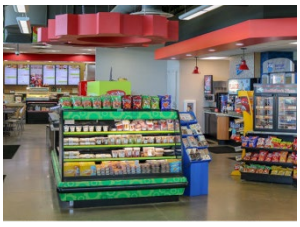
Energy Savings Tips for Small Businesses: Convenience Stores



As a convenience store owner/operator, you understand that energy management is a top priority in the success and sustainability of your business. Therefore, it's important to seek out new ways to reduce your daily energy usage, whether it's by optimizing current energy use or embedding energy awareness in your company's culture. These resources will help you improve the energy efficiency of your store.

- Benchmarking your store and ENERGY STAR certification opportunities
- Profiling your store's energy use
- Tips for saving energy and money at your convenience store
- Additional resources and links

Benchmarking your store and ENERGY STAR Certification opportunities

The first step to saving energy at your convenience store is to benchmark — that is, to measure and compare your energy to similar buildings, past consumption, or a reference performance level. Benchmarking turns the information on your utility bill into knowledge you can act on.

Portfolio Manager is an interactive resource management tool that enables you to benchmark the energy use of any type of building, all in a secure online environment. Nearly 25% of U.S. commercial building space is already actively benchmarking in Portfolio Manager, making it the industry-leading benchmarking tool. Learn more about benchmarking your convenience store with Portfolio Manager.

EPA worked with the National Association of Convenience Stores (NACS) to facilitate data collection used to develop a 1–100 ENERGY STAR score for convenience stores. Stores with a score of 75 or higher are eligible to apply for ENERGY STAR certification. ENERGY STAR certified buildings have lower utility bills as on average, they use 35 percent less energy than similar buildings nationwide.

- Read about the benefits of ENERGY STAR certified buildings.
- Download data collection worksheet to gather information for benchmarking your store in Portfolio Manager.

Profiling your store's energy use

The food-sales industry shares many of the energy-related challenges seen in other business sectors, such as lighting, heating and cooling, appliances, etc., but what sets it apart is its high dependence on refrigeration. For convenience stores, refrigeration may use up to 40 percent of the property's total energy. That's why it's important to maintain refrigeration systems and to learn about the multitude of energy efficiency options available in today's market. Better technology and improved practices can be applied to all types of refrigeration equipment, such as reach-in, walk-in, and under the counter refrigerators/freezers, as well as a multitude of food/drink storage units and display cases. The following tips are designed to help your store improve the efficiency of its refrigeration, thereby reducing operating costs, saving energy, and preventing pollution.

Tips for saving energy and money at your convenience store

EPA has worked with industry partners to provide both a quick checklist of energy-saving tips through the Convenience Store Treasure Map.

To help convenience stores access tools and resources to increase energy efficiency, NACS has a full suite of resources on their website—including a Treasure Map for Convenience Stores. Access NACS resources on convenience store efficiency.

The following are additional helpful tips designed specifically for convenience stores:

Refrigeration

- **Purchase** ENERGY STAR certified refrigerators and freezers which can save you energy and money over time. You may be able to find rebates for your purchase from ENERGY STAR Partners.
- **Keep the doors of all refrigeration and freezer units shut** as much as possible as repeated fluctuations in temperature will damage food quality and cost money.
- **Check the temperature settings of your units**. If the temperature is set lower than necessary, you are probably wasting energy. The most common recommended settings are between -14° and -8° Fahrenheit for freezers and between 35° and 38° Fahrenheit for refrigerators.
- **Clean the cooling coils on the backs of all units**. Over time, dirt accumulation impairs proper heat transfer and lowers the efficiency and capacity of refrigerators. As you clean dirt and dust, watch for ice accumulation on coils and remove that as well.
- **Ensure that the door seals on your units close tightly**. Having tight seals and properly closing doors prevents warm air from entering the unit, reducing energy required for cooling as well as preventing frost build up. Use this rule of thumb: If you can easily slide a dollar bill into the seal, have the seal adjusted.

Lighting

Changing over to ENERGY STAR-qualified LED lighting can deliver the following benefits.

- **Reduces energy costs** — uses up to 90% less energy than incandescent lighting, saving on operating expenses.
- **Reduces maintenance costs** — lasts 35 to 50 times longer than incandescent lighting and about 2 to 5 times longer than fluorescent lighting. No bulb-replacements, no ladders, no ongoing disposal program.
- **Reduces cooling costs** — LEDs produce very little heat.
- **Is guaranteed** — comes with a minimum three-year warranty — far beyond the industry standard.
- **Offers convenient features** — available with dimming on some indoor models and automatic daylight shut-off and motion sensors on some outdoor models.
- **Is durable** — won't break like a bulb.

In addition to bulbs and fixtures themselves, your store can employ lighting controls and/or sensors to reduce energy use.

Heating and Cooling

Although heating and cooling systems provide a useful service by keeping customers and employees comfortable, they also can account for a significant portion of a building's energy use. For more information, see the ENERGY STAR Guide to Energy Efficient Heating & Cooling (PDF, 1.4 MB). Here are some tips you can employ in your retail space:

- **Change your air filter regularly**. Check your filter every month, especially during heavy use months (winter and summer). If the filter looks dirty after a month, change it. At a minimum, change the filter every three months. A dirty filter will slow down air flow and make the system work harder to keep you warm or cool—wasting energy.
- **Tune up your HVAC equipment yearly**. Just as a tune-up for your car can improve your gas mileage, a yearly tune-up of your heating and cooling system can improve efficiency and comfort. Use the ENERGY STAR Maintenance Checklist as a guide.
- **Install a programmable thermostat**. A programmable thermostat is ideal for areas that are unoccupied during set periods of time throughout the week. Rooms that have minimal traffic (such as stock rooms and warehouses) should be kept cooler in the winter and warmer in the summer.
- **Seal your heating and cooling ducts**. Ducts that move air to-and-from a forced air furnace, central air conditioner, or heat pump are often big energy wasters. Sealing and insulating ducts can improve the efficiency of your heating and cooling system by as much as 20 percent and sometimes much more. See the ENERGY STAR Duct Sealing Fact Sheet (PDF, 787 KB) for more information.

Resources and Links

This section includes online resources that can help you and your employees learn more about energy use and energy efficiency.

- ENERGY STAR Commercial Food Service
- ENERGY STAR Maintenance Checklist

- ENERGY STAR Commercial Refrigerators and Freezers (PDF, 600 KB)
- ENERGY STAR for Commercial Refrigerators and Freezers
- ENERGY STAR Guide to Energy Efficient Heating & Cooling (PDF, 1.4 MB)
- ENERGY STAR Duct Sealing Fact Sheet (PDF, 787 KB)
- ENERGY STAR Rebate Finder
- Air Conditioning, Heating, and Refrigeration Institute (AHRI) (link is external)