

# Energy Efficiency Tips for Consumers

## Energy Efficiency Tips to Make Your Home (and Your Wallet) More Comfortable

Most Americans have chosen to live in homes and apartments that feature the comfort and convenience of natural gas heat. Fifty-one percent of all heated American households feature natural gas heat, and 60 percent of all new single-family homes heat with gas. Natural gas is the consumer's best energy value – costing less than electricity, propane and heating oil, according to the U.S. Department of Energy (DOE). Everyone likes to save money – so here are some steps consumers can take to use energy more wisely and better manage the costs of keeping their homes and families warm.

### Keep the Cold Out

Consumers can take easy, inexpensive steps to reduce household energy consumption and minimize energy loss. Reducing air leaks could cut as much as 10 percent from an average household's monthly energy bill. For example, consumers can:

- Seal leaks around doors, windows, and other openings such as pipes or ducts, with caulk or weather-stripping. According to the DOE, the most common places where air escapes in homes are:
  - floors, walls, ceilings (31 percent)
  - ducts (15 percent)
  - fireplaces (14 percent)
  - plumbing penetrations (13 percent)
  - doors (11 percent)
  - windows (10 percent)
  - fans and vents (4 percent)
  - electric outlets (2 percent)

### Use Energy Wisely

- Set thermostats between 65 and 70 degrees during the winter, and at 58 degrees when away from the house for more than a few hours. While sleeping, add an extra blanket for warmth. Bear in mind that warmer temperatures are recommended for homes with ill or elderly persons or infants.
- Turn down thermostats automatically without sacrificing comfort by installing a programmable thermostat.

**BIG SAVINGS:** Cut annual heating bills by as much as 10 percent per year by turning your thermostat back 10 percent to 15 percent for eight hours per day.

- Change or clean furnace filters once a month during the heating season. Use receipt of your natural gas bill as a reminder.
- Warm air rises, so use registers to direct warm air-flow across the floor.
- Close vents and doors in unused rooms and close dampers on unused fireplaces.
- Set water heater temperatures at 120 degrees. A family of four, each showering for five minutes a day, uses 700 gallons of water each week. By lowering the thermostat on the water heater to 120 degrees, families can cut water heating bills without sacrificing comfort.
- Insulate water heaters with insulation “blankets,” in accordance with the manufacturer’s guidelines.

**BIG SAVINGS:** Insulating water heaters and turning down the unit’s thermostat to 120 degrees can help you save money, since water-heating is a typical family’s third-largest energy expense, accounting for about 14 percent of utility bills.

- Install water-flow restrictors in showerheads and faucets.
- If radiators are located near cold walls, place a sheet of aluminum foil between the radiator and the wall to reflect heat back into the room.
- Run washing machines and clothes dryers with a full load.
- On sunny days, open draperies and blinds to let the sun’s warmth in. Close them at night to insulate against cold air outside.

## Plan for Long-Term Energy-Efficiency Improvements

- Conduct a “Home Energy Audit” to determine specific household conservation needs. To find out how, contact your local gas utility for information or visit DOE’s “Do It Yourself Home Energy Audit” feature, (<http://apps1.eere.energy.gov/consumer/>).
- Check to see if attic and basement have the recommended levels of insulation.
- Check the heating system and replace old, outdated appliances with high-efficiency natural gas models. When buying new appliances, compare energy efficiency ratings and annual operating costs.
- Install storm or thermal windows and doors or double-paned glass. A less expensive alternative is plastic sheeting, which can be temporarily fastened over doors and windows to prevent drafts and retain heat.

## Bill-Payment Programs

Most natural gas utilities offer billing arrangements or assistance programs designed to help consumers better manage their energy bills. Contact your local gas utility for more information.

## Special Assistance for Low-Income Households

Low-income households spend a far higher proportion of their incomes on energy. On average, low-income households spend 10 percent of their annual income on energy, in contrast with the average 3.1 percent spent on energy by others. More than 90 percent of low-income households have annual incomes of less than \$15,000.

To help reduce this burden, the DOE's Weatherization Assistance Program (<http://apps1.eere.energy.gov/weatherization/>) helps eligible households conserve energy. To be eligible, a household must have annual income at or below 150 percent of the federal poverty level, or 60 percent of the state's median income (whichever is higher). Following weatherization, the average household saves about 25 percent on their heating bills.

Services provided under the DOE Weatherization Assistance Program:

- Professionally trained crews weatherize single-family homes, multifamily dwellings and mobile homes. Examples of energy-saving measures include installation of insulation and ventilation fans, heating and cooling tune-ups and modifications, replacement of units for energy efficiency and safety, air sealing and energy-efficient lighting.
- Computerized energy audits and advanced diagnostic equipment are used to identify energy-saving measures that are cost effective or essential for health and safety.
- Tips to help consumers understand how to use and maintain their homes and appliances to use energy wisely.

## Sources for Further Information on Using Energy Wisely

When it comes to useful information on using and saving energy, the American Gas Association's energy conservation "tips" are only the tip of the iceberg. Below are informative Web sites on forecasted energy prices, detailed home energy conservation strategies and energy-efficient home improvement materials. These sites can help utilities and their customers prepare for the winter heating season.

- [www.aga.org](http://www.aga.org): AGA's Web site is an invaluable resource for understanding the benefits and availability of clean, safe, reliable natural gas energy.
- [www.energysavers.gov](http://www.energysavers.gov): DOE's Web site is a comprehensive guide to all forms of energy supply, demand and usage; it also features energy conservation tips.
- [www.eia.doe.gov](http://www.eia.doe.gov): DOE's Energy Information Administration (EIA) issues a monthly "Short-Term Energy Outlook" that projects supply, demand and price trends for natural gas, electricity, petroleum and other forms of energy.
- <http://www.eere.energy.gov/>: DOE's Energy Efficiency and Renewable Energy Clearinghouse lists energy consultants, conservation tips, and other information on DOE programs to promote energy efficiency and renewable energy.
- [www.energystar.gov](http://www.energystar.gov): This Environmental Protection Agency (EPA) Site enables consumers to gauge the energy efficiency of many of their home appliances and to research EPA-sponsored Energy Star energy-efficient appliances.

- <http://apps1.eere.energy.gov/weatherization/>: For low-income consumers, this site explains the DOE's Weatherization Assistance Program.
- [www.ase.org](http://www.ase.org): The Alliance to Save Energy regularly posts information for consumers to help them save money, increase comfort and reduce pollution through energy efficiency.

For product information on insulation and weatherization supplies visit:

- <http://www.ahrinet.org/>: Air-Conditioning, Heating, and Refrigeration Institute
- [www.aham.org](http://www.aham.org): Association of Home Appliance Manufacturers
- [www.nahb.com](http://www.nahb.com): National Association of Home Builders
- [www.cellulose.org](http://www.cellulose.org): Cellulose Insulation Manufacturers Association
- [www.insulate.org](http://www.insulate.org): Insulation Contractors Association of America
- [www.naima.org](http://www.naima.org): North American Insulation Manufacturers Association
- [www.nwwda.org](http://www.nwwda.org): National Wood Window & Door Association