Reducing energy use with ENERGY STAR®

About the program
The U.S. Environmental Protection Agency (EPA) created the ENERGY STAR program in 1992 to protect the environment with energy-efficient products and practices. This voluntary partnership between the government and more than 8,000 organizations now includes more than 50 product categories. ENERGY STAR also offers best-practice solutions, like home sealing and duct sealing, that can make your home more comfortable and reduce your energy costs.

The program is making a difference. In fact, EPA estimates that in 2006, ENERGY STAR saved 170 billion kilowatt-hours of energy—about 5 percent of that year’s total U.S. electric demand.1 More than 15,000 buildings have been rated using EPA’s national energy performance rating system and Americans have purchased more than a billion ENERGY STAR-qualified products.2

Qualified products
One of the easiest ways to put the benefits of the program to use is to upgrade your home’s less efficient products. Products that can earn the ENERGY STAR include appliances, lighting, home office equipment, consumer electronics, and heating and cooling equipment.

Many ENERGY STAR-qualifying products involve no extra cost at the time of purchase. Other products such as kitchen appliances and heating and cooling equipment may have significant extra costs. These products are designed to make up the initial cost difference through savings on your energy bill.

Bonus Savings program
As part of the national effort, local electric cooperatives are encouraging the use of products that have earned the ENERGY STAR label. Cooperatives participating in the Take Control & Save energy-efficiency program may provide rebates for ENERGY STAR-qualified clothes washers and dishwashers, room air conditioners, and ground source and dual-fuel heat pumps. There are specific qualifications for these rebates; be sure to check with your local electric cooperative before purchasing.

Contact the energy advisor at your electric cooperative, visit www.energystar.gov, or call 1-888-STAR-YES (1-888-782-7937) for more information on the ENERGY STAR program.

1Tertia Speiser “Shine on with Energy Star in Your Portfolio; Results from an E SOURCE Roundtable Discussion” 2007
2U.S. Environmental Protection Agency “ENERGY STAR—The Power To Protect The Environment Through Energy Efficiency” EPA 430R03008 July 2003
Maximize home heating and cooling performance with ENERGY STAR®

A drafty home, rooms that are too hot or too cold, and high energy bills are all common issues for homeowners. The Home Performance with ENERGY STAR program offers a comprehensive, whole-house approach to improving energy efficiency and comfort.

A local Home Performance with ENERGY STAR program sponsor (a State Energy Office, utility, or nonprofit energy-efficiency organization) is responsible for ensuring that participating contractors maintain high standards for quality. For more information on Home Performance with ENERGY STAR program contractors in Missouri, Oklahoma, and Iowa, contact www.energystar.gov or call 1-888-STAR-YES (1-888-782-7937).

The measures that qualify a home for ENERGY STAR make it more energy efficient than a standard home. Effective insulation, duct sealing, more efficient heating and cooling equipment, and independent testing to verify performance can result in homes using substantially less energy. Additional savings on maintenance costs also can be substantial.

Tight construction
When it comes to your home, you’ll often hear references to tightening up the building, or thermal, envelope. A building envelope is the separation between the interior and the exterior environments of a building. It serves as the outer shell to protect the indoor environment as well as to facilitate its climate control.

The physical components of the envelope include the foundation, roof, walls, doors, and windows. Tightening the building envelope means detecting air leakage in these areas, then sealing the leaks with caulking and other sealing materials.

You can detect some air leaks inside your home by holding a smoke or incense stick near windows and doors; movement of the smoke will reveal any significant drafts. You can detect most air leakage in your home by contacting an energy professional to perform a “blower door test.” The energy professional will recommend ways to seal and tighten your building envelope. You can then decide whether to do the sealing work yourself or hire a contractor.

Effective insulation
Insulation performance is measured by R-value—its ability to resist heat flow. Different R-values are recommended for walls, attics, basements, and crawlspaces. Be sure your home’s insulation meets the recommended R-value for your region in order to achieve optimum energy efficiency. The U.S. Department of Energy offers an online Insulation Fact Sheet with an R-value calculator at www.ornl.gov/~roofs/Zip/ZipHome.html.

Duct sealing
A typical duct system can waste 25 to 40 percent of the energy a heating and cooling system uses,* due to leaks, holes, and poorly connected ducts. If your ducts are easily accessible, you may be able to seal some leaks on your own. Otherwise, look for a licensed/certified contractor to repair, seal, and insulate the ductwork. If you’re planning to install new heating and cooling equipment, a well-designed and sealed duct system may allow you to downsize to a smaller system that will provide better dehumidification.

More efficient heating and cooling systems
If your heating or cooling system is more than 10 years old, consider replacing it with a unit that has earned the ENERGY STAR label.

Your electric cooperative can help you find the best ways to improve your home’s energy efficiency. Contact your co-op or visit www.TakeControlAndSave.coop for details on the ENERGY STAR program and other measures that can make a difference for you.


An installer “shaves” excess wet-spray cellulose fiber insulation from wall studs after it has dried.