




# Energy Conservation

Simple but Effective  
Strategies to

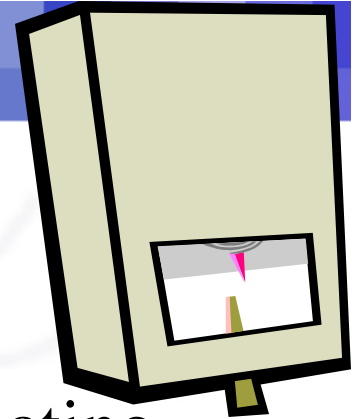
**"Save Energy and Save  
Money"**



# Have an Energy \$mart Winter

- Interested in learning how to save energy? You've come to the right place. This slide show contains fun facts and great tips to lower your energy costs this winter!
  - Its a good time to check smoke and carbon monoxide detectors and replace old batteries. Remember - as you seal up leaks in your home this becomes even more important.
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# Winter Energy Savings Tips



- Use a programmable thermostat with your heating system to adjust the setting at night or when no one is home. Thermostats should be set at the national standard of 68 degrees.
- Clean and Tune your heating systems to maintain the efficiency rating of the system. If you heat with oil C&T every year. If you heat with gas, C&T every two years. A good heating system should be maintained at 75% efficiency or higher.




# Winter Energy Savings Tips

- Keep the warm air in and the cold air out by adding insulation, caulking around the windows, cracks in walls and around baseboards, adding door bottoms and replacing old weather-stripping around doors will keep cold air from coming in and hot air from escaping out.
  - Install outlet insulators to outlets and switch plates.
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# Winter Energy Savings Tips

- Foam – use foam to fill in open cavities in wall openings. (in basement by passes, i.e.: plumbing, electrical, and duct systems by passes).
  - Outlet insulators – reduce drafts from outlets and switch plates.
  - Windows may save you energy however the payback is much longer making the project much more expensive. (if buying, make sure they are double pane and contain low gas).
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# Winter Energy Savings Tips

- Use foam to fill in open cavities in wall openings (in the basement around all by passes, i.e.: plumbing, electrical, and duct systems by passes.
  - Replacing broken windows and placing plastic sheathing around picture frames, will keep cold air from entering the living space of your home. (keeps drafts out).
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# Winter Energy Savings Tips

- Insulate your Hot Water Heater with hot water wrapping to maintain water temperature in the tank from fighting the elements around it. Set temperature @ 115 degrees.
  - Wrap all pipes (hot and cold) to prevent pipes from loosing heat or freezing.
  - Install aerators to faucets to reduce water flow and consumption to (1.5 gal. per minute).
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# Winter Energy Savings Tips

- Install showerheads to reduce water consumption in half to (2.5 gal. per minute).
  - Make sure floor & wall vents are not blocked by draperies, furniture, or rugs. Vents should also be cleaned regularly with a vacuum or broom.
  - Keep blinds and drapes of sun-exposed windows open in the daytime and closed at night.
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# Winter Energy Savings Tips

- When the fireplace is not in use, keep the flue damper tightly closed.
  - If you have a forced-air heating system, check your air filters once a month and replace if dirty.
  - Make sure outdoor portions of your heating system are not blocked by leaves, shrubbery, or other objects.
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# Winter Energy Savings Tips

- If you have a window air conditioning unit, remove it for the winter months to prevent heat from escaping through and around the unit. If it can't be removed, buy an inexpensive cover to prevent drafts.
  - Install rubber gaskets behind outlets and switch plates on exterior walls. Gaskets can be found in most home improvement stores.
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# Home Energy Use


## DID YOU KNOW?

- You could use 30% LESS energy in your home just by using energy more wisely and purchasing products with the ENERGY STAR ® label. You can find the ENERGY STAR on [refrigerators](#) , [clothes washers](#) , computers, [dishwashers](#) , [room air conditioners](#) , TVs, VCRs, dehumidifiers, lighting, ceiling fans, and more!
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# Home Energy Use

## Where does your home use energy?

- 60% - Air conditioning/heat
  - 16% - Water heater
  - 12% - Refrigerator
  - 7% - Lights
  - 5% - Computers, TV, etc.
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# Home Energy Use

- The amount of electricity you use is measured in, and priced by, kilowatt-hours (kWh). When you pay for a kilowatt-hour of electricity, you are paying for 1,000 watts of electricity used continuously for one hour.
  - You can calculate the operating cost of any electrical appliance by checking its wattage and using these formulas:
    - wattage x hours used/1,000 = kWh
    - kWh x cost per kWh = operating cost
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# Home Energy: Lighting


## Did you Know?

- Replacing your current incandescent light bulbs with compact fluorescent light bulbs (CFLs) will save you nearly \$30 over the life of each bulb.
  - ENERGY STAR CFLs use 66% less energy than a standard incandescent bulb and last up to 10 times longer.
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# Home Energy: Lighting

## Did You Know?

- ENERGY STAR® lighting fixtures put out the same amount of light as standard fixtures while providing excellent color rendering and light temperature. Colors appear true and natural.
  - ENERGY STAR fixtures operate at much lower temperatures than many traditional lamps, drastically reducing the risk of fire in your home.
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# Lighting Energy Savings Tips

- Turn off unused lights and electronics (TVs, radios, computers) when you leave a room.
  - Use timers on indoor and outdoor lights.
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# The Attic Energy Savings Tips

- Insulate your attic.
  - Install a vapor barrier in your attic to reduce the flow of moisture from inside your home through the insulation. This eliminates condensation that reduces insulation efficiency.
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# Home Energy: Laundry

- 90% of the energy used for washing clothes is for heating the water.
  - [ENERGY STAR® clothes washers](#) use 50% less water than standard models, saving about 7,800 gallons a year per household.
  - They also use 55% less energy, saving you approximately \$110 a year (depending on the water temperature setting and whether it's an electric or natural gas hot water heater).
  - In addition, ENERGY STAR clothes washers extract more water from clothes during the spin cycle. This reduces the drying time and also saves energy.
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# Laundry Energy Savings Tips

- Only wash and dry full loads.
  - Always rinse in cold water.
  - Hang your laundry outdoors to dry.
  - Remove the lint from your dryer screen.
  - Make sure the clothes dryer exhaust is not blocked.
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# Home Energy: Refrigerator

## Did You Know?

- Your [refrigerator](#) uses the most electricity of all the appliances in your home.
  - ENERGY STAR qualified refrigerators require about half as much energy as models manufactured in 1993.
  - ENERGY STAR refrigerators have better insulation and efficient motors, as well as all the features you want and expect.
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# Energy Savings Tips: Refrigerator

- ENERGY STAR qualified refrigerator models use at least 15 percent less energy than required by current federal standards and 40 percent less energy than the conventional models sold in 2001. Get more info on [ENERGY STAR refrigerators](#).
  - Regularly clean the condenser coils of your refrigerators that are typically located underneath or behind the refrigerator.
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# Energy Savings Tips: Refrigerator

- Make sure the seals on your refrigerator, freezer and oven doors fit tightly. Easily perform this test by leaving a lit flashlight inside a closed appliance and if you see light around the gasket, replace the gasket.
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# Home Energy: Dishwasher

## Did You Know?

- [refrigerators](#), [clothes washers](#), computers, [ENERGY STAR® dishwashers](#) are at least 25% more energy efficient than standard models.
  - Replacing a dishwasher manufactured before 1994 with an ENERGY STAR qualified dishwasher can save you more than \$25 a year in energy costs. Plus, ENERGY STAR models use much less water than conventional models.
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# Energy Savings Tips: Dishwasher

- Run your dishwasher only when full.
  - Air dry the clean dishes by turning the energy-saver switch on.
  - Scrape - do not rinse! Scrape your dishes before loading the dishwasher. Pre-rinsing is no longer necessary with today's technology and detergents. You may be using more water to pre-rinse your dishes than the dishwasher uses for a full wash cycle!
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# Home Energy: Home Office

## Did You Know?

- In the average home, 75% of the electricity used to power home electronics is consumed while the products are turned off. Home electronic products use energy when they're off to power features like clock displays and remote controls. Those that have earned the ENERGY STAR use as much as 50% less energy to perform these functions, while providing the same performance at the same price as less-efficient models.
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# Energy Savings Tips: Bathroom

- Use your exhaust fans sparingly. In just one hour they can remove a houseful of warmed or cooled air.
  - Repair all leaky faucets. One drop per second can waste as much as 10 gallons of water in a week.
  - Take showers rather than baths. A typical shower requires only half as much hot water as an average tub bath.
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# Brought to you by the Orange County Energy Task Force



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