

# Steps That Businesses Can Take To Manage Rising Electric Costs

## FACT SHEET

To learn more about Focus on Energy<sup>SM</sup> call 800.762.7077 or visit [focusonenergy.com](http://focusonenergy.com)

**Y**ou can reduce electricity use at your facility and manage rising electricity prices more effectively. This action list will help you get started. If you do not have the expertise in-house, work with Focus on Energy and local experts such as contractors and product and service providers to complete energy saving projects.

This fact sheet identifies no cost, low cost and moderate cost options to increase your businesses' energy efficiency. Each step you take will help you manage rising electricity costs now and in years to come.

### **NINE ACTIONS THAT WILL REDUCE ELECTRICITY USE**

1. Turn off lights and equipment when not in use
2. Program setback thermostats and energy management systems correctly
3. Install the most efficient lighting equipment and incorporate control devices
4. Maintain HVAC equipment regularly
5. Check other equipment regularly and ensure it is operating properly
6. Install variable speed drives
7. Purchase energy efficient equipment
8. Monitor monthly energy bills
9. Get employees involved in saving energy

#### **1. TURN IT OFF! (NO COST ACTION)**

Turn off electric lights when they are not needed and take advantage of natural daylight whenever possible. Turn off office equipment at night and on weekends. Set the energy saving "sleep mode" to activate at the end of each day, or install timers that do the job for you and your staff.

#### **2. MAKE SURE SETBACK THERMOSTATS AND ENERGY MANAGEMENT SYSTEMS ARE PROGRAMMED CORRECTLY (NO / LOW COST ACTIONS)**

You can save two percent on air conditioning

costs for each degree you raise the thermostat. Instead of relying on staff to adjust temperatures properly, use setback thermostats or energy management systems (EMS) to manage your facility's energy use. If you have an EMS installed, make sure it is set correctly and operating properly. If you do not have either system, you should install setback thermostats at a minimum. If you need help, hire an expert to help you adjust the settings.

#### **3. INSTALL THE MOST ENERGY EFFICIENT LIGHTING OPTIONS AVAILABLE AND INCORPORATE CONTROL DEVICES (LOW / MEDIUM COST ACTIONS)**

Energy efficient lighting options are available for all business needs. Install compact fluorescent bulbs in task lights and high performance T8 lamps and ballasts and/or pulse start metal halide systems in larger applications. Also, do not forget to install lighting control systems, including daylighting controls, occupancy sensors and timers. Lighting controls turn lights down or off when they are not needed. Convert exit lights to LED (light-emitting diode) which use only two to three watts and can last up to 20 years.

#### **4. MAINTAIN HEATING, VENTILATING AND AIR CONDITIONING EQUIPMENT REGULARLY (LOW COST ACTION)**

Follow all manufacturer's guidelines for maintaining heating, ventilating and air conditioning (HVAC) equipment. Have HVAC systems serviced regularly. Change air filters monthly. Basic maintenance makes a difference: you can cut up to 30 percent of fan energy use and up to ten percent of space conditioning energy use. Clean the space around your heating, water heating or cooling system to prevent debris from being pulled into burners or filters. Insulate hot water pipes and air ducts to minimize losses.



## **5. CHECK OTHER EQUIPMENT REGULARLY AND ENSURE IT IS OPERATING CORRECTLY (LOW / MODERATE / HIGH COST ACTIONS)**

Many school, commercial, industrial and government facilities have specialized equipment such as refrigeration units, cooking equipment, pumps and evaporative coolers. Follow all manufacturer's guidelines for operating and maintaining the equipment. Keep systems clean to optimize operation.

## **6. INSTALL VARIABLE SPEED DRIVES (MODERATE COST ACTION)**

Fans, pumps, refrigeration equipment and compressors do not need to operate at full power all the time. Variable frequency drives (VFD) control the speed of the motor that drives this equipment so that the motor's speed is matched to the actual equipment load, allowing the motor to be continually adjusted. VFD cut electricity use – sometimes substantially – as well as wear and tear on the motor. Select premium efficiency motors when it is time to replace them.

## **7. PURCHASE ENERGY EFFICIENT EQUIPMENT (MODERATE / HIGH COST ACTION)**

Choose energy efficiency equipment when it is time to replace equipment. This decision will save money for years to come. Look for the ENERGY STAR® label as a guide. You can now purchase a wide variety of office and restaurant equipment that receives the ENERGY STAR certification.

## **8. MONITOR ENERGY USAGE MONTHLY (NO COST ACTION)**

An unexpected change in peak demand or energy use can indicate that something is not working properly or has inadvertently been left on.

## **9. ASK EMPLOYEES HOW TO REDUCE ENERGY USE (NO COST ACTION)**

Employees can help you reduce energy use; solicit their input and you will encourage them to think about ways to save energy.

## **BUSINESS-SPECIFIC ACTIONS**

### **FOOD SERVICE OPERATIONS**

- Install VFD on exhaust hoods, fans, pumps and compressors. If your exhaust hood has two speeds, select the lower speed during slower times to reduce the amount of air exhausted outside; your HVAC system will not have to re-heat or re-cool as much air. Turn off hoods when smoke or heat are not present.
- Install anti-sweat heater controls on glass-front refrigerator doors. Check refrigerator and freezer door seals, clean condenser and coils monthly, and defrost appropriately.

## **LODGING**

- Install guest room energy management systems to better control lighting and HVAC electricity use in guest rooms and common areas.
- Install compact fluorescent bulbs (CFL) in guest rooms and lobby lamps. CFLs use 75 percent less energy and last up to ten times longer.

## **SCHOOLS, INSTITUTIONAL BUILDINGS, WAREHOUSES AND GYMNASIUMS**

- Make sure the ventilation system is not "over-ventilating" a space and wasting electricity. Close outside air dampers when the building is not occupied.
- Upgrade to a lighting system that can be switched off easily and automatically when spaces are not occupied. Install multi-level switching to assure that light levels are appropriate for different situations.
- Examine hours of operation and make sure heating, cooling and lighting loads are adjusted accordingly.
- Add timers to hot water circulating systems to save energy when the building is not occupied.

## **AGRICULTURAL BUSINESSES**

- Optimize ventilation fans and ventilation systems to meet needs of barns or warehouses.
- Examine refrigeration and water heating system components and upgrade them to energy efficient units, if possible. These components include refrigeration heat recovery units, scroll compressors, plate/pre-coolers and variable speed milk pumps.

## **LEARN MORE**

Focus on Energy can help you with these steps to take control of your business's energy usage. We offer fact sheets, case studies and technical data sheets on many of the energy saving actions and technologies discussed in this action list. We sponsor a variety of training courses and seminars statewide that are open to all business customers. We can answer your energy efficiency questions, provide assistance, make recommendations and connect you with local contractors who can help. Additionally, we offer financial incentives for many projects on a first come, first served basis. Call 800-762-7077 or visit [focusonenergy.com](http://focusonenergy.com).