

# **ENERGY STAR QUALIFIED HEATING AND COOLING** EQUIPMENT

Heating and cooling equipment that has earned the government's ENERGY STAR, combined with properly sealed ducts, saves energy, money, and the environment and may also improve the comfort level in your home.

# **HELP FIGHT GLOBAL WARMING**

Electricity used in our homes predominantly comes from the burning of fossil fuels at power plants, which contributes to global warming. Simply put, using energy-efficient products and practices in our homes helps fight global warming by reducing these greenhouse gas emissions.

If just one household in 10 bought ENERGY STAR qualified heating and cooling equipment, we could prevent 14 billion pounds of greenhouse gas emissions—equal to those from nearly 1.2 million cars—every year.

**;ial Business** alty for Private Use ; ington DC 20460 ed/Recyclable—Printec egetable Oil Based Inks ;ycled Paper (Minimum



ÈPA

ited States vironmental otection Agency



**U.S. Environmental Protection Agency U.S. Department of Energy** 

# Heating and Cooling

EPA -

# WHAT IS ENERGY STAR<sup>®</sup>?

ENERGY STAR is a label that identifies energyefficient products, such as heating and cooling equipment, which meet strict energy efficiency guidelines set by the U.S. Environmental Protection Agency (EPA) and the U.S. Department of Energy (DOE).

Products that have earned the ENERGY STAR help you save energy and money without sacrificing performance. By using less energy, these products also help reduce greenhouse gas emissionscaused by the burning of fossil fuels at power plants—that contribute to global warming.

More than 50 types of products, including heating and cooling equipment, lighting, office equipment, appliances, and home electronics can qualify for the ENERGY STAR.

The ENERGY STAR program helps businesses and individuals fight global warming through energy-efficient products and practices.

Learn more at www.energystar.gov.

## **CHOOSE ENERGY STAR QUALIFIED HEATING AND COOLING** EQUIPMENT

Heating and cooling can account for nearly half of the energy used in your home. While some ENERGY STAR qualified heating and cooling products may cost more initially, they can yield annual returns of 15 - 30 percent in lower energy bills.

#### **AIR CONDITIONERS**

Compared to conventional models, ENERGY STAR gualified central air conditioners and room air conditioners reduce energy waste by about 15 and 10 percent, respectively. Replacing an old central air conditioner with one that has earned the ENERGY STAR can save nearly \$200 per year in electricity depending on climate and the size of the unit you're replacing.

#### BOILERS

A properly sized and installed ENERGY STAR qualified boiler uses about 6 percent less energy than a standard new boiler—saving over \$75 per year in energy costs.

#### PROGRAMMABLE THERMOSTATS

Programmable thermostats that have earned the ENERGY STAR provide you with more flexibility than standard models and contain no mercury. Properly using a programmable thermostat to consistently control your home's temperature can save you about \$180 every year in energy costs.

### **AIR-SOURCE/GEOTHERMAL HEAT PUMPS**

Electric air-source heat pumps use the difference between indoor and outdoor air temperatures to heat and cool your home. Geothermal heat pumps use stable ground temperatures to provide heating and air conditioning. ENERGY STAR gualified models are up to 30 percent more energy efficient than standard equipment.

#### FURNACES

Due to advanced technology, ENERGY STAR gualified furnaces are over 10 percent more energy efficient than standard new furnaces available today.

### **CEILING FANS**

ENERGY STAR qualified ceiling fans move air over 45 percent more efficiently than conventional fans. This means you'll use less energy to get the same amount of cooling.

### VENTILATION FANS

ENERGY STAR qualified ventilation fans perform better and are typically less noisy than conventional models because they use high-performance motors and a better overall design. Qualified fans consume 70 percent less energy than conventional models.

# **CHANGE THE WORLD** START WITH ENERGY STAR QUALIFIED HEATING AND COOLING EQUIPMENT



## HEATING AND COOLING SYSTEM CHECKLIST

When it's time to install a new heating, ventilation, and air conditioning (HVAC) system, make an educated decision with the help of these simple suggestions:

**Find the Right Contractor**—The performance of your new system depends on how well it is installed. Getting the right contractor is key to getting a quality installation. Look for contractors with several years of experience that are licensed and insured (if required). Ask for a written contract of all work and whether a contractor's service technicians are certified by North American Technician Excellence (NATE). NATE is an industry-supported certification for technicians who install and service heating and cooling equipment. Visit www.natex.org to use NATE's contractor locator.

Look for the ENERGY STAR—When deciding on an ENERGY STAR qualified system, ask the contractor to estimate your utility bill savings and costs. Although ENERGY STAR qualified equipment may cost more initially, you will be rewarded with savings over its lifetime.

Properly Size and Install Your System—When replacing heating and cooling equipment, bigger isn't always better. Oversized equipment will cost more up front and to operate over its lifetime. Additionally, it will not dehumidify or provide a comfortable environment as it should. Don't assume your current system is the right size. Ask your contractor to calculate the "size" of the system using Manual J, or an equivalent calculation tool. Today's equipment is more efficient, and

To locate a store near you that carries ENERGY STAR qualified heating and cooling equipment, use our store locator at www.energystar.gov. Just select "products," click on "heating and cooling equipment," choose the item you are interested in purchasing, and click on "Find a Store."



- your original system may have been sized improperly. As part of a proper installation, a certified technician should:
- Install equipment in easily accessible areas for easy maintenance.
- Test for adequate airflow and verify that the system has been charged with the correct refrigerant level in accordance with the manufacturer's guidelines.
- Conduct a combustion safety test after ducts are sealed to be sure all gas or oil-burning appliances are working properly.
- Replace indoor and outdoor coils for maximum efficiency.
- **Seal and Insulate**—Central air conditioners, heat pumps, and furnaces rely on a system of ducts to circulate air throughout your home. It is common to find gaps between duct joints in a home, whether new or old. Ask your contractor to seal and insulate ducts in unconditioned spaces such as an attic or crawlspace. Sealing and insulating your home with ENERGY STAR can improve a heating and cooling system's efficiency by about 20 percent. For more information visit www.energystar.gov/homesealing.
- Maintain Your System—Schedule your contractor to do annual check-ups of your heating and cooling system to help prevent future problems and unwanted costs. Also check your filter every month, especially during heavy use months (winter and summer). If the filter looks dirty after a month, change it. At a minimum, change the filter every 3 months.

