



# An Overview of Efficient Appliances

When purchasing a new appliance there are many factors to consider before making a decision. Today, an appliance's efficiency has become a growing concern. Many people prefer to purchase high-efficiency appliances but are turned away by the price tag. In this case, it is important to draw a distinction between price and cost. Although less efficient appliances require a smaller initial investment, they will cost more to operate over time. Therefore, while efficient appliances have higher sticker prices, they will ultimately cost less than their low-efficiency counterparts.

Many home appliances are now offered in high-efficiency models. Clothes washing machines, dehumidifiers, dishwashers, refrigerators and freezers, room air conditioners, room air cleaners, stoves and ovens can all be efficient. When purchasing one of these appliances, look for EnergyGuide Labels to guide you to the most efficient units. These bright yellow labels are located on appliance packaging. The EnergyGuide Label displays the amount of energy required to operate an appliance as well as the amount of money it will cost to run on a scale of least and most possible energy and monetary costs. The EnergyGuide compares these ratings for a given appliance to other models.

## **Clothes Washers and Dryers<sup>1</sup>**

High-efficiency washing machines have many advantages over conventional models. ENERGY STAR washing machines use less energy and water, saving money on monthly utility bills. They are also gentler on clothes. Conventional washing machines utilize an agitator which is harsh on clothing while more efficient washing machines do not use agitators, ensuring that clothes will last longer. ENERGY STAR does not rate clothes dryers; however there are some key features to look for when selecting a dryer.

When purchasing a washing machine, look for models that:

- Allow you to set the water level based on size of load. This feature will save water and may also limit the amount of water that needs heating if you wash warm or hot loads.
- Have a high Modified Energy Factor (MEF). MEF is a combined measurement of a washer's energy use, the energy used to heat water, and the energy used to run the dryer.
- Have a low Water Factor (WF). The WF measures gallons of water consumed per cubic inch. Both the MEF and WF are listed on the ENERGY STAR LABEL.

### **When using a washing machine always:**

- Use high efficiency (HE) detergent;
- Wash full loads;
- Where permitted, hang dry clothes on a clothes line;
- Wash in cold water to save energy.

### **When purchasing a dryer, look for models that:**

- Feature moisture sensors which will automatically shut off when the sensor detects that clothes are dry.

### **When using a dryer always:**

- Use the moisture sensor;
- Clean the lint filter after every load;
- Scrub the lint filter regularly.

### **When using a washing machine always:**

- Use high efficiency (HE) detergent;
- Wash full loads;
- Where permitted, hang dry clothes on a clothes line;
- Wash in cold water to save energy.

<sup>1</sup>ENERGY STAR, "Clothes Washers," resource available online at [http://www.energystar.gov/index.cfm?c=clotheswash.pr\\_clothes\\_washers](http://www.energystar.gov/index.cfm?c=clotheswash.pr_clothes_washers)

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**Dishwashers<sup>1</sup>**

ENERGY STAR dishwashers use less water and at least 41% less energy than conventional dishwashers. On top of the savings from using less energy and water to run the washer, additional money is saved from having to heat less water.

**When using a dishwasher always:**

- Wash full loads;
- Use the air-dry feature rather than expending energy to dry the dishes.

**Refrigerators and Freezers<sup>2</sup>**

Refrigerators are large energy consumers in the home. ENERGY STAR refrigerators use at least 20% less energy than required by federal standards while ENERGY STAR freezers use at least 10% less energy.

**To maximize refrigerator/freezer efficiency:**

- Position the unit away from heat sources (oven, etc) and direct sunlight;
- Leave space between the wall and the back of the refrigerator;
- Keep the coils clean and ensure door seals are airtight;
- Maintain refrigerator temperature between 35-38 degrees and freezer at 0 degrees;
- Don't leave doors open; they should always be closed immediately.

**Stove/Oven**

Stoves and ovens are not rated by ENERGY STAR, but there are still many factors that can contribute to energy and monetary savings.

**When purchasing a stove/oven, consider that:**

- Gas stoves cost less to operate than electric stoves;
- Halogen and induction elements are the most efficient stove tops, followed by gas and then electric, however their initial cost may never be recouped;
- Gas stoves/ovens with electric ignition save energy as opposed to pilot lights that must always remain on.

**When using a stove/oven:**

- Only preheat when necessary and keep preheating time to a minimum;
- Don't open oven door frequently to check on cooking food;
- Bake multiple dishes at the same time;
- Use toaster ovens and microwaves for smaller meals;
- Size your pans and pots to the burners;
- Cover pots and pans to help food cook quicker.

<sup>1</sup>ENERGY STAR, "Dishwashers," resource available online at [http://www.energystar.gov/index.cfm?c=dishwash.pr\\_dishwashers](http://www.energystar.gov/index.cfm?c=dishwash.pr_dishwashers)

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