



Restaurant Energy Efficiency Tip Sheet

Restaurants use an estimated 2.5 times more energy per square foot than other commercial buildings, meaning there are ample opportunities to reduce energy bills.

Here are some answers to common questions to help you save energy and money in your restaurant.

Q. What are the biggest energy-saving opportunities in a restaurant?

A. Food preparation accounts for the largest percentage of energy consumption, followed by heating, ventilation and air-conditioning. Sanitation, lighting, and refrigeration are also large energy sappers. Some ways to reduce these costs:

- Replace cooking and refrigeration appliances with Energy Star-qualified ones.
- Turn equipment off when not in use.
- Fix leaks and maintain equipment, including hot water leaks, refrigerator gaskets, freezer doors, cooking appliances, missing or worn-out control knobs.
- Clean refrigerator evaporator and condenser coils and check refrigerant charge.
- Recalibrate – do a regular thermostat check on appliances, refrigeration, dish machines, and water heaters.
- Install a 1.6-gallon-per-minute pre-rinse spray valve/nozzle in dish room, which can save \$300-350 per year in water, sewer, and natural gas costs.
- Use low-temperature Energy Star-qualified CFLs in walk-in refrigerators.
- Improve kitchen ventilation system's efficiency. Here's how: Add side panels to range hoods, and push cooking appliances as far back against the wall as possible. Install a "demand-based" exhaust control which senses ventilation needs. (Such enhanced ventilation system can cut costs by 30 – 50% and improve kitchen air quality.)

Q. How much can I save?

A. The most savings will likely come from purchasing Energy Star-qualified cooking and refrigeration equipment. Estimated savings from such equipment ranges from \$100 to \$975 annually on gas or electric bills, depending on equipment type. Outfitting an entire commercial kitchen with Energy Star-qualified equipment could save \$3,600 annually, according to the Department of Energy.

Find estimated annual savings of various types of Energy Star-qualified equipment and other useful energy-saving ideas for restaurants in the Energy Star Guide for Restaurants: <http://www.energystar.gov/restaurants>.



If an Energy Star model is unavailable, ask distributors and manufacturers for energy use information. Visit <http://www.fishnick.com/> to find energy-efficient models.

Q: Are there low- or no- cost strategies for saving money in a restaurant?

A: There are many ways to reduce energy use in a kitchen that cost very little. Here are some ways to consider:

- Turn off uninsulated holding cabinet when kitchen is closed (can save up to \$500 annually).
- Turn off an idle combination oven (can save \$400 to \$800 annually, assuming two hours cut daily).
- Cut idle broiler time (can save \$600 annually, assuming three hours of cut broiler time daily).
- Use auto mode on conveyor-style dishwashers.
- Make sure dishwasher pressure gauge is adjusted to manufacturer specifications (usually around 20 psi).
- Turn off dishwasher at night and replace any torn wash curtains or worn spray heads.
- Keep ice machine lid closed.
- Turn off door heaters on reach-in refrigerators and freezers, when possible.
- Set defrost timers.
- Operate dishwashers only when full.
- Allow air circulation behind refrigerators and insulate suction lines.
- Scrape and soak dishes instead of rinsing them with running water.
- Turn back water heater temperature to standard 125 to 130 degrees.
- Post signs in rest rooms and kitchen to encourage water conservation and report leaks to management.

Q. Are rebates available?

A. Some utilities offer rebates for more efficient commercial equipment and appliances. Contact Energy Smart for information about what your particular utility offers.

Have questions or need help? Call Energy Smart at (651) 292-4652.