



Maintaining the Home

How to Buy an Energy-Efficient Home Appliance

Maintaining the Home: How to Buy an Energy-Efficient Home Appliance

You go shopping for a new refrigerator and you are on a budget. The best buy is the refrigerator with the lowest sales price, right? Not necessarily. If you buy the lowest-priced refrigerator, you may end up spending more than if you buy a more expensive one. The reason? The cost of owning a home appliance has three components: the initial purchase price, the cost of repairs and maintenance and the cost to operate it.

To figure out how much you'll spend over the lifetime of the appliance, you have to look at all these costs. The appliance with the lowest initial purchase price, or even the one with the best repair record, isn't necessarily the one that costs the least to operate. Here's an example of how an appliance's energy consumption can affect your out-of-pocket costs.

Suppose you are in the market for a new refrigerator. Different models of refrigerators with the same capacity can vary dramatically in the amount of electricity they use. For one popular size and configuration, for example, the annual electricity consumption varies across models from a low of about 600 kilowatt-hours a year to a high of more than 800 kilowatt-hours a year. Based on national average electricity prices, the annual cost to operate this refrigerator can range from about \$50 to \$70, depending on which model you buy. A \$20 difference in annual operating costs might not sound like much, but remember that you will enjoy these savings year after year for the life of the appliance, while you must pay any difference in purchase price only once. As a result,

you may actually save money by buying the more expensive, more energy-efficient model.

You can learn about the energy efficiency of an appliance that you're thinking about buying through the yellow-and-black EnergyGuide label it displays. The Federal Trade Commission's Appliance Labeling Rule requires appliance manufacturers to put these labels on:

- Refrigerators, freezers, dishwashers, clothes washers
- Water heaters, furnaces, boilers
- Central air conditioners, room air conditioners, heat pumps
- Pool heaters

When you shop for one of these appliances in a dealer's showroom, you should find the labels hanging on the inside of an appliance or secured to the outside. The law requires that the labels specify:

- The capacity of the particular model
- For refrigerators, freezers, dishwashers, clothes washers and water heaters, the estimated annual energy consumption of the model
- For air conditioners, heat pumps, furnaces, boilers and pool heaters, the energy efficiency rating
- The range of estimated annual energy consumption, or energy efficiency ratings, of comparable appliances.

Some appliances also may feature the EnergyStar logo, which means that the appliance is significantly more energy efficient than the average comparable model. For more information on the EnergyStar program, operated by the Department of Energy and the Environmental Protection Agency, visit the EnergyStar website at www.energystar.gov.

For An Energy-Smart Deal On Your Next Appliance...

- Read the EnergyGuide label.
- Compare the energy use of competing models.
- Estimate their differences in energy costs.
- Consider both purchase price and estimated energy use when deciding which brand and model to buy.

Why should I care about energy efficiency?

The more energy efficient an appliance 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.

Don't all appliances have to be energy efficient?

All major home appliances must meet energy conservation standards set by the U.S. Department of Energy. It's the law. But many appliances beat the standard, use even less energy and cost less to run.

What makes one appliance more efficient than another?

Most of the differences are on the inside—in the motors, compressors, pumps, valves, gaskets and seals, or in electronic sensors that make appliances “smarter.” Even if two models look the same from the outside, less-obvious inside features can mean a big difference in your monthly utility bills.

How can I be sure energy efficiency claims aren't just sales hype?

Manufacturers must use standard test procedures developed by the Department of Energy to prove the energy use and efficiency of their products. Many have these tests performed by independent laboratories. The test results are printed on the EnergyGuide labels, which manufacturers are required to put on many of their appliances.

What's the purpose of EnergyGuide labels?

The EnergyGuide labels help you compare the efficiency or annual energy use of competing brands and similar models. Look for the labels on clothes washers, dishwashers, refrigerator/freezers, room air conditioners, water heaters, pool heaters and on central home heating and cooling equipment. If you don't see an EnergyGuide label, ask a salesperson for the information.

Shopping Strategy

1. **Select the size and style.** Measure the space the appliance will occupy to be sure your new purchase will fit. Make sure that you'll have enough room to open the door or lid fully and enough clearance for ventilation. This may help you narrow your choices as you settle on the best capacity and style.
2. **Know where to shop.** Appliance outlets, electronics stores and local retailers carry different brands and models. Dealers also sell appliances through print catalogs and the Internet.
3. **Compare the performance of different brands and models.** Ask to see the manufacturer's product literature. Decide which features are important to you. Ask questions about how the different models operate: Are they noisy? What safety features do they have? What about repair histories? How much water do they use? How energy efficient are they?

4. **Estimate how much the appliance will cost to operate.** The more energy an appliance uses, the more it will cost to run. Consult the EnergyGuide label to compare the energy use of different models. The difference on your monthly utility bill can be significant, especially when considered over the 10-to-20-year life of the appliance. You could save money over the long run by choosing a model that's more energy efficient, even if the purchase price is higher.

5. **Ask about special energy efficiency offers.** Ask your salesperson or local utility about cash rebates, low-interest loans or other incentive programs in your area for energy-efficient product purchases and how you can qualify.

Tips to Lower Your Monthly Energy Bill

Being an energy-smart consumer means getting the most from the energy you use. Here's how you can cut energy waste without sacrificing comfort or convenience.

- Move your refrigerator if it's near the stove, dishwasher or heat vents. Vacuum the coils every three months to eliminate dirt buildup that reduces efficiency. Check the door gaskets for air leaks. Defrost the freezer when more than a quarter-inch of ice builds up.
- Scrape but don't pre-rinse dishes by hand if you have a dishwasher that automatically pre-rinses or has a rinse/hold cycle. Use the "energy saver" option found on many machines.
- Use pots that fit the size of your stovetop burners. Use lids on your pots and pans so you can cook at a lower burner setting.
- Match the water level and temperature settings on your clothes washer to the size of your load. Don't fill the whole tub for a few small items.
- Clean your clothes dryer filters after each use or as necessary.

- Ensure that the temperature on your water heater is set to 120 degrees. Some thermostats are preset at the factory to 140 degrees.

This material was adapted from publications produced by the U.S. Department of Energy. DOE publications can be found on the Web at <http://www.eere.energy.gov/>.

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*This resource is one in a series on **Maintaining the Home** which include:*

Interior Maintenance

Preventive Home Maintenance Checkup
Make a Basic Toolkit for Simple Home Repairs
Selection and Use of Home Cleaning Products
Discovering the Secrets of Successful Storage

Heating

Furnace Care
Fireplace and Chimney Care

Cooling

Evaporative Cooler
Air Conditioner
Ceiling Fans

Plumbing

Fixing Plugged Sink Drains
How to Unclog a Toilet
Repairing Dripping Faucets

Electrical

How to Set or Reset a Circuit Breaker
How to Replace a Fuse

Appliances

How to Buy an Energy Efficient Home Appliance
Choosing a Water Heater

Maintenance:

Dishwasher Care and Dishwasher Cleaning
Dryer Care and Dryer Cleaning
Freezer Care and Freezer Cleaning
Garbage Disposal Care and Cleaning
Range and Oven Care and Range Cleaning
Refrigerator Care and Refrigerator Cleaning
Small Electrical Appliance Care and Cleaning
Washer Care and Cleaning

Flooring

Buying new carpet
Carpet Care and Cleaning
Wood Floors Care and Cleaning
Ceramic Tile Floors Care and Cleaning
Vinyl Floor Coverings Care and Cleaning

Walls

Selecting and Applying Paint
Wallpaper Selection and Cleaning
Repairing Walls

Furniture

Furnishing Your New Home: Color and Design
Selecting Fabric For Home Furnishings

Exterior Maintenance

Home Exterior

Foundations, Basements and Yards
Exterior Walls, Windows, and Doors

Roof

A Guide To Roofs
Roof Maintenance

Landscaping and Lawn Care

Principles of Xeriscape
Watering Your Lawn

Home Safety

Child-Proofing Your Home
Is Your Home Safe From Fire Hazards?
Smoke Alarms Save Lives
Carbon Monoxide Alarms
Are Your Children Safe From Poisons?
Protecting Yourself Against Burglary

Conservation

Weatherize Your Home
Easy Tips to Save Money and the Planet
How to Stop Air Leaks Around Windows
Energy-Efficient Heating and Cooling
Indoor Water Conservation Tips
Outdoor Water Conservation Tips

Environment Issues

Green Building
Reduce-Reuse-Recycle: Alternatives for Waste Management
Create a home recycling center
Healthy Indoor Air for New Mexico Homes
Dealing with Mold
Household Hazardous Waste
Hazardous Household Substances: Alternatives That Are Relatively Free of Toxic Effects
Radon

Pest Control

Cockroaches and Their Control
Southwest Insects

Accessible Living

Update your home for a lifetime of living
Vision Loss & Hearing Loss
Hand Dexterity, Strength and Range of Motion
Cognitive Difficulties
Mobility Impairments, Balance and Coordination

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