



# Energy Conservation 101

## Energy for All

This information has been designed to help you take a look at your household's energy usage, so you can design an energy-saving plan that works for you. The energy usage tips provided here can be put into action right away at no-cost; others may take some time. We hope you will find this information useful and encourage you to share it with a friend or neighbor.



### Start Saving Right Now!

- ☐ Microwave ovens may reduce your overall cooking energy requirements by about 15% to 20%. For items particularly suited to microwave cooking, savings may be greater. Microwave ovens can keep your kitchen cooler in the summer, too.
- ☐ Fluorescent lighting is more economical watt for watt than incandescent bulbs. Fluorescents give twice the light for the same wattage as incandescent and last up to 10 times as long as ordinary bulbs. They're cooler, too. Use deluxe warm white fluorescent lamps for home use. They blend with incandescent and create a warm, pleasant atmosphere of good color fidelity. Adapters are now available to convert table lamps to use fluorescent lamps.
- ☐ The wattage of a bulb does not measure the amount of light it gives but simply the amount of power it uses. Light is measured in lumens, which are marked on each bulb's package. Read bulb packages carefully to get the most light for the same wattage.
- ☐ Leaking faucets are annoying and wasteful. Always turn spigots off and replace worn washers quickly. Ninety drops of water per minute add up to 212 gallons of water down the drain in one month.
- ☐ Sweep driveways and sidewalks, don't hose them - water is too valuable to use in this manner.

### Efficiency Check-Up

--- Start saving right now! Give your home an energy efficiency check-up.

#### A Comfortable Home

- ☐ Set air conditioning thermostat at 78°.
- ☐ Set heater thermostat at 68° during the day.
- ☐ Set heater thermostat at 55° during the night.
- ☐ Heat or cool only the rooms you use.
- ☐ Keep drapes closed during the day in summer and open in the winter.
- ☐ Keep doors and windows closed when heating or cooling.
- ☐ Clean (or replace) heater and air conditioner filters monthly.
- ☐ Dress for comfort. Wear warm clothes in the winter and cool clothes in summer.
- ☐ Shade windows in summer.
- ☐ Weatherize your home.

#### In The Kitchen

- ☐ Cover season's pots and pans when cooking.
- ☐ Preheat oven only when necessary.
- ☐ Keep oven door closed - repeated "peeking" wastes heat.
- ☐ Reduce heat after cooking starts.
- ☐ Turn off appliances when not in use.
- ☐ Use small cooking appliances.
- ☐ Plan one-dish meals, or prepare several meals at one time.

#### Laundry Tips

- ☐ Organize laundry for full loads.
- ☐ Don't overwash; a 5-10 minute cycle is sufficient.
- ☐ Wash in warm water. (when applicable)
- ☐ Clean washer and dryer lint filters after each use.
- ☐ Dry laundry outdoors when possible - it's free!
- ☐ Don't preheat iron - press light garments as iron warms.
- ☐ Turn iron off as soon as you've finished pressing garments.

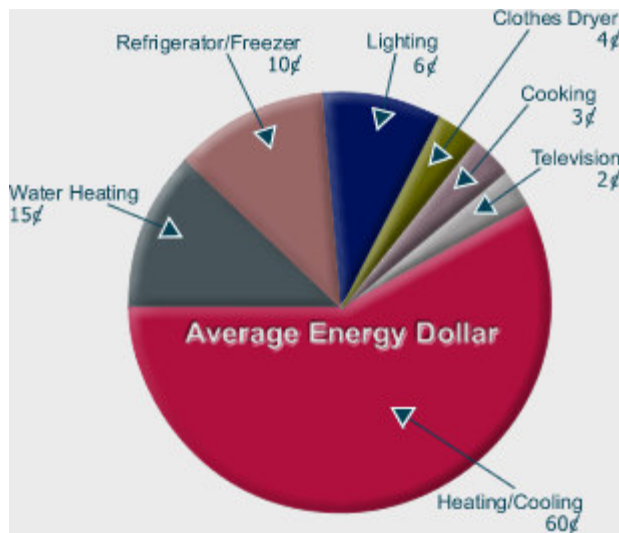
#### Energy - Conscious Living

- ☐ Lower water heater thermostat to 110° (between Med-Low).
- ☐ Insulate exposed hot water pipe.
- ☐ Install water-saving restrictors on all showers and faucets.
- ☐ Fix leaky faucets.
- ☐ Use low wattage light bulbs.
- ☐ Turn off unnecessary lights.
- ☐ Don't let water run when washing or shaving.
- ☐ Wrap water heater with insulation blanket.
- ☐ Turn furnace "pilot" off.

There are countless ways to save energy and saving energy means saving money! Follow these simple tips to conserve - it's easier than you think to do your share!

## Typical Ways Electricity is Used in the Home

This shows typical Electricity costs for common home appliances. Your actual costs will vary based on factors such as your appliance models and usage, your home size and insulation, and the weather.



**Cost of electricity based on 12¢ per season's kWh.**

### Other Energy Dollars

Electricity is purchased from the local utility company in kilowatt hours (kWh), which is equal to the use of 1000 watts for one hour. Installing energy efficient appliances and lighting fixtures that require lower wattage for operation translates directly into lower electric bills. Less electricity used each month means savings at the end of the month, every month. It's that simple.

#### -- More average Energy Dollars.

- Personal Computer - 6¢ or less/hour
- Hair Dryer - 1¢ /5min
- Vacuum Cleaner - 6¢ or less/hour
- VCR - .005¢ /Hour (45 watts)
- Microwave - .05¢ /15min (1500 watts)

## Plan Ahead - A Budget Can Help

If you find yourself letting bills sit unopened for days, you are not alone. There are many individuals who face the same problem that you do. You will need to make some arrangements to ensure that you will be able to handle utility bills, housing costs and daily living expenses. The suggested follow-up includes:

### Utilities

Each company has its own procedure to follow before disconnecting service. The procedure generally includes notification by mail before service is turned off. **If you are having problems paying your utility bills, call each company before you get behind in payments.**

### Gas

The gas company will usually work with you to set up a payment plan. Before service is stopped for nonpayment of bills, the gas company will usually send you three notices and a representative will visit the residence.

### Electric

The electric company may or may not be willing to make payment arrangements. Be sure to at least ask. If you do not pay your bill when due, a past due notice will usually be sent once the bill is two weeks old. Service is stopped if the bill is not paid by the date on the past due notice.

## Telephone

If you are having difficulty paying your telephone bill, you should contact your local telephone business office to make arrangements for continued service. Individuals who have had phone service for a long period of time and have always paid their bills will usually be allowed to make arrangements for service. Even if you have had problems paying your bill in the past, notify the business office. If they know your problem, you have a better chance of ensuring that phone service will be continued.

## Paying your bills

**If you have not paid your bill, the swiftness of cut-off will depend on:**

1. Your past record of payment
2. Your length of service and,
3. the average size of your bill

**You can expect quick action if...**

1. You have a poor record of paying bills with the local company
2. Your bill is much larger than season's usual
3. You have lived in the area a short time, and
4. company efforts to reach you by mail or phone have failed

**These conditions mean you are considered a risk and service may be disconnected – temporarily or permanently. To get service again you will probably have to pay...**

1. Any past-due bill
2. A deposit
3. Reconnect charges after a permanent disconnect
4. Service fees or other charges

## Housing

**Rent Payment --**

If your income has decreased, discuss the problem with your landlord. The landlord may be willing to negotiate a revised payment schedule or accept partial payment for 1 or 2 months. You might look for less expensive housing, but remember there will be moving expenses, deposits, and other personal adjustments to make. The disadvantages might outweigh the advantages of moving to less expensive housing.

**House Payment --**

Creditors usually do not want to foreclose on the mortgage. Foreclosure takes time and may or may not result in the creditors recouping their investment when this property is resold at auction.

**What to do...**

1. Try to work out a payment plan with your lender to cover you until you are better off financially. The lender may suggest interest only payments for a few months or allow you a few months of skipped payments. **Before you start skipping payments, be sure this is agreeable with the lender.**

2. You may want to consider selling if your decrease in income is permanent or could continue for a long time. Seek sound advice first and find out if you will gain by selling and if you will be able to find suitable housing for less.



## SPACE HEATING AND COOLING

In the heating season, set your thermostat at 68 degrees or lower during the day. Keep warm indoors by wearing warm clothing, especially several light-weight layers.  
Savings 5-20 percent

☐ In the heating season, set your thermostat back to 55 degrees before you go to bed at night or when you'll be away from home for more than season's four hours. (Heat pumps should only be set back five degrees to prevent unneeded use of backup strip heater.)  
Savings 10-20 percent

☐ In the cooling season, set your thermostat at 78 degrees or higher when you're at home.  
Savings 10-20 percent

┆ When you're away from home during the cooling season, set your air conditioner at 85 degrees.  
Savings 5-12 percent

☐ Provide shade for your air conditioning condenser.  
Savings 5-11 percent

☐ Plug any leaks in your heating or cooling system ducts. Also fix leaks in water / steam heat pipes.  
Savings 2-3 percent

┆ Insulate attic access and basement trap doors with R-19 insulation.  
Savings 1-3 percent

┆ Use clear plastic sheets to insulate windows during the heating season.  
Savings 2-7 percent

┆ Use insulation shutters or drapes and keep them closed during winter nights and summer days.  
Savings 8-15 percent

☐ Repair any holes in your roof, walls, doors, ceilings, windows and floors.  
Savings up to 10 percent

┆ Plug gaps around pipes, ducts, fans and vents that go through walls, ceilings and floors from heated to unheated spaces.  
Savings 1-3 percent

☐ Seal off electrical receptacle and switch boxes with foam gaskets or fiberglass insulation.  
Savings 1-3 percent

┆ Keep your furnace clean, lubricated and properly adjusted. And remember to clean or replace the filter regularly.  
Savings up to 5 percent

☐ Turn off your furnace pilot light during the non heating season.  
Savings 3-9 percent

☐ Turn your heater(s) down when you're using your fireplace. And don't forget to close the damper when you're not using the fireplace.  
Savings 2-8 percent

☐ Close off heating or cooling to rooms and areas that don't need it if your home has zoned or individual room controls.  
Savings up to 10 percent

## WATER HEATING

☐ Set your water heater thermostat to 120 degrees, or 140 degrees if you have a dishwasher.  
Savings 7-11 percent

┆ Install low-flow showerheads and faucets or flow restrictors. Try to reduce your hot water use in other ways, too.  
Savings 5-10 percent

## APPLIANCE AND LIGHTING

☐ Follow the next four tips for major appliances.  
Savings 5-10 percent

☐ Washer: Use cold water when possible. Wash full loads.

☐ Dryer: Line dry clothes (especially towels) whenever you can. When you use your dryer, dry full loads.

┆ Refrigerator / Freezer: Open doors only when necessary and keep the coils (on the back or the bottom of the appliance) clean.

☐ Dishwasher: Always wash full loads and air dry dishes on the "energy saver" setting.

☐ Select the most energy efficient model when buying a new appliance.  
Savings 5-25 percent

☐ Remove operating second refrigerator or freezers.  
Savings up to 30 percent

☐ Use dimmer switches and/or timers on lights.  
Savings 7-10 percent

☐ Replace incandescent bulbs with fluorescent lamps.  
Savings 30-38 percent

┆ Turn off lights whenever they're not needed.  
Savings depend upon your current energy practices.

## OTHER

┆ Follow the next two tips for pool equipment.  
Savings 4-7 percent

┆ Keep pool cleaning and heating equipment clean and lubricated.

☐ Reduce-pool water temperature and the number of months you heat your pool.

☐ Use foam pads and side insulation on waterbeds, and turn the heater down.  
Savings up to 5 percent

## TIME-OF-USE RATE (TOU)

┆ This optional rate can save you money if you can shift your appliance use to off-peak hours. Off-peak hours are between 6pm and noon weekdays and all day Saturday and Sunday. Savings depend on your use.

┆ If you install a time clock so your electric water heater operates only during off-peak hours, you can save even more with TOU rates.

☐ Switch pool filter and sweeper operations to off-peak hours.

## PRACTICE CONSERVATION

┆ Practice water conservation in your home and garden.  
Savings depend on your use.

┆ Recycle glass, aluminum and newspaper at your local recycling center. Not applicable to your gas and electricity savings.

## NOTE:

These are typical savings for the typical household. The savings percentages apply only to the category of energy use. For example using fluorescent lamps saves 30 to 38 percent of your lighting bill, not your total electric bill. The figures cannot be added to find your total savings.