



REDUCE YOUR ENERGY COSTS!

Tips to Save \$ and Decrease Pollution

Natural-gas prices are rising. The U.S. Department of Energy estimates that homeowners are projected to have average heating bills of \$1,003 this winter, up 15 percent from last year. A report published by the Consumer Federation of America recently found that “domestic energy price shocks have increased household energy bills by 25 percent” over the past four years.

A triple whammy of increased demand for natural gas by power plants, reduced supply, and damage to oil and gas-producing derricks caused by hurricanes in the Gulf of Mexico will keep oil and gas prices rising this winter.

As energy costs continue to rise, energy waste hits us in the pocketbook while also degrading our environment with pollution that causes health problems like asthma and mercury contamination and contributes to the serious issue of global warming.

What can you do? Below are a few suggestions.

Tips for saving energy in your home:

1. **Change incandescent light bulbs to compact fluorescent bulbs**, especially any bulbs that are on for 4 hours or longer each day.
 - Incandescent bulbs waste 90% of their energy as heat.
 - CFLs use only about 25% of the energy that an incandescent light bulb uses to create an equal amount of light.
 - Compact fluorescents last about 13 times longer!
 - If every American home replaced just one incandescent with a compact fluorescent, we could save enough energy to shut down one Chernobyl-sized nuclear power plant!
2. **Weatherize your home** – seal the envelope of your home to prevent loss of heated and cooled air through cracks and openings into the walls and exterior of your home.
 - Use caulk to seal any gaps or cracks around windows and doors
 - Caulk around any pipes under your kitchen and bathroom sinks where there is a gap.
 - Put weatherstripping on your doors and windows to seal them more effectively
3. **Insulate your home** – insulation such as fiberglass batting or cellulose to help hold in the heated air in the winter and the cooled air in the summer
 - R-40 in attic
 - R-20 under house if raised house
4. **Water heating** – as much as 30% of your energy costs
 - Hot water heater blanket
 - On-demand hot water heater – Aquastar – saves \$80-\$100/year – about \$150-200 more expensive, pays off in only a couple of years.
 - Solar hot water heating – let the sun heat the water for you
5. **Radiant Barrier** – installed in your attic reflects about 90% of the sun’s heat back out, significantly reducing the need for air conditioning in the summer
6. **Attic tent** – helps to insulate above your attic door, a spot where you would otherwise not have insulation between your house and attic
7. **HVAC** (heating ventilation and air conditioning) system

- Try to **purchase the most efficient HVAC system you can** – must be at least 12 SEER (Seasonal energy efficiency rating), but go as high as you can afford as you will see the difference in savings on your utility bill over time.
 - Make sure your **ducts are well sealed** with Mastic (not duct tape) and are insulated.
 - **Set your thermostat at 78 degrees in the summer and 68 degrees in winter.** Every degree = substantial savings on your energy bill. Using a fan requires much less energy and makes it feel cooler even at higher temperatures.
 - **Don't heat or cool your home when you're away.** Turn down your thermostat to about 7 degrees cooler in winter and warmer in summer while you are away during the day. Better yet, purchase a **programmable thermostat** and set it to the proper temperature when you are home and to about 7 degrees toward outside temperatures while you are away. You can then set it to turn back 20 minutes before return home, so it is comfortable when you get there.
8. **Energy Efficient appliances** – look for appliances with the **Energy Star** logo. These energy efficient appliances use a lot less energy than the standard and are generally of better quality and can trim your bills.
- Sponsored by the Energy Department, the program promotes energy-stingy products that could **save an average household \$400 a year.**
 - If they need replacing or updating, **target the biggest home-energy users:** Your furnace/air conditioning, lighting and refrigerators.
 - **Replacing old air conditioners and furnaces with Energy Star units,** for example, **can save 20 percent to 40 percent** on your power bills, according to the Alliance to Save Energy (<http://www.ase.org>), an energy conservation group.
 - **Sleep is good – for you and your computer!** Set your computer to sleep mode, when it's not in use, rather than using a “screen saver”. Screen savers use a lot of energy.
 - Of course, the most efficient way to dry your clothes is by using the sun. You can also use outdoor grills more to cook in the summer so you don't heat up your home.
9. **Reduce “phantom loads”** – TV, DVD players, VCRs and other electronics can use as much energy as if they were turned on all the time. To stop this waste, plug these devices into a power strip with an on/off switch and turn it off when you're not using them. Be sure to turn off all appliances and lights when not in use.
10. **Keep direct sun out**
- **Plant trees** around your home to shade it from the sun. On the south side of your home, plant trees that lose their leaves in the winter, so that the sun can shine in and warm your home in the winter and shade it in summer.
 - **Put overhangs and awnings over windows** and French doors, especially on the south side of your home, to block direct sunlight when the sun is higher in the sky in the summer, but allow in the sun in the winter.

Tips to save gas and money at the pump:

1. **Keep your car properly tuned up and change the air filter regularly,** both to save gas and protect your engine.
2. If you own more than one vehicle, **drive the one that gets better gas mileage** whenever possible.
3. **Avoid aggressive driving,** such as speeding, rapid acceleration, and rapid braking. It wastes gas and decreases your gas mileage by as much as 33 percent at highway speeds, according to the U.S. Department of Energy (DOE).

4. **Don't speed!** Speeding wastes gas - and your money. Each mile per hour you drive over 60 mph is like paying an extra 10 cents per gallon, DOE says.
5. **Inflate tires to the proper setting** - not only to increase fuel economy, but also to make tires safer and extend their life.
6. **Avoid idling**, which gets 0 mph. Cars with larger engines typically waste even more gas at idling than cars with smaller engines.
7. **Use the recommended grade of motor oil** to maximize fuel economy. Look for the "Energy Conserving" label that ensures friction-reducing additives inside.
8. **Combine your errands into one trip and plan your routes carefully** to drive fewer miles and use less fuel.
9. If available, **use your vehicle's overdrive gear when appropriate** to reduce engine speed, save gas, and decrease engine wear.
10. If you're cruising down the highway, **use cruise control** to maintain a steady speed and help cut fuel consumption.
11. **Pack lightly** when traveling, and avoid carrying items on your vehicle's roof.
12. **Carpool and use public transportation** whenever possible.
13. **When buying a new vehicle, think high gas mileage.** Check out the Department of Energy (DOE) website (www.fueleconomy.gov) and the ACEEE website (www.greencars.com) for information on fuel-efficient vehicles.
 - Hybrid Cars, such as a Toyota Prius, Honda Civic and Accord hybrid qualify for a **\$2,000 federal-income-tax deduction** in 2004.
 - These vehicles attain as much as 60 miles a gallon, your **gasoline bill can be reduced by at least a third compared with a conventional sport-utility vehicle.**
 - That means **spending only \$350 to \$450 a year on gas versus more than \$1,200 for a conventional SUV.**
 - A hybrid electric increases fuel efficiency by **combining a regular gas engine with an electric motor** and battery pack.
 - You **don't have to plug it in**; it recharges the battery pack by using the energy that is normally wasted when you slow down or break to generate electricity back to the batteries.
 - In a Prius, the **engine turns off** when you come to a stop, so it uses no gasoline.
 - They're **reasonably priced**, costing \$20-21K, especially when you consider the \$2K income tax deduction.
14. Of course, the best way to save gas is to **get your exercise!** Whenever possible, walk or ride a bike to your destination. You'll be healthier, save gas and money, and reduce pollution all at the same time.
15. Last, but definitely not least – **urge your elected officials to support policies that promote energy efficiency, renewable energy, auto fuel efficiency, and climate stewardship!**