

# Toolkit Assessment for Food Shelf Energy Use

Saving money on your electricity bill can be as easy as cleaning equipment and forming new habits. This is a list of things you can do to improve your food shelf's energy efficiency.

# AN IMPORTANT FIRST STEP IS TO GET AN ENERGY AUDIT

An energy audit is a review of your facility by a professional which includes recommended actions and projects. Talk to your gas or electric utility providers and visit CERTs' Energy Assessment & Benchmarking: https://www.cleanenergyresourceteams.

https://www.cleanenergyresourceteams. org/energy-assessment-benchmarking

## **BUILDING ENVELOPE**

-windows, doors, walls, and roofs that separate the inside and outside of a building-

## **Actions to Take**

- Inspect doors and windows to find gaps or cracks. These air leaks can be weather-stripped, caulked, or filled with foam insulation. Visit the Department of Energy's Weatherstripping webpage: https://www.energy.gov/energysaver/ weatherstripping
- Use window shades to maintain indoor temperature. In winter, close shades at night and open shades on sunny days. In summer, close shades on sunny days.
- Keep doors closed to the outside. Also, keep doors closed to any areas that are not heated or cooled.

## **Items to Consider Purchasing**

- Weather stripping or caulk to ensure cold air doesn't slip through in the winter and hot air doesn't slip through in the summer.
- Window film to put over windows to prevent cold coming inside in the winter.
- Window shades to block out the sun's heat in the summer and retain building heat in winter.

# REFRIGERATION

## Actions to Take

- Set refrigeration to energy-saving and food-safe temperatures. Recommended temperatures are 35-38 degrees Fahrenheit for refrigerators and 0 degrees for freezers.
- Identify leaky refrigerator and freezer doors. Close the door on a piece of paper, and if it is easily pulled out, replace the seal/gasket.
- Check that refrigerator cooling coils are clean. Use a vacuum or duster to remove built-up dust and debris at least once per year.
- Defrost the inside of your freezer or refrigerator. If your freezer or fridge regularly ices up, then at least once per year, unplug it, and leave the doors open for a day or two to fully thaw out. Once all ice has melted, plug it back in and make sure it is fully cooled before putting food in it again.
- Move refrigeration units away from heat sources.
  Sources of heat might include heating system vents, radiators, cooking appliances, or even the sun's warmth from a nearby window.
- Use the power saver feature on refrigerators when available.
- Unplug unused refrigerators or freezers. Be sure to prop doors open when unplugged.
- Use refrigerator anti-sweat feature only when necessary. This feature is only needed when there is high humidity in the facility's air.

### **Items to Consider Purchasing**

- Refrigerator/freezer thermometers to confirm the units are set to the correct temperature.
- Seals/gaskets to keep cold air inside the refrigerator/ freezer.
- Open fridge covers to keep food cool outside of distribution times.
- Open door alarms to prevent cold air loss if the door is accidentally left open.
- Conductivity-based anti-sweat control to automatically shut off the anti-sweat device when not needed.



When buying equipment or lighting, **check for the ENERGY STAR logo** – this means it is recognized as an energy-efficient model. You can find lots of rebates for ENERGY STAR products using the ENERGY STAR Rebate Finder: https://www.energystar.gov/rebate-finder

## **OFFICE EQUIPMENT**

## **Actions to Take**

- Activate power management settings on office equipment. Visit ENERGY STAR's Activate Power Management on Your Computer webpage for directions: https://www.energystar.gov/products/low\_ carbon\_it\_campaign/power\_management\_computer. Other equipment like monitors, printers, and copiers may have these settings available, too.
- Identify equipment left on overnight. Equipment left in sleep, idle, or "screen saver" mode still use energy. Form habits to turn off equipment when not in use.

## **Items to Consider Purchasing**

- Power strips to more quickly turn off many plugged-in devices at once at the end of a day.
- Smart power strips to automatically turn off computer accessories (monitor, speakers, printer) once the computer is powered down.

## **HEATING AND COOLING**

### **Actions to Take**

- Stop using individual space heaters. While they seem like a solution to heating small spaces, space heaters are very inefficient and are a fire hazard.
- Regularly maintain your heating, ventilation, and air conditioning (HVAC) systems. If you do not have staff trained to do this, have an annual maintenance contract to "tune up" HVAC during both fall and spring seasons. Use ENERGY STAR's HVAC Maintenance Checklist: https:// www.energystar.gov/campaign/heating\_cooling/ maintenance\_checklist
- Replace furnace filters monthly. This will improve the efficiency of the furnace, extend its life, and reduce dust in the facility.
- Program your thermostat to heat or cool at specific times. A smart thermostat can be programmed to cool or heat spaces in advance rather than maintaining a constant temperature. Visit ENERGY STAR's Programmable Thermostats: https:// www.energystar.gov/products/heating\_cooling/ programmable\_thermostats

## **Items to Consider Purchasing**

- Smart thermostat to program your heating and cooling times instead of maintaining a constant temperature.
- Air source heat pump to replace or supplement your heating or cooling system. Learn more at CERTs' Air Source Heat Pumps: https://www.cleanenergyresourceteams.org/ashp

### **MORE INFORMATION**

### CERTs can help you with solar:

https://www.cleanenergyresourceteams.org/simple-steps-solar

**Citizens Utility Board of Minnesota** does utility bill consultations for food shelves. Contact them at info@cubminnesota.org or (651) 300-4701.



# LIGHTING

### **Actions to Take**

- Eliminate "day-burners." Exterior and parking lot lighting should only be on at night. If they are on during the day, establish a practice of turning them off each morning or check for a failed or dirty light sensor.
- Consider using automated lighting controls. These best fit low traffic spaces with lights that are routinely left on (restrooms, storage areas, hallways, etc). Visit ENERGY STAR's Smart Lighting: https://www.energystar.gov/products/smart\_home\_ tips/smart\_lighting
- Replace incandescent or fluorescent lighting. Consider opportunities to upgrade to LED lighting from incandescent and fluorescent fixtures in areas where the lighting is most used.

### **Items to Consider Purchasing**

- LED lighting to replace inefficient incandescent lighting. Check out ENERGY STAR's Upgrade Your Lighting: https://www.energystar.gov/buildings/ save\_energy\_commercial\_buildings/ways\_save/ upgrade\_lighting
- Automated lighting controls:

- Motion or occupancy sensors - for low-traffic areas.

- Daylight sensors - to turn off exterior and parking lot lights during the day.

- Timers - to turn on or off lights under a set schedule.

- Dimming controls - in locations where natural lighting (windows, skylights, light tubes) is available or where less than full brightness is needed (hallways).