



ENERGY SAVINGS TIPS

Energy efficiency can cook up big savings.

Most energy efficiency upgrades also improve:

- Customer and employee comfort
- Visual appeal
- Safety
- Indoor air quality
- Equipment life

RESTAURANTS



An IDACORP Company

BON APPETIT

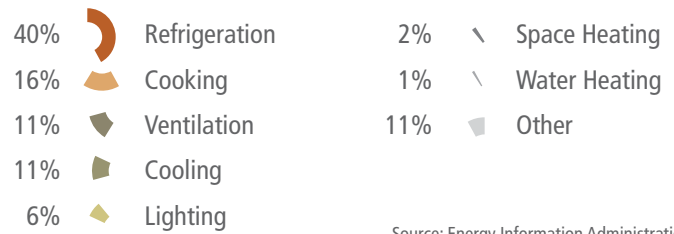
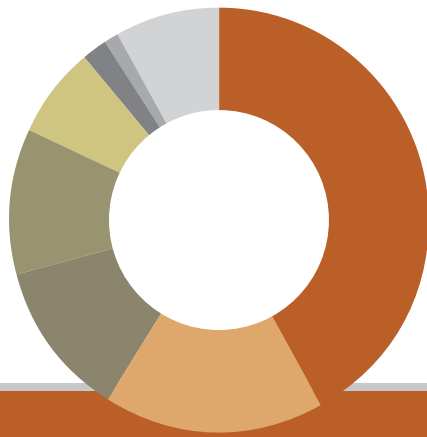
INCREDIBLY DELICIOUS FOOD

BURGERS

INCREDIBLY DELICIOUS FOOD

PIZZAS

Electricity Use in U.S. Restaurants



Source: Energy Information Administration 2012 Commercial Buildings Energy Consumption Survey

REFRIGERATION

- Use controllers on walk-in coolers and freezers to slow down or cycle off fans when they are not needed. Demand-based defrost systems can sense the optimal time to start and end defrost cycles. This saves energy and helps maintain the quality of products.
- Install variable-speed drives on air handlers, recirculation fans, evaporator fans, condenser fans and refrigeration compressors. They reduce motor speed based on load requirements and reduce energy use.
- Set temperature between -14 degrees and -8 degrees for freezers and between 35 degrees and 38 degrees for refrigerators.
- Keep evaporator coils clean. Dirt and ice build-up can make the refrigeration system work harder to maintain the same temperature.
- Seal refrigerator and freezer doors. Air gaps let warm air enter the refrigerator or freezer and make the system work harder. If you can slide a dollar bill between the door and the case, it is time to reseal the refrigerator or freezer.
- Invest in energy-efficient refrigerators, freezers and other appliances. A variety of ENERGY STAR® certified options are available.

KITCHEN EQUIPMENT AND OPERATIONS

- Think in terms of total life-cycle costs, which include purchase price, annual energy costs, maintenance and other long-term costs associated with the equipment. ENERGY STAR® certified appliances meet energy use standards and often require less upkeep than other equipment.
- Use a low-temperature dishwasher to save energy by reducing your heating load. Additionally, high-efficiency dishwashers typically use less water than standard systems, reducing water-related costs and chemical treatment bills.
- Low-flow, pre-rinse spray nozzles can remove food from dishes before washing while reducing the amount of water needed, saving water and water-heating energy.
- Buy appliances that match your needs on a pounds-per-hour basis. Oversized appliances cost more in capital and operating costs.
- Leaving equipment on standby costs money, so implement a startup/shutdown plan to ensure you use equipment only when you need it.
- Examine your cooking methods, equipment and menu to find ways to operate efficiently. Ovens tend to be more efficient than rotisseries, and griddles tend to be more efficient than broilers.
- Fix leaky gaskets, clogged burners, loose oven door hinges, missing knobs, water leaks, dirty evaporator and condenser coils and refrigerator doors that don't completely close.

Utility expenses make up **9%** of the operating expense for a restaurant.

Food service facilities use nearly **3X** more energy than other commercial buildings.

Nearly **2/3** of all energy use in restaurants comes from the kitchen.

Every **\$1** saved on energy in a restaurant is equal to selling an additional **\$20 to \$30** of food.

HEATING, VENTILATION AND AIR CONDITIONING (HVAC)

- Install a Building Automation System (BAS) to control HVAC systems. This allows for greater zone control by monitoring and adjusting lighting and HVAC equipment based on occupancy, environment and weather. According to the Department of Energy, a BAS can save 5 to 15 percent of the building's energy use with a cost of \$2 to \$4 per square foot.
- When the facility is unoccupied, raise the temperature during summer and lower it in the winter. You can also try small temperature changes during working hours. A one degree change is not harmful to health or comfort and is frequently unnoticed.
- Have a licensed professional check, clean, calibrate and lubricate your economizers once a year. Consider installing economizers on units that don't currently have them.
- New high-efficiency HVAC units can reduce cooling energy use by 10 percent or more. If your equipment is more than 10 years old, consider replacing it with more efficient equipment.
- Heat-recovery technology captures heat that would otherwise be lost and helps heat incoming water or air that would use electricity to heat. This technology shows good return on investment and reduces air conditioning load.
- Use variable air-volume hoods to reduce exhaust air while maintaining airflows.

LIGHTING

- Turn lights off or down, and look for opportunities to upgrade to more efficient lights. Lighting retrofits can save 25 to 90 percent on lighting costs and easily fit into routine maintenance. Interior lighting retrofits help reduce cooling costs during the summer.
- Upgrade to LEDs which can last up to 25 years and reduce energy use by over 90 percent. Don't forget about exterior lighting, such as parking lots, signage and building exteriors. If you haven't upgraded to LEDs, get a quote from a lighting vendor or contractor. Incentives are available and often lead to project paybacks of one to three years.
- Replace T12 fluorescent lamps and ballasts with T8 or LED products, which have a longer life and better light quality. Better light enhances food appearance and adds to the customer experience.
- Install occupancy sensors in rooms that are often unoccupied, like bathrooms and storage areas.
- Daylighting takes advantage of natural ambient light and reduces the amount of electric lighting needed. However, without lighting controls, daylighting may not save energy. Automatic photosensor controls that sense daylight help ensure electric lighting is reduced when enough daylight is available.



Other Opportunities

- Kitchen equipment performance changes over time. Thermostats and control systems can fail, fall out of calibration or readjust. Consider commissioning your building (evaluating and optimizing the building's operating systems) to help ensure it is functioning as intended.
- Restaurants may use unnecessary energy during off-hours. Idaho Power can provide hourly energy use information so you can investigate ways to reduce your use.
- Encourage employees to turn kitchen equipment off when not in use. Develop simple energy management procedures with schedules and checklists.

Additional Resources

- Register for **My Account** at idahopower.com/myaccount to pay your bill, get account information, understand your use and find more ways to save.

Idaho Power has programs available to help customers just like you save energy and money. To learn more, visit idahopower.com/business.



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