

USING ELECTRICITY AT HOME

Energy-Saving Tips and Safety Information





Using Electricity at Home

- Introduction 3**
- How to Save Energy and Money 4**
 - Cooling 4
 - Lighting..... 5
 - Weatherizing 6
- Electrical Appliances 8**
 - Refrigerator/Freezer 8
 - Oven/Microwave..... 9
 - Dishwasher 9
 - Clothes Washer/Dryer..... 10
- A Quick Start to Online Resources 14**

INTRODUCTION

Dear Xcel Energy Customer:

We're glad to have you as one of our customers, and we want you to know that providing you with helpful information on saving energy and money is one of our primary goals. Using less energy helps you save money, conserve natural resources and reduce power plant emissions. Saving energy can be as simple as turning off a light when you leave a room or opening your windows on a cool night. You'll save even more when you invest in weatherizing your home or choosing energy-efficient appliances. It all adds up to savings on your monthly energy bill.

We'll all benefit from a more energy-efficient world and a cleaner environment, and this guide will get you started on saving energy today. Included are:

- A range of tips that will help you save energy around your home every day
- Information about online resources found at xcelenergy.com that will help you do a more thorough analysis of your home's energy efficiency
- A chart that helps you estimate the costs to operate common household appliances and compares them with the costs of operating energy efficient models

Keeping you and your family safe is also important to us. So we've included a number of tips throughout the guide to refresh your memory on how to stay safe around the energy we supply to your home.

And, finally, we've listed our company contact information in the back of the guide. Keep it handy so you can contact us in the case of an emergency. You can learn more about all our programs and services by calling us at 1-800-895-4999 or by visiting us online at xcelenergy.com.

Best regards,
The Employees of Xcel Energy





Saving money is top-of-mind for many of us. Here are some things you can do at home to save on your monthly energy bill.

HOW TO SAVE ENERGY AND MONEY

Cooling

Plant Trees for Shade

Deciduous trees—those that produce leaves in the spring and lose them in the fall—shade your house from the sun during warmer days and let the sun warm your house on cooler days. Shading your home could save up to 8 percent on cooling costs.

Open Windows on Cool Nights

On cool days and nights, turn off your air conditioner and open your windows. Don't open windows when the outside temperature is warmer than the inside of your house.

INDOOR SAFETY TIPS

▶ Shop Only For Approved Electric Appliances

Look for the Underwriters Laboratories Inc.® (UL) seal on the electric appliances you consider for purchase. Remember to follow all manufacturers' directions to keep appliances in safe working condition.

Replace Worn Electric Cords ◀

Cords that are cracked and brittle qualify as worn. Those that run under rugs, in doorways or along walkways can wear out quickly and cause accidents.

SAFETY
TIPS

Change Your Air Conditioning Filter

Clean or replace your central air conditioner's filter monthly during the cooling season to improve the efficiency and extend the life of the unit.

Keep Air Conditioning Coils Dust-Free

Keep the coils of your central air conditioner and/or window air conditioner unit free of dust and dirt to increase efficiency and extend the life of the equipment.

Match the Output of Your Air Conditioner to the Space You Cool

When you buy an air conditioner—central air or window unit—make sure the output of the system is right for the size of the room or the size of your house to ensure efficiency and comfort. Check the manufacturer's recommendations or consult with a reputable vendor in advance to ensure proper sizing.

Provide Shading for Your Air Conditioning Condenser

Your central air conditioner's condenser works more efficiently in a cooler environment. Provide shade around your air conditioner to reduce your cooling costs by nearly 3 percent.

Use Ceiling Fans to Cool Your House

The most efficient ceiling fans cost as little as 30 cents a month if used eight hours a day. A window air conditioner can cost 50 times as much as a fan. Ceiling fans will keep the air moving and allow you to keep the thermostat setting higher because moving air feels cooler.

Consider a Whole House or Attic Fan

Through your open windows, a whole house or attic fan draws in cool nighttime air and forces out hot air that builds up during the day.





Raise Your Thermostat Setting

You can save \$25 or more each month during the summer by raising your thermostat's temperature from 72 to 78 degrees.

Use a Programmable Thermostat

This device can save as much as 12 percent on cooling costs by automatically turning your cooling system up or down to coincide with your daily routine. For example, set your temperature to 85 degrees when you're away.

Lighting

Turn Off Lights When You Leave a Room

Every time you turn off lights when they're not needed, you're saving energy and money. Keeping one 75-watt bulb off for one hour a day can save \$2.46 a year.

Use Three-Way Bulbs to Increase Light And Reduce Energy

Three-way bulbs reduce energy use by providing the right amount of light where it's needed instead of over-lighting with a single high-wattage bulb.

Install Compact Fluorescent (CFL) Bulbs Where You Can

Over the life of one CFL bulb, you could save approximately \$55. Just a handful around the house and you could notice a difference in your energy bills. They cost a bit more, but you'll change them less often and they produce little or no heat.

Install Dimmers and Motion Sensors Where Possible

Dimmer switches can extend bulb life up to 20 times longer if dimmed to half the brightness. Motion sensors give you light when you need it.

Install Motion Detector Lights for Outdoor Lighting

Motion detectors put light where you want it for brief periods of time to provide safety and security for your property.

Run Washing Machines, Dishwashers, and Clothes Dryers with Full Loads

Get in the habit of running full loads to maximize energy savings.

Weatherizing

Seal Household Window Drafts

Older homes, in particular, can benefit during winter from covering windows with plastic film. Home improvement stores carry easy-to-install window-sealing kits. You'll block out drafts and could save more than \$40 on your energy bill in one heating season.

Control Air Leaks in Your Home

Plug gaps around pipes, ducts and vents that go through walls to prevent losing heated air and having cold air drawn in to replace it. Caulk or seal plumbing and wiring holes at ceiling level. Add weather-stripping to doors and windows for the most cost-efficient way to protect your home.

Install Window Coverings to Insulate Your Home

During winter days, open curtains, blinds and shades to heat your home with solar power. Close them at night to retain the heat. In summer, do the opposite: close curtains and shades during the day to retain cool air and reduce the burden on your air conditioner.

OUTDOOR SAFETY TIPS

▶ Never Trim Trees Tangled In Power Lines

Wood can conduct electricity if the tree is damp; even the sap can carry a current.

▶ Have A Professional Trim Trees Near Pole-To-House Power Lines

You should never attempt to trim trees around power lines yourself. Most of these lines are fully energized and extremely dangerous. You may hire a qualified professional tree trimmer to do this work in some areas. Call Xcel Energy at 1-800-895-4999 to request that your pole-to-house line (service wire/loop) be temporarily disconnected while your trees are professionally trimmed.

SAFETY
TIPS



ELECTRICAL APPLIANCES

Look for the ENERGY STAR® Label

When purchasing appliances, cooling equipment, lighting or home electronics, choosing energy-efficient products can save you money in the long run and help to preserve our natural resources. Visit www.energystar.gov for more information.

Refrigerator/Freezer

Cover Refrigerated Foods

Covered foods can reduce power consumption by limiting moisture evaporation into the air. Moist air takes more energy to cool than dry air, forcing the compressor to work harder.

Clean Your Refrigerator Coils

Once a year, pull out your refrigerator and clean or dust the coils located on the back of the refrigerator. Clean coils help the compressor cool faster and run less frequently, which extends the life of your refrigerator and reduces energy use.

Buy the Smallest Freezer You'll Need

Because a freezer operates most efficiently when full, buy the smallest freezer you think you will need.

Set Your Refrigerator at the Right Temperature

Your refrigerator temperature should be set between 34 and 37 degrees and your freezer at 5 degrees. Not only are these the safest temperatures for food storage, but most refrigerators are manufactured to operate most efficiently at these settings.



Oven/Microwave

Defrost Food Before Cooking And Pre-Heat Only For Baking

Save 30 to 50 percent on cooking costs by defrosting your food before cooking. Your food will cook faster. Pre-heating is important for baking, but if you're reheating a casserole or cooking a roast, pre-heating isn't necessary.

Retain Oven Heat with a Good Door Seal

Gently clean the seal on your oven door with kitchen degreaser to ensure that it retains the maximum amount of heat when baking.

Keep the Oven Door Closed

Every time you open the oven door, the oven temperature can drop 25 degrees. Use the oven light or a timer to avoid wasting energy.

Use Lids and Turn Off Electric Burners Early

Use lids to trap steam and help food cook faster. If you're cooking with an electric range, you can turn off the burners a few minutes early because the burners retain heat.

Use Small Appliances

Use an electric skillet, broiler oven or toaster oven instead of your conventional oven for cooking and baking small quantities. These may use just half the energy.

Use Heat-Producing Appliances When It's Cooler

To keep your home cooler during summer, use heat-producing appliances at cooler times of the day, such as early morning and at night. On warm days, instead of using your range or oven, use your toaster oven, microwave and outdoor grill to keep your home cool and use less energy.





Dishwasher

Scrape, Don't Rinse Your Dishes

Scrape your dishes instead of rinsing to save water and the energy needed to heat the water.

Run Your Dishwasher Only When It's Full

Get in the habit of running your dishwasher only when it's full to maximize energy savings.

Air-Dry Your Dishes, Even in the Dishwasher

Air-dry the dishes or use the unit's energy-saving features. Avoid using the heat-dry, rinse-hold and pre-rinse features.

Choose a High-Efficiency Dishwasher

High-efficiency dishwashers, such as those with internal water heaters and load sensors, use over 40 percent less energy than conventional models. You can save more than \$30 a year by replacing a 15 year-old dishwasher with a high efficiency model.

OUTDOORSAFETYTIPS

▶ Teach Children Not To Climb Or Play Near Power Lines

Instead, teach them to fly kites, planes and other aerial toys in open fields, far away from overhead power lines. They should never attempt to retrieve toys or pets from trees near power lines.

▶ Look Up And Around Before Casting A Fishing Line

Never cast fishing lines near overhead power lines, and do not attempt to retrieve lures that become entangled in them.

▶ Keep Tall Work Equipment Away From Power Lines

Have someone guide you when raising any tall object. Items such as ladders, pipes, scaffolds and antennas should be kept at least 10 feet from power lines.

SAFETY
TIPS

Clothes Washer/Dryer

Run Full Loads of Laundry and Shorten Wash Cycles

Run full loads of laundry to maximize energy and water use. In addition, most loads require only an eight- to 12-minute wash cycle. Use your custom load features to reduce wash time.

Wash Clothes in the Coolest Water Possible

About 80 percent of the cost to run your washer is used for heating the water. Except for all-white loads, there is little benefit to washing in hot water.

Dry Loads Back-to-Back

Since your dryer retains heat, dry several loads in a row. You can reduce the heat level on the last load or two. Dry your lightweight items together using a lower heat setting for less time.

Clean Your Dryer Filter and Exhaust Vent

Regularly clean out your dryer filter and exhaust vent. When they become clogged with lint, your dryer works harder and uses more energy.

OUTDOOR SAFETY TIPS

▶ Use A Fire Extinguisher Made For Electrical Fires

If an appliance catches fire, unplug it or switch off the power at the circuit breaker. Then call 911 and report an electrical fire. After this, douse the appliance with a fire extinguisher rated "Class C" (for electrical fires). If the fire is still beyond your control, evacuate to a safe place and allow professional firefighters to control the blaze.

▶ Prepare Your Own Power Outage Kit

Occasionally, power can be knocked out. If it happens to you, make sure you have easy access to a flashlight, extra batteries, a battery-powered radio, a first aid kit, water, canned food and a manual can opener.

SAFETY
TIPS



- Use the following chart to see how much energy is used and how much it costs to operate household appliances. These costs are estimates, and the actual costs to operate the appliances in your home may vary.

Appliance and Description	Model Type	Monthly kWh	Monthly Usage Cost
Electric Water Heater (household of four, 90 gal/day)	Standard	488	\$43.92
	Efficient	477	\$42.93
Refrigerator/Freezer (25 cubic feet side-by-side w/ icemaker)	Standard	99	\$8.91
	Efficient	54	\$4.86
Refrigerator/Freezer (20 cubic feet top/bottom)	Standard	76	\$6.84
	Efficient	42	\$3.78
Freezer (14 cubic feet, frost-free)	Standard	54	\$4.86
	Efficient	49	\$4.41
Dishwasher (home w/ electric water heater average 18 washes/month)	Standard	48	\$4.32
	Efficient	36	\$3.24
Electric Range (typical monthly usage)	Standard	161	\$14.49
Microwave (@ 15 minutes/day)	Standard	11	\$0.99
Toaster (@ five minutes/day)	Standard	4	\$0.36
Clothes Washer (home w/ electric water heater, average 33 washes/month)	Standard	96	\$8.64
	Efficient	51	\$4.59
Electric Clothes Dryer (25 loads/month, one hour each)	Standard	106	\$9.54
Lighting – 18-watt compact fluorescent (one month @ eight hours/day)	Standard	4	\$0.36
Lighting – 75-watt incandescent (one month @ eight hours/day)	Standard	18	\$1.62
Electric Space Heater (hourly usage, 80-square-foot space)	Standard	15	\$1.35

*The chart above compares energy-efficient appliances to standard, non-energy efficient appliances. Purchasing high-efficiency appliances, often certified by ENERGY STAR® can save you 30 percent or more on your energy costs. ENERGY STAR appliances meet the government's energy-efficiency rating.

A QUICK START TO ONLINE RESOURCES

Go to xcelenergy.com/infosmart to find:

Home Energy Analyzer –

Your source for personalized recommendations on how to save energy and money

Energy Calculators –

Tools to find out how much energy your appliances use and to help you choose energy-efficient appliances

ENERGYsmart University –

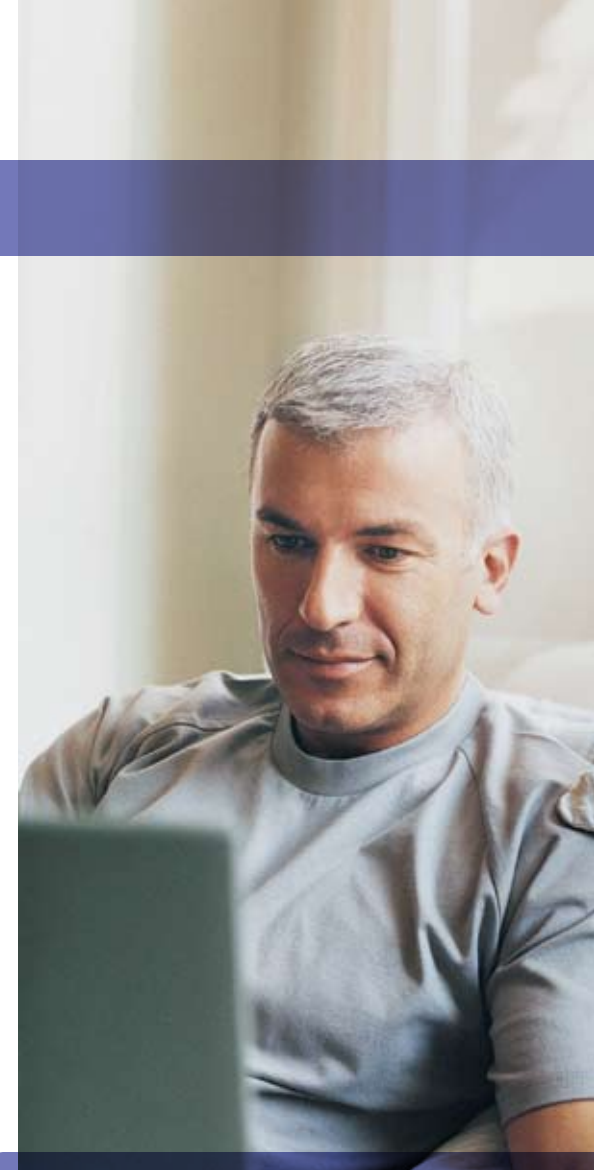
A virtual college campus that focuses on energy-related issues

ENERGYsmart Library –

A place to look up energy-related items

Put your home to the test. Take advantage of our online information to learn more about energy and how you can save on a daily basis. Visit xcelenergy.com today to get started.

For other energy savings information, visit xcelenergy.com/energysavings.





XCEL ENERGY CONTACT INFORMATION

24-Hour Emergency

Electric Emergency/Power Outage **1-800-895-1999**

Gas Emergency/Gas Odor **1-800-895-2999**

Residential/Home Office

24-Hour Customer Service and Billing **1-800-895-4999**

TDD/TTY Support **1-800-895-4949**

Product Sales and Information **1-800-824-1688**

Para esta información en español **1-800-895-4999**

Business

Customer Service and Billing **1-800-481-4700**

Internet & E-mail Inquiries

Web site **xcelenergy.com**

Residential/Home Office **inquire@xcelenergy.com**

Business **bsc@xcelenergy.com**

Payment Address

Xcel Energy

P.O. Box 9477

Minneapolis, Minnesota 55484-9477

OTHER INFORMATION SOURCES

American Gas Association: www.aga.org

The U.S. Department of Energy: www.doe.gov

The Environmental Protection Agency: www.epa.gov

The ENERGY STAR® program: www.energystar.gov

Assumptions

The calculations in this guide assume that the price of electricity for consumers is \$0.09 per kilowatt-hour, excluding state taxes, municipal taxes and other local fees.

Energy savings are based on an average kilowatt-hour cost across Xcel Energy's service area.

Appliance information represents an array of household appliances, including ranges, ovens, microwave ovens and other small appliances. Individually, these appliances account for no more than 2 percent of typical household energy.



1-800-895-4999
xcelenergy.com

© 2009 Xcel Energy Inc.
Xcel Energy is a registered trademark of Xcel Energy Inc.
Northern States Power Company - Minnesota,
an Xcel Energy Company

09-08-508 CRS 1954



Printed with soy-based ink on recycled paper certified in accordance to the Forest Service Council standards. FSC certification ensures that this paper contains fiber from well-managed and responsibly harvested forests that meet strict environmental and socioeconomic standards.