Helpful Household Energy Saving Tips

When purchasing a new appliance, ask your dealer about the high-efficiency electric models. Be familiar with the Energy Guide and Energy Star Labels. Contact Waseca Utilities at 835-9718 for information on rebates available to utility customers on the purchase of energy-star rated appliances, air conditioners and LED lightbulbs. For more energy-saving tips, visit <u>www.energystar.gov</u>, <u>www.energyhog.org</u>, <u>http://hes.lbl.gov</u> and <u>www.smmpa.com</u>.

Refrigerators/Freezers

- Place refrigerators and freezers away from sources of heat such as stoves, clothes dryers, dishwashers, heating systems, and direct sunlight.
- Replace door gaskets when they become hard or out of shape. A tight seal will minimize air leakage.
- Vacuum or dust external coils at least once a year.
- Defrost freezers before the ice becomes 1/4 inch thick.
- Fill refrigerators and freezers to capacity, but avoid blocking air circulation.

Washers/Dryers

- Use hot water only for heavily soiled or greasy clothes and for sanitation purposes.
- Wash only full loads or match the water level to the load size.
- Use cold water in the rinse cycle.
- Dry full loads of clothes and avoid over drying clothes.
- Vent dryers to the outside to avoid moisture build-up inside the home. Dryers operate less efficiently when they use moist air to dry clothes.
- Make sure exterior dryer vents close tightly when not in use.
- Keep lint filters and exterior dryer vents clean.

Dishwashers

- Pre-rinse only when necessary and then use only cold water.
- Operate the dishwasher only for full loads.
- When time allows, air dry the dishes.
- When washing the dishes by hand, avoid running the water continuously to rinse dishes.

Ranges/Ovens

- Use cookware with smooth, flat bottoms and tight-fitting lids.
- Use range-top elements that match the size of the pan you are using. This permits a more efficient transfer of heat.
- Cook foods in covered cookware to retain heat. This will enable you to cook at lower temperatures.
- Turn elements off a few minutes early and allow retained heat to continue cooking the food.
- Thaw frozen foods in the refrigerator before cooking. This can reduce cooking time by as much as 50%.
- Rely on the oven thermostat and recipe time when baking or roasting food. Opening the oven door can lose up to 20% of the heat.
- In many cases, microwave ovens use less electricity than conventional ovens, because they cook faster at lower wattage. The microwave oven is more efficient when used to cook small to medium amounts of moderately moist food.
- Never use an oven as a heater. It is inefficient, expensive, and dangerous for your family.

Water Beds

- Keep your water bed covered with a comforter or bedspread. An uncovered water bed uses up to one third more energy to maintain the desired temperature.
- Placing a water bed in an unheated room or on a cold basement floor can reduce efficiency and greatly increase costs.

Lighting Energy-Saving Tips

Lighting efficiency is expressed in lumens per watt— the amount of light produced from each watt of electrical power consumed. Replacing a bulb with one that produces more lumens per watt can provide you with the same amount of light for less money. Remember, efficient light sources may cost more initially, but the cost is soon paid back in longer life and lower operating costs. With energy-efficient lighting, you'll save money. For example, a 75 watt incandescent bulb which lasts 750 hours can be replaced by an 18 watt LED lightbulb which lasts 7000 hours. You save 57 watts every hour the light is on. In eighteen hours you save 1000 watts. In one year you save 125 kWh (about \$21.00) when the bulb is used six hours a day. That's a big savings!

- Keep light fixtures clean and use translucent lamp shades with white linings for greater efficiency.
- Consider using LED lights. LED lighting produces three to four times more light per watt than incandescent lighting and usually lasts ten times longer.
- Install dimmer switches to control lighting levels and energy use.
- Save energy by using low wattage light bulbs in areas where minimum lighting is needed.
- Get into the habit of turning off lights when they are not in use.

Heating/Cooling

When buying new space heating or cooling equipment, check the efficiency rating. Heating efficiency is expressed as Annual Fuel Utilization Efficiency. Cooling efficiency is expressed as the Energy Efficiency Ratio or the Seasonal Energy Efficiency Ratio. In all cases, the higher the rating, the greater the system's efficiency.

- Use properly sized heating and cooling equipment. Oversized equipment reduces operating efficiency.
- Seal up your home. Install adequate amounts of insulation in the walls and attic. Weatherstrip and insulate the attic entrance.
- Close dampers on unused fireplaces and install draft barriers to prevent heat loss through the chimney.
- Set thermostats conservatively. Lowering the thermostat setting in winter and raising it in summer reduces heating and cooling costs by as much as 3% per degree.
- Install a programmable thermostat. Recommended settings are 68 degrees during times when you are at home, and 58 degrees when you are away or asleep.
- Ventilate your attic. Adequate ventilation is necessary for the efficient cooling of your home.
- During cold weather, open the drapes to let in the sun's heat. Close them at night.
- During hot weather, close the drapes to keep out the sun's heat.
- Arrange furniture and drapes so that air circulation will not be obstructed around heating and cooling sources.

Water Heater Improvements and Tips

The following improvements are proven measures that will save on <u>electric</u> water heating costs.

- If indicated in the owner's manual, insulate your water heater with a vinyl-backed insulating water heater blanket. Water heaters should be insulated to a minimum R-value of R-10.
- Insulating hot water pipes wherever they are accessible will reduce heat loss and save energy cost.
- Install water-saving showerheads and faucet aerators.
- Take a shower instead of a bath. The average person uses about half as much hot water in a shower as in a bath.
- While you are on vacation for two days or more, a water heater utilizes energy keeping stored water hot. If you are going to be away for two days or more, it pays to turn off the water heater.
- Select a water heater with insulation R-value levels of R-10 or greater.
- Locate water heaters within the heated living space and as close as possible to areas needing hot water to minimize heat loss and save energy cost.

Water Heater Maintenance

- Repair leaky faucets. A slow drip can boost your hot water consumption 15%.
- Disconnect the power to the water heater and drain the water out of the water heater once a year until it is free of sediment. Deposits build up on heating elements and can decrease the system's efficiency, and could cause the water heater element to burn out faster.
- Some water heaters contain a sacrificial rod (anode rod) that is destroyed by chemicals in the water. When the rod is eaten away, the chemicals attack the tank and fittings. This rod should be examined every five years and replaced if necessary.
- If you run out of hot water sooner than usual, have the thermostats and elements in your tank checked and replaced if necessary.