

ENERGY STAR®



Earning the ENERGY STAR[®]
means a product meets strict
energy efficiency guidelines
set by
the US Environmental Protection Agency
and
the Department of Energy.

BENCHMARKING

ENERGY STAR's®

national energy performance rating system

- Rate the performance of your building on a scale of 1-100 relative to similar buildings nationwide
 - Rating of 75 or more may qualify for the ENERGY STAR
- Accounts for the impacts of year-to-year weather variations, building size, location, & several operating characteristics

BENCHMARKING

Eligible space types

(over 50% of US commercial floor space):

- Offices
- K-12 Schools
- Hospitals & Medical Offices
- Hotels & Motels
- Supermarkets
- Residence Halls
- Warehouses

PURCHASING & PROCUREMENT

- **Purchasing efficient products reduces energy costs without compromising quality**
 - A procurement policy is a key element in any energy efficiency strategy
 - An effective policy can be as simple as asking procurement officials to specify ENERGY STAR® qualified products in their contracts or purchase orders

On-line training is available to explain the full range of purchasing opportunities:

www.energystar.gov

COMPACT FLUORESCENT BULBS (CFLs)

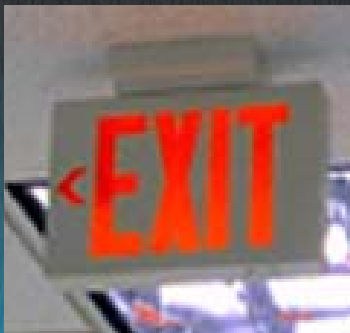
- ENERGY STAR® qualified CFLs use 66% less energy than standard incandescent and last 10 times longer



Replacing a 100-watt incandescent with a 32-watt CFL can save at least \$30 in energy costs over the life of the bulb.



EXIT SIGNS



- Exit signs that have earned the ENERGY STAR® operate on five watts or less per face, whereas standard signs use as much as 40 watts per face
 - Tested for visibility factors, and come with a five-year manufacturer warranty



One sign can save about \$10 annually on electricity costs and last up to 10 years without a lamp replacement (compared to less than one year for an incandescent)

COMPUTERS



An ENERGY STAR® qualified computer uses 70% less electricity than computers without enabled power management features

- Enter a low-power mode and use 15 watts or less



MONITORS

- An ENERGY STAR® qualified monitor, in sleep mode, uses **90% less electricity** than monitors without power management features
 - Automatically enters two successive low-power modes of less than or equal to 15 watts and 8 watts after a period of inactivity



PRINTERS

- Printers that have earned the ENERGY STAR® can cut the equipment's electricity use by over 60%
 - Spending a large portion of time in low-power mode not only saves energy but helps printing equipment run cooler and last longer



SCANNERS

- Scanners that earned the ENERGY STAR® can cut the equipment's electricity use by over 50%
 - Cost the same as standard scanners



COPIERS

- The most energy-intensive type of office equipment because they sit idle for long periods of time:
 - “Sleep” or power down when not in use, and uses 40% less electricity compared to standard models
 - Feature duplexing units that automatically make double-sided copies, reduces paper costs by about \$60 a month



MULTIFUNCTION DEVICES (MFD)

- An ENERGY STAR® qualified MFD can save about \$220 dollars in electricity bills over its lifetime:
 - Has all the features of an ENERGY STAR printer, scanner, and fax machine



By powering down, ENERGY STAR MFDs can reduce energy costs by almost 40%



TVs & VCRs



- ENERGY STAR® qualified TVs, VCRs and combination units use about 25% less energy than standard units
 - If half of all US households replaced their regular TV with an ENERGY STAR model, the change would be like shutting down a power plant

HEAT PUMPS

- ENERGY STAR® qualified Air-Source Heat Pumps are about 20% more efficient than standard new models



An electric air-source heat pump that has earned the ENERGY STAR can save about \$130 a year on your electricity bill



HEAT PUMPS

- ENERGY STAR qualified Geothermal Heat Pumps use about 40-60% less energy than a standard heat pump



A properly sized and installed ENERGY STAR labeled geothermal heat pump can save about \$400 a year on your energy bill



HEATING



- ENERGY STAR qualified Furnaces have an annual fuel utilization efficiency (AFUE) rating of 90% or greater (about 15% more efficient than standard models)
- An ENERGY STAR qualified furnace can save \$50 to \$70 a year on heating costs

HEATING

- ENERGY STAR® qualified Boilers have an annual fuel utilization efficiency (AFUE) rating of 85% or greater
- ENERGY STAR labeled boilers can save up to \$75 per year on heating bills



COOLING

- ENERGY STAR® qualified Central Air Conditioners have a higher seasonal efficiency rating (SEER) than standard models, which makes them about 25% more efficient



- ENERGY STAR qualified Room Air Conditioners use at least 10% less energy than conventional models
- Replacing a 10-year-old room air conditioner with a new ENERGY STAR qualified model saves an average of \$14 a year on your electric bill

FOOD PREPARATION

GAS & ELECTRIC FRYERS



- ENERGY STAR® Fryers are up to 25% more energy-efficient than standard models
 - Advanced burner and heat exchanger designs = shorter cook times and higher production rates
 - Fry pot insulation results in a lower idle energy rate
- Each gas fryer can save an average of \$185/year on utility bills
- Each electric fryer can save an average of \$60/year on utility bills

FOOD PREPARATION

ELECTRIC & GAS COOKERS

- ENERGY STAR® qualified Steam Cookers:
 - Better insulation & more efficient steam delivery system = shorter cook times, higher production rate, and reduced heat loss
- Each electric steam cooker can save an average of \$450/year on utility bills
- Each gas steam cooker can save an average of \$820/year on utility bills



FOOD



- Refrigerated beverage Vending Machines that have earned the ENERGY STAR are 35% more energy-efficient than standard new machine models
 - Can save \$90 annually on utility bills

FOOD STORAGE

- ENERGY STAR labeled Commercial Solid Door Refrigerators and Freezers can lead to energy savings of as much as 46% with a 1.3 year payback



Save \$140 annually per refrigerator & \$100
per freezer



FOOD STORAGE

- Hot Food Holding Cabinets that have earned the ENERGY STAR® are 60% more energy-efficient than standard models
 - Maintain food temperature while using less energy
- Each hot food holding cabinet can save an average of \$280/year on utility bills



WATER COOLERS



- ENERGY STAR® water coolers feature:
 - Improved chilling mechanisms
 - More insulation to keep heated water hot and chilled water cold
- ENERGY STAR qualified water coolers can lower annual energy bills by as much as \$30 per unit

TRANSFORMERS

- Decrease the voltage of electricity received from the utility to the levels used to power lights, computers, and other electric-operated equipment
 - Can save \$100-300 each year at an electricity rate of \$0.075/kWh
 - Typical large facility with 6-10 low voltage transformers can save between \$600 and \$3,000 per year



For More Information:
www.energystar.gov

THANKS FOR YOUR PARTICIPATION



At Eastern Connecticut
State University

The Institute For Sustainable Energy
at Eastern Connecticut State University

www.sustainenergy.org