

# FTC FACTS for Consumers

ftc.gov

FOR THE CONSUMER

FEDERAL TRADE COMMISSION

1-877-FTC-HELP

## Heating and Cooling Your Home



**H**eating and cooling systems are some of the most important investments you'll ever make in your home. Whether you're buying a new house, renovating an old one, or making an emergency purchase because "old faithful" finally conked out, a lot is riding on the choices you make: Your comfort and safety are at stake, and so is your money.

According to the Department of Energy (DOE), about 45 percent of your utility bill typically goes toward "space conditioning," or heating and cooling your home. While the purchase price of the equipment and cost of repairs and maintenance are important to consider, so is the operating cost of the system. By choosing the most energy-efficient equipment that meets your needs and fits your budget, you may be able to lower those hefty space conditioning costs.

The Federal Trade Commission, the nation's consumer protection agency, wants you to know that it enforces the Appliance Labeling Rule, which requires EnergyGuide labels on certain appliances, including room and central air conditioners, furnaces, boilers and heat pumps. The labels let you know how energy efficient a model is compared to others like it.

# Facts for Consumers

## **Why should you care about energy efficiency?**

The more energy efficient a system is, the less it costs to run and the lower your utility bills. Using less energy is good for the environment, too; it can reduce air pollution and help conserve natural resources.

## **Is there much of a difference among the various models on the market?**

All products have to meet minimum energy efficiency standards set by the federal government. But many products beat those standards, use even less energy and cost less to run.

## **How can you tell how efficient a system is?**

Retailers and contractors that sell heating and cooling systems (central air conditioners, furnaces, boilers and heat pumps) are required to let you know about a product's energy use and energy efficiency before you buy it. They can use a website, fact sheet, brochure or directory. If a seller hasn't pointed out this information, be sure to ask about it. Manufacturers have to provide it on EnergyGuide labels on their products.

The Energy Star logo is a key indicator of efficiency, too. When you see it, it means the product meets strict energy efficiency criteria set by the Environmental Protection Agency and DOE. Learn more at [energystar.gov](http://energystar.gov).

## **What makes one system more efficient than another?**

Most of the differences are on the inside — in the motors, compressors, pumps and valves. So even if two models look alike from the outside, these internal features can mean a big difference in your monthly utility bills.

## **How can you be sure claims about energy efficiency aren't just sales hype?**

Manufacturers use standard tests developed by DOE to measure the efficiency of their products. The test results are reported on the EnergyGuide

label for each product. If you can't see the EnergyGuide label when you're making your decision, a seller should have the information in a fact sheet, brochure or directory.

### **How Do You Say "Efficiency"?**

When it comes to talking about energy efficiency, heating and air conditioning systems have a language all their own...

If you're referring to furnaces and boilers, it's "annual fuel utilization efficiency," or AFUE.

For room air conditioners, it's "energy efficiency ratio," or EER.

For central air conditioners and heat pump cooling, it's "seasonal energy efficiency ratio," or SEER.

For heat pump heating, it's "heating seasonal performance factor," or HSPF.

Regardless of the acronym, a higher number means a more efficient system.

## **Before You Buy a New Heating or Cooling System...**

**Do a home energy audit.** An energy audit is a careful look at your home to see how efficient your heating and cooling systems are and where your home is wasting energy — say, through air leaks or under-insulated attics and ducts. Your utility company may offer free or low-cost energy audits, or it may be able to recommend a local company or organization to do it. You also can check with your state or local government energy or weatherization office. A professional audit with special equipment like blower doors and infrared cameras can cost between \$300 and \$800. Before you hire a company to do your audit, get several references to contact, check out the company with the Better Business Bureau to see if there's a history of complaints, and make sure the auditor uses a calibrated blower door and does thermographic inspections or else contracts

another company to do them. Expect to come away with recommendations for specific fixes and improvements you can make to save energy.

If your budget doesn't allow for a professional audit, you can do a basic energy audit yourself. For more on what to look for, visit DOE's Office of Energy Efficiency and Renewable Energy (EERE) at [energysavers.gov](http://energysavers.gov), or use the online audit tool at [hes.lbl.gov](http://hes.lbl.gov).

**Weatherize your home.** Caulk, seal and weather-strip air leaks around windows, doors and cut-throughs for plumbing, ducting or electrical wiring. Check existing seals for gaps or cracks, and repair leaky ducts. While you may try doing some minor repairs yourself, consider hiring a professional to do more extensive repair work.

If your energy audit reveals inadequate insulation levels in your home, you can bring them up to DOE-recommended levels. These fixes may allow you to install a smaller, less expensive heating or cooling system to get the same results.

**Compare the performance and operating cost of different brands and models.** Study the product literature, and do some research. Will the product do the job? What's its repair history? Will it handle your needs today? Ten years from now? Does it fit your budget?

Look at each product's energy use, as well. The more energy an appliance uses, the more it costs to run. Ask to see the fact sheets, brochures or product directories that tell you about a product's energy use and energy efficiency so you can compare among models. Retailers and contractors selling these systems are required to have this information. The difference on your monthly utility bill can be significant, especially over the lifetime of the product. Choosing a more energy efficient model, even if it costs more at first, saves you money over time.

**Ask about special energy efficiency offers.** Ask your local utility or system salesperson about cash rebates, low-interest loans, tax breaks or other

incentives in your area for buying energy-efficient products — and how you can qualify.

### **Tips for Lowering Your Monthly Energy Bill**

Being an energy-smart consumer means getting the most from the energy you use:

- Lower your thermostat in winter and bump it up in summer before you go to sleep and before you head out for the day. Even easier, install a programmable thermostat that does it automatically.
- Clean or replace filters for forced-air furnaces, heat pumps or air conditioners.
- Vacuum air vents, baseboard heaters and radiators regularly — dust reduces heating efficiency — and move furniture, carpet and curtains that restrict their operation.
- Use drapes and shades to help prevent heat gain on sunny summer days and heat loss on chilly winter nights. Shade room air conditioners to save them unnecessary extra work.
- Seal air leaks around windows, doors and places where pipes and wiring come through walls. Check existing caulking and weatherstripping for gaps or cracks.
- Schedule an annual tune-up for heat pumps, furnaces, boilers and central air conditioners. Expect to pay between \$50 and \$200. Your utility company may offer these tune-ups.
- Check ducts for holes and gaps where sections have separated and air may be leaking out. Some leaks you can seal yourself with mastic sealant or metal tape (don't use duct tape). Hiring a professional to repair leaky ducts can be a good investment.
- Close fireplace dampers when you don't have a fire going, and seal flues in fireplaces you don't use.
- If your home has a crawl space under it, open your foundation vents in spring and close them in winter.
- Prune shrubs that may block airflow to your air conditioner or heat pump.

## Facts for Consumers

- Make sure your home is insulated to DOE-recommended levels, which you can find at [energysavers.gov](http://energysavers.gov).
- Use ceiling fans to cool in summer and circulate heat in winter.
- Close the doors to rooms you don't use regularly.

### For More Information

To learn more about saving energy when heating and cooling your home, read *Weathering the High Cost of Heating Your Home* and *Home Insulation Basics: Higher R-Values = Higher Insulating Values*. The Federal Trade Commission offers a wide range of business and consumer information online at [ftc.gov](http://ftc.gov). This information also is available by calling our toll-free helpline at 1-877-FTC-HELP (382-4357) (TTY: 1-866-653-4261).

The Department of Energy's Energy Efficiency and Renewable Energy Network offers a range of

energy-efficiency information at [energysavers.gov](http://energysavers.gov). This information also is available from a toll-free hotline at 1-877-EERE-INF (337-3463); TTY: 1-800-273-2957.

Your state and local energy offices and local utility company also may be sources of information.

The FTC works for the consumer to prevent fraudulent, deceptive and unfair business practices in the marketplace and to provide information to help consumers spot, stop and avoid them. To file a complaint or to get free information on consumer issues, visit [ftc.gov](http://ftc.gov) or call toll-free, 1-877-FTC-HELP (1-877-382-4357); TTY: 1-866-653-4261. The FTC enters consumer complaints into the Consumer Sentinel Network, a secure online database and investigative tool used by hundreds of civil and criminal law enforcement agencies in the U.S. and abroad.

FEDERAL TRADE COMMISSION	<a href="http://ftc.gov">ftc.gov</a>
1-877-FTC-HELP	FOR THE CONSUMER

**Federal Trade Commission**  
Bureau of Consumer Protection  
Division of Consumer and Business Education