# **Major Appliances**

**Updated January 2012** 



When Canadians want to save energy and money and help the environment, they look for the ENERGY STAR® symbol to identify energy-efficient products.

Major appliances are one of the biggest energy users in a typical Canadian home. That's why more Canadians are looking for the ENERGY STAR symbol when shopping for new appliances.

ENERGY STAR is the symbol for energy efficiency for many products in Canada and the world. Major household appliances that qualify for the ENERGY STAR symbol are tested to prescribed specifications. Ongoing testing after qualification ensures products continue to meet the ENERGY STAR requirements. These products save consumers money because they use less energy than conventional products while offering the same or better performance. From

> an environmental perspective, improving energy efficiency reduces greenhouse gases that contribute to climate change.

## **DID YOU KNOW?**

A 2009 ENERGY STAR qualified refrigerator uses approximately 36 percent of the energy used by a refrigerator made in 1990. Don't lose these energy savings by using your old refrigerator in the basement or garage.

### How do appliances qualify for the **ENERGY STAR** symbol?

In Canada, the **ENERGY STAR symbol** 

can be used to promote the sale of qualifying models of six types of appliances: clothes washers, refrigerators and freezers, dishwashers, dehumidifiers, room air cleaners and water coolers. Consult the ENERGY STAR listings for qualified models.

### To qualify:

- Residential clothes washers and residentialstyle commercial clothes washers must have a modified energy factor of 56.6 L/kWh per cycle or greater and a maximum water factor (WF) of o.8 L/cycle/L. The modified energy factor of an appliance takes into account the amount of energy used by the dryer to remove the remaining moisture content in the clothes. To achieve this target, a clothes washer must have advanced design features that deliver cleaning performance using less water and energy.
- Standard-sized refrigerators must be at least 20 percent and standard-sized freezers must be at least 10 percent more efficient than the minimum federal standard in Canada's Energy Efficiency Regulations (the Regulations). Compact refrigerators and freezers must achieve energy efficiency levels that are at least 20 percent better than the minimum regulated standard in Canada. These appliances typically have a more energyefficient compressor and better insulation than conventional models.
- Standard-sized dishwashers must have a maximum total annual energy consumption (TAEC) of 295 kilowatts per year (kWh/year) and a maximum WF of 16.09 litres per cycle (L/cycle). Compact dishwashers must have a maximum TAEC of 222 kWh/year and a maximum WF of 13.25 L/cycle. Standard dishwashers must exceed the minimum federal standard in Canada's Regulations by at least 16 percent. Compact dishwashers must be at least 14 percent more efficient. Many ENERGY STAR labelled dishwashers use "smart sensors" that adjust the wash cycle













and the amount of water to match how much cleaning the dishes need. They may also have an internal heater to boost the temperature of incoming water.

- Dehumidifiers must have an energy factor (EF) of 1.2 to 2.5 L/kWh, depending on its water removal capacity. The higher the EF, the more energy-efficient the unit.
- Qualifying room air cleaners must produce a minimum 50 clean air delivery rate (CADR) for dust. CADR is the measure of the delivery of specified, particulate-free air produced by an electric room air cleaner. The minimum performance requirement is 2.0 CADR per watt (W). Measured standby power for models that perform secondary functions, such as clock or remote control, must not exceed 2 W.
- Water coolers that dispense only cold water or cold and room-temperature water must have a standby energy consumption of no more than 0.16 kWh per day. (Standby energy refers to the energy required to maintain the water at an appropriate dispensing temperature.) Water coolers that dispense hot and cold water must have a standby energy consumption of no more than 1.20 kWh per day.

Appliance manufacturers who are not already enrolled in the ENERGY STAR program in the United States and who wish to use the ENERGY STAR symbol in Canada must sign an administrative arrangement with Natural Resources Canada's (NRCan's) Office of Energy Efficiency (OEE) and certify that the product or products to be labelled meet ENERGY STAR specifications. Manufacturers of ENERGY STAR labelled products that qualify in Canada and those who are enrolled in the U.S. ENERGY STAR program must supply NRCan with a Canadian contact if they want to benefit from NRCan's marketing and promotional activities.

# Availability of ENERGY STAR labelled appliances

Many appliances sold in Canada show the ENERGY STAR symbol on the product, on its packaging or in its literature. The *EnerGuide Appliance Directory* also lists products that have high efficiency levels. The directory is available on the OEE Web site or through the toll-free publications line (see contact information at right).

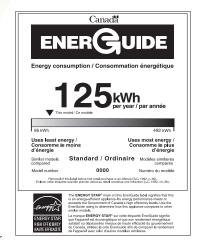
### **ENERGY STAR and EnerGuide**

ENERGY STAR is promoted in conjunction with Canada's EnerGuide rating system for appliances, whose goal is to help consumers save money and help the environment.

Although the EnerGuide label provides buyers with the information they need to compare the energy consumption of different products, ENERGY STAR goes a step further by identifying the most energy-efficient models on the market. In some cases (e.g. refrigerators), the ENERGY STAR symbol may appear on the EnerGuide label.

For more information on ENERGY STAR in Canada, visit the Web site at energystar.nrcan.gc.ca, or to order ENERGY STAR publications, call the publications line at 1-800-387-2000 (toll-free).

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