

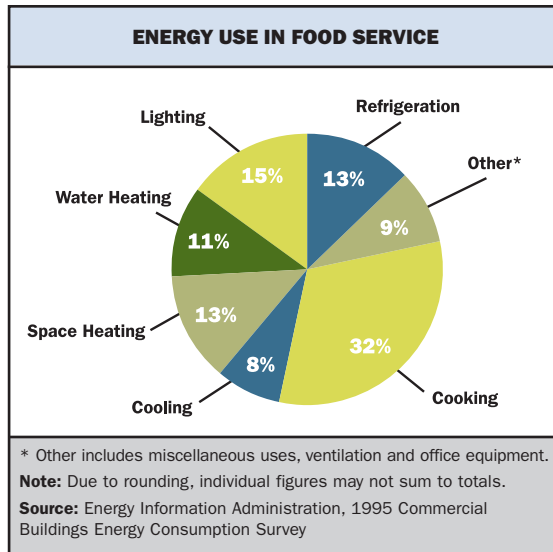
Controlling Energy Costs in Food Service Operations

FACT SHEET

Which uses more energy in a day: the average commercial grade pasta cooker or a home of a family of four? If you guessed the pasta cooker, you're probably the owner or manager of one of the 14,000 food service businesses in the state of Wisconsin and have a good idea of just how much energy it takes to run your business each day. In fact, when it comes to commercial energy usage, food service businesses top the list, using almost two and one-half times as much energy per square foot as the average commercial building.

To learn more about Focus on Energy,™ call 800.762.7077 or visit focusonenergy.com

Fortunately, there are a number of relatively easy ways to reduce energy usage that won't compromise employee efficiency or customer satisfaction—and could save you up to 30 percent annually on your utility bills. Integrating any of these energy saving tips can help to boost the tight margins the food service industry typically faces.



COOK UP SOME ENERGY SAVINGS

Cooking equipment accounts for 32 percent of the total energy costs for an average food service facility. Save energy by using your current equipment wisely and replacing older equipment with ENERGY STAR® qualified options—the ENERGY STAR label only appears on equipment that meets strict energy use guidelines.

Not in use? Shut it off

You can save significant amounts of energy by

identifying use patterns, shutting down cooking equipment during slow periods and minimizing preheat time.

ANNUAL SAVINGS PER HOUR OF DAILY SHUT OFF*:	
Steamers	Up to \$80
Pasta cookers	Up to \$300
Griddles	Up to \$80
Fryers	Up to \$37.50
Broilers	Up to \$200

* Savings are based on gas-fired equipment and would be larger for electric cookers; shut off individual burners/sections of equipment for partial savings.

Don't boil away savings

Evaporation causes significant heat loss. Keep a lid on equipment during long simmering periods and you'll reduce evaporation rates and save energy. And try braising pans and steam kettles which can reduce energy consumption during simmering periods by as much as 50 percent. During slow periods set your pasta cookers to a temperature just below boiling: these cookers can bring the water back to boil rapidly and this step will save you up to \$100 annually per hour of daily use.

Keep the heat in

Use a lid when cooking on a range and you'll increase cooking efficiency by eight to 14 percent. And avoid unnecessary opening of your oven door: every second it's open, the temperature drops three to 10 degrees.

Use the right equipment for the job

All cooking methods are not created equal when it comes to energy efficiency. Generally speaking, ovens, fryers and steamers are much more efficient than range tops, griddles and broilers—a broiler, for instance, can use six times the energy of a fryer. Steamers are extremely efficient because they cook moderately, transfer heat rapidly and require little preheating. Use steam to partially cook your food, then finish with your usual cooking method to save energy and time.

Keep it clean

Grease and sediment build-up can force your equipment to work harder than necessary; routine cleaning and maintenance help to ensure energy efficiency. And be sure to include the cleaning of any roof-top equipment in your schedule: exhaust build-up can compromise effective ventilation and increase your energy costs.



SAVE MONEY AND ENERGY WITH ENERGY STAR

Look for the ENERGY STAR label and you'll be sure that you're purchasing a top energy performer. Here are just a few examples of ENERGY STAR savings:

Commercial fryers

- 25 percent higher energy efficiency over standard models
- Annual utility savings of \$270 (gas)/\$65 (electric)
- Shorter cook times/higher production rates through advanced burner and heat exchanger designs

Commercial hot food holding cabinets

- 60 percent higher energy efficiency over standard models
- Maintain food temperature with lower energy use through better insulation and reduced heat loss
- Annual utility savings of \$300

Commercial steam cookers

- Up to 60 percent more efficient than standard models
- Annual energy savings of \$725
- 90+ percent savings in water usage

FIND BETTER WAYS TO LIGHT UP!

Lighting makes up 15 percent of annual energy costs. Here are some easy ways to save money and energy:

Exit lights - replace standard incandescents for light emitting diode (LED) screw-ins and save roughly \$20 per fixture, per year, in energy costs.

Install occupancy controls - To prevent wasted energy with storage area and bathroom lighting.

Use fluorescent lights whenever possible - high performance T8s can be an excellent choice in the kitchen. They offer exceptional light quality and optimal energy efficiency, and can last for up to 28,000 hours on a 12-hour run time. In the dining area, compact fluorescent lamps (CFLs) can reduce energy usage by 60 to 75 percent and last up to 10 times as long as incandescent bulbs.

CHILL - THE ENERGY EFFICIENT WAY

Refrigeration eats up 13 percent of an average food service operation's energy costs. To improve your energy efficiency:

Operate at optimum capacity - Stored food acts as a thermal mass and helps to maintain the interior temperature when the door is opened—but leave enough space to allow air to circulate. When units are at partial capacity, partition your space or fill it with “dummy” loads that can function as a thermal mass.

Replace gaskets that don't offer a tight seal - The dollar bill test is a good way to check this: close your door on a dollar bill, then try to pull it out. If it pulls out easily, your gasket isn't sealing properly.

Regularly vacuum vents and coils - This will help your unit operate efficiently.

Place your refrigerator away from sources of heat - These include ovens, heat registers, ranges and direct sunlight.

Buy the right size unit - Evaluate your needs and buy the size that meets them. The bigger your refrigerator, the more energy it takes to cool.

Replace an older unit with an ENERGY STAR model - This could cut your operating costs by 50 percent. Also, there are standards for energy efficient ice machines. See Focus on Energy's Commercial Ice Machine Technical Data Sheet for more information.

OPTIMIZE YOUR HEATING, COOLING AND VENTILATION SYSTEMS

Space heating and cooling make up 13 and eight percent of energy usage respectively, and are also affected by ventilation (which falls into the “other” category on the graph at nine percent). There are a host of ways to improve the efficiency of your heating and cooling systems including energy efficient windows, better insulation and eliminating air leaks. And when it's time to update your furnace or air conditioner, opt for an ENERGY STAR model.

Exhaust hoods pull conditioned (heated or cooled) air from the inside to the outside and help to create a safe and comfortable working environment. Unfortunately, in many food service facilities these hoods operate at full power the entire day while cooking load varies, using unnecessary energy to power the fan motor and taxing your building's cooling/heating system. In fact, in a 1990 study, the American Gas Association estimated that more than \$2 billion of energy is wasted each year on excessive ventilation. Install variable volume exhaust ventilation controls and you can save up to 30 percent or more on energy costs associated with ventilation. You can also improve system effectiveness by placing equipment as far back as possible under the hood.

STAY OUT OF HOT WATER!

Water heating consumes roughly 11 percent of your annual energy costs. To improve your energy efficiency:

Run dishwashers at capacity - It takes just as much energy to run a full dishwasher as a half-empty one. Wait until it's full before hitting the “on” button.

Set your water heater at 110 to 120° F - Cooler temperatures save money, but you'll need a booster heater connected to your dishwasher to generate temperatures that are high enough to kill pathogens.

Insulate your water heater - A simple insulating wrap prevents heat loss and will help to cut costs.

And, as always, pick an ENERGY STAR model when it's time to replace your current heater

FOR MORE INFORMATION

If you're interested in learning more about energy efficiency opportunities in the Food Service industry, call Focus on Energy at 800.762.7077 and ask to speak with an Energy Expert for your specific business type, or visit our Web site at focusonenergy.com.

