

Save Money & Save the Environment:

A Consumer Guide
To Buying
Energy Efficient Products
For the Home



CONSUMER RESEARCH COUNCIL

DID YOU KNOW . . .

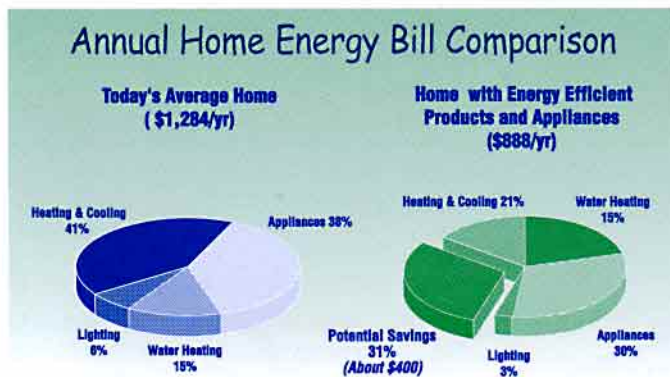
That every time you buy new heating or cooling equipment, appliances, consumer electronics, or office equipment for your home, your choices affect the environment? Smart buying choices not only help the air we breathe but also reduce our energy bills month after month. You can save money and the environment by understanding the basics about home energy use and by selecting the most energy efficient products. This guide is designed to help you do just that.

Much of the energy consumed in homes is produced by power plants that burn fossil fuels like coal, oil and natural gas. Pollution from these fuel sources harms the environment and can cause respiratory disease, smog, and acid rain. It also contributes to global climate change. In fact, the average home causes more air pollution than the average car.

Buying energy efficient products is one of the smartest ways consumers can reduce energy use and help prevent air pollution. A household that buys energy efficient equipment instead of standard new equipment can substantially reduce carbon dioxide emissions over the lifetime of the products—pollution savings equivalent to taking a car off the road for seven years. Using energy efficient products in your home can also reduce nitrogen oxides, which are primary contributors to smog and acid rain.

Energy efficient products also save money. When we receive our monthly energy bill, many of us think there is little we can do to reduce monthly costs—besides adjusting our thermostat. But this is not true! The products you select can significantly affect that monthly bill. You can reduce your energy bill by about 30 percent when you purchase energy efficient products.

These savings can add up. The average American household spends approximately \$1,300 per year on energy costs. Thus, the average household can save \$400 a year on their energy bills by purchasing energy efficient products, and some households can save even more. If you live in an area with higher than average energy prices or extremes in weather temperatures or if your major appliances are old, chances are your annual bills are even more, and so are the potential savings.



Source: Annual Home Energy Cost from 1993 Residential Energy Consumption Survey; Savings Estimated by Lawrence Berkeley National Laboratory

Buying Energy Efficient Products for Your Home

Look for the ENERGY STAR® label

What is ENERGY STAR®?

ENERGY STAR® is the label given by the U.S. Environmental Protection Agency (EPA) and the U.S. Department of Energy (DOE) to appliances and products that exceed federal energy efficiency standards.

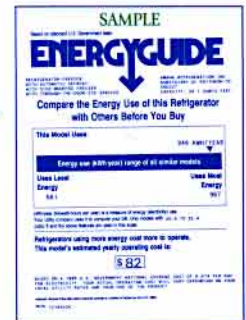


This label helps consumers quickly and easily identify those products that will save energy and save money. ENERGY STAR®-labeled appliances, for example, often exceed the efficiency levels of other new products on the shelf by 20%, but in some cases by as much as 75%. This high level of energy efficiency reduces the cost of operating the product or appliance throughout the course of its lifetime.

Manufacturers and retailers place the ENERGY STAR® label on those models that meet the labeling criteria. The ENERGY STAR® can be found on the product itself, on the packaging, or in advertising. If you cannot find the label, ask a salesperson or call the toll-free ENERGY STAR® Hotline at 1-888-STAR-YES (1-888-782-7937).

Look for the EnergyGuide

Major appliances have a big yellow tag called the EnergyGuide. It is provided to help consumers compare the operating cost of similar models when shopping for new appliances. All new refrigerators, freezers, water heaters, dishwashers, clothes washers, room air conditioners, central air conditioners, heat pumps, furnaces and boilers have an EnergyGuide label.



Remember, the ENERGY STAR® label tells you which products are energy efficient!

Make Your Home Energy Efficient

Natural Gas and Oil Furnace Systems—Have a professional assess your needs and recommend the type and size of system you should purchase. Size is one of the most important factors affecting the efficiency of these systems. Too large a system costs more and operates inefficiently. Bigger is not always better. For ENERGY STAR® furnaces, the AFUE* is 90 or higher.

Central Air-to-Air Heat Pumps—If you live in a cool climate, look for a heat pump with a high HSPF*. Contact a professional for advice on purchasing air-to-air heat pumps. ENERGY STAR® heat pumps are in the top 25% for efficiency.

Central Air Conditioners—Look for ENERGY STAR® units — they have a SEER* rating of 12 or above. Contact a professional for advice on sizing a central air system. ACs that bear the ENERGY STAR® label are at least 20% more efficient than new air conditioners and may be twice as efficient as some existing systems.

Questions about
ENERGY STAR® products? Call the
toll-free ENERGY STAR® Hotline at
1-888-STAR-YES.

Clothes Washers—Look for features that help cut water use: front loading design, automatic water level controls, "suds-saver" features, spin cycle adjustment, and large capacity. ENERGY STAR® clothes washers are twice as efficient as standard models.

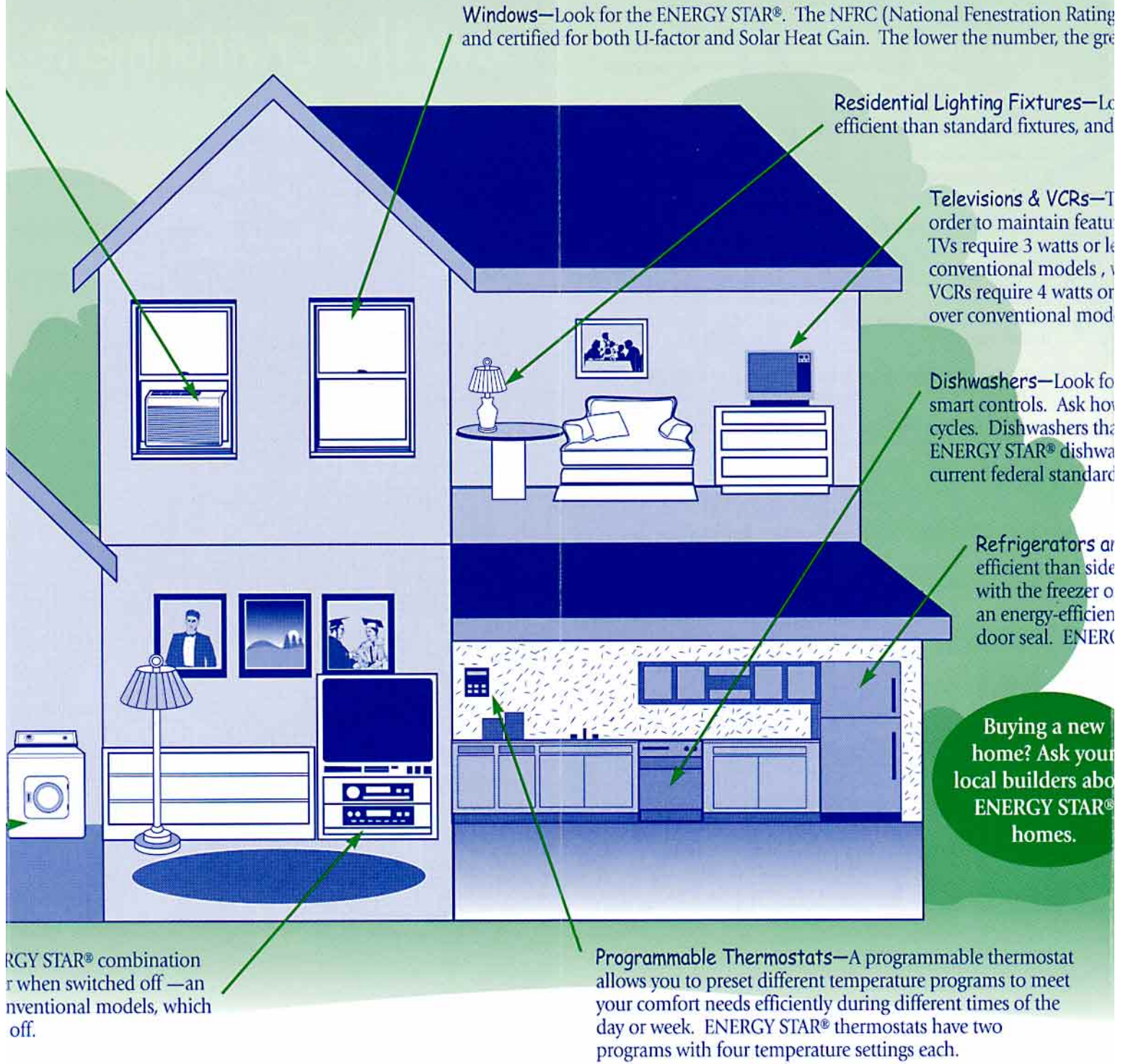
Annual Fuel Utilization Efficiency (AFUE*) and Heating Seasonal Performance Factor (HSPF*) are measures of heating efficiency. Seasonal Energy Efficiency Ratio (SEER*) and Energy Efficiency Ratio (EER*) are measures of cooling efficiency. The higher the efficiency level for any particular product, the more energy it will save.

Room Air Conditioners—Buy a correctly sized and energy efficient unit. The higher the EER*, the more efficient the unit. If the room is very sunny, increase capacity by 10%. For a kitchen unit, increase the capacity by up to 4,000 Btus per hour. ENERGY STAR® units exceed minimum federal standards by at least 15%. What size to buy?

Area in square feet	Btu/hour
100 to 150	5,000
150 to 250	6,000
250 to 350	7,000
350 to 400	9,000
400 to 450	10,000
450 to 550	12,000
550 to 700	14,000
700 to 1,000	18,000

TV/VCR Combination Units—ENERGY STAR® units require 6 watts or less of power and provide energy savings of up to 70% over conventional units that consume as much as 20 watts while on.

Efficient—Buy ENERGY STAR® Pro



Products!



g Council) also provides a label that means a window is rated
eater the energy benefits.

ook for ENERGY STAR® lighting fixtures. They are more energy
l also meet safety, reliability and quality guidelines.

Vs and VCRs continue to use energy even when turned off in
res like remote control and channel memory. ENERGY STAR®
ess when switched off—an energy savings of up to 75% over
which consume as much as 12 watts while off. ENERGY STAR®
less when they are in the off position—as much as 70% less
els which use as much as 13 watts.

or features that will reduce water use, such as booster heaters and
w many gallons of water the dishwasher uses during different
at use the least amount of water will cost the least to operate.
ishers have an Energy Factor of 0.52 or greater, 13% better than
ls.

nd Freezers—Refrigerators with freezers on top are more
e-by-side units. Look for an “energy saver” switch on models
n top. When purchasing a frost-free refrigerator, buy one with
it option. Look for heavy door hinges, which create a good
GY STAR®-labeled units exceed federal standards by at least 20%.

More Ways to Save Energy Dollars:

- Caulk and weatherstrip leaky windows and doors.
- Caulk and seal air leaks where plumbing, ducting or electrical wiring go through exterior walls,
- Repair leaky faucets promptly; a leaky faucet wastes gallons of water in a short period of time.
- Insulate your hot water heater. Always follow directions carefully when installing an insulation jacket.
- Clean or replace furnace or heat pump filters once a month or as needed.
- Keep your fireplace damper closed unless a fire is going.

Remember: You Save Money and You Help the Environment When You Buy Products That Are Energy Efficient. It's a Win-Win Situation!

Frequently Asked Questions

Q: Do products that are energy efficient cost more?

A: Energy efficient products do not necessarily cost more. While some do have higher up-front costs, energy efficient products cost less to operate over the product's lifetime. They often offer better performance, as well. Thus, it's important not only to compare the price of the product but also to examine the second or hidden price tag—what you will pay as part of your energy bill month after month. When you consider total costs, energy efficient products almost always save money.

Q: How do energy efficient products compare to standard products?

A: Products bearing the ENERGY STAR® label perform as well or better than standard equipment. By purchasing ENERGY STAR® products you will not sacrifice any performance features.

Q: Where can I find ENERGY STAR® products?

A: Check with your local retailers. For additional information, call the ENERGY STAR® toll-free Hotline at 1-888-STAR-YES (782-7937) or check the ENERGY STAR® website at www.energystar.gov.

Q: Will an energy efficient heating or cooling system reduce the comfort level in my home?

A: No. Energy efficient products function in the same manner as your existing products. They simply do so while consuming less energy. In fact, some energy efficient products may actually improve the comfort level of your home by maintaining a constant temperature evenly throughout the day.

Q: What happens if the contractor I call doesn't know about ENERGY STAR® or energy efficient products?

A: Call the ENERGY STAR® toll-free Hotline to identify products that are part of the ENERGY STAR® program. A contractor that doesn't want to install energy efficient products is taking away your opportunity to reduce your monthly energy bill. Be persistent and insist that energy efficient products be used.

Q: Is there financial help available to offset the higher initial cost of some of these products?

A: Yes. Private financing companies offer ENERGY STAR® loans with longer terms and competitive interest rates for ENERGY STAR® heating and cooling equipment compared to financing commonly available when you purchase standard heating and cooling equipment. For information on where to call to apply for ENERGY STAR® financing, call the ENERGY STAR® toll-free Hotline. It is wise to shop around for the best loan rates and terms.

Also, check with your local utility to see if it offers rebates toward the purchase of energy-efficient equipment.

Q: I want to have my equipment installed properly to ensure the best operation. How do I find a contractor?

- A:**
1. Ask friends for recommendations of good contractors they have used.
 2. Look in the Yellow Pages for a list of local companies.
 3. Ask about previous experience and check references.
 4. Check with your county or state consumer protection office or your local Better Business Bureau to review consumer complaints or other investigations.
 5. Look for licensed, insured and bonded contractors.
 6. Get three bids with details in writing.
 7. Consider warranties, service, and reputation as well as price.
 8. If installing a very high-efficiency furnace or boiler, ask if the contractor has any special training in this type of installation.

Q: What happens if the contractor I call tells me he or she can save me money with a less expensive non-energy efficient model?

A: Ask what it costs to operate the system annually and compare it to other comparable models. Remember: there are two price tags—1) the cost of the product when you buy it and 2) the cost to run it over its useful life.

Q: Is the ENERGY STAR® label going to be given to more products in addition to the ones you've mentioned?

A: Yes, the Environmental Protection Agency and the Department of Energy are working with a variety of industries and manufacturers to identify additional products which may qualify for the label.

Other Resources

Alliance to Save Energy
P.O. Box 33939
Washington, D. C. 20033-0939
(202) 857-0666
www.ase.org

Publication:
PowerSmarts: Easy Tips to Save Energy & The Planet
(Send \$3. & a self addressed stamped #10 envelope)

American Council for an Energy-Efficient Economy (ACEEE)
1001 Connecticut Avenue, NW
Suite 801
Washington, D. C. 20036
(202) 429-8873
(Research & Conferences)
(202) 429-0063—(Publications)
www.aceee.org

Publications:
Consumer Guide to Home Energy Savings (6th edition) by Alex Wilson and John Morrill
The Most Energy-Efficient Appliances
1998

Consumer Research Council
1424 16th Street NW - Suite 604
Washington, D. C. 20036
(202) 387-6121
www.buyenergyefficient.org

Energy Efficiency and Renewable Clearinghouse (EREC)
PO Box 3048
Merrifield, VA 22116
Toll-Free: 1-800-DOE-EREC (363-3732)
www.eren.doe.gov
Publications:
U. S. Department of Energy:
Energy Savers: Tips on Saving Energy and Money at Home
Clearinghouse Fact Sheets
available via:
www.eren.doe.gov/erec/factsheets

U.S. Environmental Protection Agency—ENERGY STAR® Program
401 M Street SW (6202J)
Washington, D. C. 20460
Toll-Free: 1-888-STAR-YES (782-7937)
www.energystar.gov