry, have existed for some time and vary in servicing capabilities. The newest generation of EMSs, what we call EMS 2.0, is cloud-based, often wireless, mobile-enabled, simple to use and extremely powerful. Some EMS 2.0 platforms are designed specifically to serve small commercial facilities such as restaurants, and include the option to centralize programming and equipment control, freeing restaurant staff to focus on customers rather than equipment.

With this in mind, it is important to know how to select the right energy management system for your restaurants’ needs to ensure they pay for themselves quickly.

- Determine your highest-priority needs or challenges. Where in your operations might you need to shed light on things you cannot already control or observe? This could be anything from ensuring employees are following equipment start-up and shut-down schedules to tracking the performance of your mission-critical equipment.
- Make sure the system is designed for your size and type of commercial facility. Ask the provider in what other types of facilities this system is installed. Systems designed for larger buildings are often unnecessarily complex for smaller facilities, which often leads to their abandonment because they are too expensive and hard to use.
- Assess whether the technology you are considering fits within your budget. Though essentially all systems have net value to your operations, if the payback period is too long, this could potentially damage other areas of your business.
- Verify that your facility has the infrastructure to support the system. This means, for example, making sure that your facility’s Internet access is segregated from sensitive equipment like POS.

Ensure a Seamless Change-over

Once you have identified and installed the most appropriate system for your business goals, it is important to start

out strong as you integrate the EMS into your operations. Begin by training your staff to adhere to equipment start-up and shut-down schedules and ensure that items such as ventilation and cooking equipment are only running when necessary. Use reporting from the EMS to give them feedback on how they are doing in this regard. Some systems allow ranking of locations in multi-location enterprises, which can be helpful in creating accountability and healthy competition.

Next, secure your walk-ins: Make sure that you have strip curtains and automatic doors, and be diligent about only using the necessary number of defrost cycles and clean coils. Make sure to service these regularly to troubleshoot any emerging issues that your EMS may discover, preventing emergency repairs that both disrupt day-to-day operations and cost more than preventive maintenance.

“The ability to control major energy operations has significantly improved our bottom line,” said Scott Amerault, Director of Construction and Facilities for Pepper Dining Inc., a Chili’s franchise. “By taking full advantage of the data and control we have on hand, we are able to monitor our energy spending and consumption, while also ensuring a comfortable and safe experience for our guests and team members.”

Imagine the Potential

Once the energy management system is installed and proper habits are in place, the net potential to restaurant operations is huge—but you must actively derive this value.

For one, make sure to monitor and manage human interaction with both the EMS and the equipment it is controlling and tracking. If your staff is consistently operating costly equipment outside of scheduled hours, you may want to consider installing expanded equipment controls to take equipment schedules out of their hands.

Second, implement a training program on full system functionality to ensure efficient onboarding of new employees. Applying a system-monitoring program in your operations is also beneficial for making sure the energy management system becomes integrated into day-to-day operations. Finally, it is important to standardize alarm management and access to the control systems to streamline operations and make sure the system is functioning at its full potential.

According to Richard Shandross, an Associate Director in the energy practice at Navigant Consulting, “The greater a restaurant’s insight into its equipment, the greater the restaurant’s opportunity to maintain control over their energy expenses and find ways to increase efficiency. Utilizing a cloud-based monitoring and management system can be an excellent solution for restaurants of all sizes.”

“Large facilities are able to afford the larger EMS systems, but there was a real gap in the marketplace on these smaller footprint sites,” said George Huettel, Vice President of Market Development at Ecova. “[These systems] give us a very cost-effective solution to give visibility into the energy patterns and operational patterns of smaller facilities.”

EMSs provide restaurant operators the power to see, in full view, all energy consumption in real time, and to control critical assets accordingly. Having once been ill-equipped to serve smaller facilities, energy management systems today are capable of providing more cost effective and energy-efficient restaurant operations. These systems further offer infrastructure to solve other operational challenges, such as tracking refrigeration temperatures across multiple facilities for food safety compliance. This resource is finally here in a form that makes sense for restaurants. With the right implementation and best practices, managers will possess the power to control what was once uncontrollable.

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