



LOOK FOR ENERGY STAR®

to identify the most energy-efficient products





Cat. No. M144-12/2011E (Print) ISBN 978-1-100-18034-2 Cat. No. M144-12/2011E-PDF (On-line) ISBN 978-1-100-18035-9

© Her Majesty the Queen in Right of Canada, 2011

For information regarding reproduction rights, contact Public Works and Government Services Canada (PWGSC) at 613-996-6886 or at copyright.droitauteur@pwgsc-tpsgc.gc.ca.

Aussi disponsible en français sous le titre : Recherchez l'étoile ENERGY STAR® pour repérer les produits offrant le meilleur rendement énergétique



CONTENTS

Introduction	2
Lighting products	4
Major household appliances	8
Windows, doors and skylights	13
Home heating and cooling equipment	16
Fans and dehumidifiers	20
Home entertainment equipment	23
Home office equipment	25
Learn more	27

EVERYBODY IS A WINNER!

ENERGY STAR® is the international symbol for energy efficiency — a simple way for consumers to identify products that are among the top energy performers on the market.

Products bearing the ENERGY STAR symbol help save energy and money and protect our environment.

Depending on the type of product you are buying, choosing an ENERGY STAR qualified model can help reduce energy consumption and costs by 10 to 50 percent compared with a conventional product.

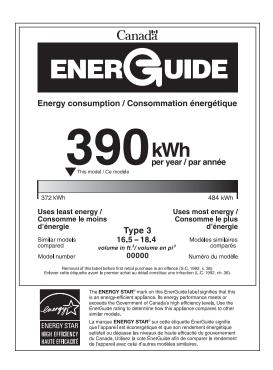
ENERGY STAR qualified products are also good for the environment. Using energy-efficient appliances and other equipment in your home reduces greenhouse gas emissions and pollutants that cause urban smog and acid rain.

To qualify for the ENERGY STAR symbol, products must meet stringent specifications for energy consumption without sacrificing the features, versatility and quality expected of high-performing products. And ENERGY STAR qualified products often cost no more to purchase than conventional equipment.

Natural Resources Canada's Office of Energy Efficiency promotes the international ENERGY STAR symbol in Canada and monitors its use. As you will learn in this booklet, you can find products bearing the ENERGY STAR symbol for every room in the house. So the next time you are shopping for an appliance, lighting, heating or cooling equipment, a computer, home electronics or even windows, remember to look for the ENERGY STAR symbol.

EnerGuide and ENERGY STAR – a winning team

For more than 25 years, Canadian shoppers have relied on the EnerGuide label to compare the energy consumption of major electrical household appliances and heating and cooling equipment. ENERGY STAR and EnerGuide work hand-in-hand — when you see the ENERGY STAR symbol on an EnerGuide label, you can be sure that the product is among the most energy-efficient available, thus saving you money on your energy bills.





LIGHTING PRODUCTS

Lighting accounts for about 11 percent of electricity use in a Canadian home. The good news is that you can help control electricity costs by increasing the energy efficiency of your lighting products.

The average Canadian home has 30 light bulbs that together consume close to \$130 worth of electricity every year. Installing ENERGY STAR qualified light bulbs and luminaires throughout your home is one of the smartest energy efficiency investments you can make.

High-quality energy-efficient lighting products may cost more initially, but they will save you money over their lifetime and will last longer.

Here is why. ENERGY STAR qualified lighting products produce the same light output as regular incandescent products but use only one third or less of the energy. That can make a big difference on your energy bill and for the environment.

Luminaires

Luminaires that have earned the ENERGY STAR symbol combine high performance, quality and the highest levels of energy efficiency.



Fluorescent or light-emitting diode (LED) luminaires are available in hundreds of decorative styles, giving homeowners access to a whole new assortment of fashionable, energy-efficient lighting products in various price ranges.

Why should you consider ENERGY STAR qualified luminaires when renovating, remodelling or building a new home? They are not only designed to meet the efficiency requirements of the future but also come with a two-year warranty (double the industry standard). And you do not need to sacrifice versatility —

ENERGY STAR qualified fixtures are available with the same convenient features as standard fixtures, such as dimming on some indoor models and automatic daylight shut-off and motion sensors on outdoor models.

Ceiling fans

Qualified ceiling fans move air 20 percent more efficiently than standard models, due to efficient motors and improved blade design. Plus,

qualified ceiling fans with light kits are about 50 percent more efficient than conventional models, and the light kits produce about 75 percent less heat. Perfect for our warm summers!

Aside from being safer, an ENERGY STAR qualified torchiere (ceiling-directed floor lamp) uses about \$35 less electricity in a year than a comparable halogen fixture.



Compact fluorescent lamps

Aside from their impressive energy savings and versatility, ENERGY STAR qualified compact fluorescent lamps (CFLs) are rated to last up to 10 times longer than regular incandescent bulbs, making frequent bulb changes a thing of the past — a real bonus for hard-to-reach fixtures. ENERGY STAR qualified CFLs must also meet strict specifications for quality, light colour and brightness.

When purchasing light bulbs, keep in mind that the wattage rating is not a measure of light output — rather, it is a measure of the amount of energy the bulb uses. Light output is measured in lumens. As the following table shows, a CFL uses a lot less electricity to



produce the same amount of light as an incandescent bulb.



Standard incandescent bulb (watts)	ENERGY STAR qualified CFL (approximate equivalent watts)	Minimum light output (lumens)
40	9–13	450
60	13–15	800
75	18–25	1100
100	23–30	1600
150	30–52	2600
This table is provided as a guide only. Che	ck the product packaging to determine the equiv	valent wattage.

When installing CFLs outdoors, check the package for the low temperature rating to ensure that the light suits your local climate. CFLs installed outdoors should be enclosed in fixtures to protect them from the cold, wind and humidity.

CFLs contain a small amount of mercury – one fifth the amount found in a button cell battery and only 1 percent of the mercury used in dental fillings. Like paint, batteries, thermostats and household chemicals, CFLs should be disposed of safely, according to municipal guidelines.

Light-emitting diodes



More and more, light-emitting diodes (LEDs) are available for residential applications, such as desktop or direct lighting, under-cabinet lighting, recessed downlights, display lighting and outdoor lighting.

The design of LED products is crucial to good performance. Look for LED luminaires and bulbs that are ENERGY STAR qualified. They meet high performance criteria: They must equal the brightness of other light fixtures, distribute light well, maintain consistent light output over their rated lifetimes and have excellent colour quality. Their efficacy must be equal to, or better than, fluorescent lighting.



The following table is a quick reference of the most common lamp types, comparing energy use, life, and how each is typically used.

Lamp type	Energy use	Life (hr)	Application
LED	Low	25 000*	Accent, task, decorative
CFL	Low	10 000	Ambient, task
Linear fluorescent	Low	20 000	Ambient, task
Halogen infrared	Medium	3 000	Accent, task
Standard incandescent	High	1 000	Task, accent, decorative
Halogen incandescent	High	4 000	Accent, task

Note: Due to rapid lighting technology changes, you should confirm the latest data from suppliers.

Decorative light strings

LED decorative light strings come in a variety of colours, shapes and lengths. While LED lights may cost more than incandescent bulbs, they can pay for themselves

with energy savings in two seasons or less.

LED lights are more durable than incandescent bulbs. They are shock-resistant and last up to 10 times longer.

The amount of electricity consumed by just one 7-watt incandescent bulb could power 140 LED bulbs.

To ensure quality and durability, look for a brand that bears the ENERGY STAR symbol when purchasing seasonal LED lights. They not only offer a three-year warranty but also use about 90 percent less energy than incandescent light strings.



^{*} Long-life LEDs are still under testing.



MAJOR HOUSEHOLD APPLIANCES

If you were to replace your 2000 model refrigerator with an ENERGY STAR qualified 2009 model, you would save more than 283 kilowatt hours (kWh) of energy and about \$28 in electricity costs per year. This equates to a savings of \$509 over the lifetime of the appliance.

Your refrigerator uses electricity 24 hours a day, seven days a week – and that is a good reason to look for the ENERGY STAR symbol to make sure you are purchasing a top energy performer.



ENERGY STAR qualified household appliances use less energy than conventional ones, offer equal or superior performance and save you money – sometimes a lot of money. Refrigerators are big energy consumers in the home, so it pays to shop around.

The first step when buying a refrigerator is to select the right size (capacity) for your needs. Then look for the ENERGY STAR symbol to lock in long-term energy savings.

ENERGY STAR qualified refrigerators, refrigerator-freezers and freezers are the top energy performers in their class. Superior design, better insulation and high-efficiency compressors help to improve energy efficiency. Most use more than

50 percent less energy than models manufactured in the 1990s.

Check the temperature settings on your refrigerator and freezer. Keep the refrigerator temperature between 1.7°C (35°F) and 3.3°C (38°F) and keep the freezer compartment at -18°C (0°F) for maximum efficiency and food safety.

Of course, you will save money with a new ENERGY STAR qualified model only if you get rid of your old refrigerator. Moving it to the basement or garage defeats the purpose of buying an energy-efficient replacement model. Think of it this way — you won't be plugging your old refrigerator into the wall, you will be plugging it into your wallet.

AVERAGE ANNUAL ELECTRICITY USE OF NEW REFRIGERATORS (kWh/vr)

	1990	1997	2001	2009
Top-mounted (16.5–18.4 cu. ft.)	1044	664	572	439
ENERGY STAR qualified	_	_	440	382

ENERGY STAR qualified dishwashers are at least 9 percent more economical to operate than those that meet the federal minimum

Eighty-five percent of the electricity required to operate a dishwasher is used to heat the water – so the less water a machine uses per cycle, the better.

energy efficiency standard. New ENERGY STAR criteria that will come into effect in late 2011 will require dishwashers to be even more efficient.



Today's dishwashers are much more energy-efficient than those of past years. Believe it or not, ENERGY STAR qualified dishwashers actually use less hot water than when you wash the dishes by hand.

If your dishwasher is at the end of its useful life, look for the ENERGY STAR symbol when shopping for a new model. It is your assurance of a machine that far exceeds the

minimum requirement for energy efficiency in Canada and that will deliver energy and cost savings for as long as you own it.



Always let your dishes air dry (turn off the "heat dry" option).

ENERGY STAR qualified dishwashers enjoy the benefits of advanced technological features and use less energy and less hot water. Some dishwashers feature "intelligent sensors" that

111

determine the length of the wash cycle and the level of hot water required for the load of dishes to be washed. They may also be equipped with a built-in heating element to raise the water temperature.

AVERAGE ANNUAL ELECTRICITY USE OF NEW DISHWASHERS (kWh/vr)

	1990	1997	2001	2009	
Standard	1026	649	634	325	
ENERGY STAR qualified	_	-	534	322	

In the laundry room

Surveys show that the average family does approximately seven loads of laundry each week. That amounts to a lot of hot water, a lot of energy and a lot of money.

Through superior design, 2011 ENERGY STAR qualified clothes washers help you save money on utility bills by using 59 percent less energy than those that meet Canada's minimum energy efficiency standard and 35 to 50 percent less water than conventional models. And they get your clothes just as clean!

ENERGY STAR qualified clothes washers feature

- sensors that prevent energy waste by matching water needs to the size of each load
- advanced high-speed motors that reduce the length of spin cycles and remove more water from clothes, so less time and energy are needed for drying

Both front- and top-loading clothes washers can qualify to bear the ENERGY STAR symbol. Whatever your preference, make sure your next clothes washer is

Using the cold wash option (high-efficiency detergents are formulated for cold-water washing) will mean even more savings from your ENERGY STAR qualified clothes washer.

ENERGY STAR qualified, to help ease the burden of all that laundry.

AVERAGE ANNUAL ELECTRICITY USE OF NEW CLOTHES WASHERS (kWh/vr)

	1990	1997	2001	2009	
Standard	1218	930	905	332	
ENERGY STAR qualified	-	_	304	251	

Savings generated by purchasing an ENERGY STAR qualified clothes washer can be \$113 over its life expectancy (14 years). Not only that, but as the cost of electricity increases, so does your savings.

	Non-qualified standard clothes washer	ENERGY STAR qualified clothes washer
Annual electricity use	332 kWh	251 kWh
Annual energy cost	$332 \times \$0.10 = \33.20	$251 \times \$0.10 = \25.10
Lifetime energy cost	\$33.20 × 14 = \$464.80	\$25.10 × 14 = \$351.40

Currently, there are no ENERGY STAR performance levels for clothes dryers. When shopping for a dryer, look for the lowest EnerGuide rating.

If you are buying a new dryer, look for one with a moisture sensor. The machine will turn off automatically when the laundry is dry.



Water coolers use about the same amount of energy as compact refrigerators.

Water coolers are becoming common in Canadian homes. Some models consume significantly more energy than others to deliver the same result. To avoid pouring money down the drain, look for the ENERGY STAR symbol when buying or leasing a water cooler. To qualify for the ENERGY STAR symbol, water coolers must meet strict technical requirements that place them at "the top of the class" in terms of energy performance.

WINDOWS, DOORS AND SKYLIGHTS

Windows, doors and skylights can add character and style to a home, but they can also be a significant source of heat loss and discomfort.

When buying a new home or replacing windows, doors or skylights for an existing

Professionally installed ENERGY STAR qualified residential windows, doors and skylights can reduce your annual heating and cooling costs by up to 16 percent. They reduce or eliminate cold drafts and condensation on the glass in the winter and keep hot air out and cool air in during the summer.



dwelling, use the ENERGY STAR symbol to help you select models that will save you money and keep your house comfortable year-round.

What makes the difference? ENERGY STAR qualified windows, doors and skylights have many of the following features:

- double or triple glazing with a sealed insulating glass unit
- low-emissivity (low-E) glass
- inert gas, such as argon or krypton, in the sealed unit
- low-conductivity or "warm edge" spacer bars
- insulated frames, sashes and door cores
- good airtightness



Climate conditions vary from one part of Canada to another — and so do the qualification criteria for ENERGY STAR for windows, doors and skylights. To qualify, these products are tested for their thermal performance and airtightness. The colder the climate, the tougher the qualification requirements.



ENERGY STAR qualified windows, doors and skylights are certified by an accredited independent agency for their energy performance and quality.

But do not worry — ENERGY STAR does all of the technical work for you, making it easy to identify products that will suit your climate. Simply consult the ENERGY STAR climate zone map to find

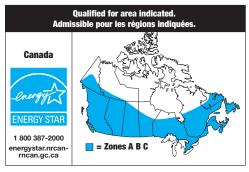
the zone where you live (see the map on this page). Then check the ENERGY STAR label to make sure the product qualifies in your zone. To save even more money and energy, buy a product that qualifies for ENERGY STAR in a colder zone (Zone A is the mildest and Zone D is the coldest).





ENERGY STAR labels for windows, doors and skylights come in various formats, each of which indicates the climate zone (or zones) where the product is qualified. To ensure an energy-efficient purchase, look for any of these labels in dealer showrooms, on Web sites or in product literature.

If your old windows are single- or doubleglazed without low-E and argon gas but are in good condition (i.e. they do not need to be replaced), you may be able to add a storm window to get an extra layer of protection. Adding a storm door can also improve airtightness around entrances.



Examples of labels for windows, doors and skylights







HOME HEATING AND COOLING EQUIPMENT

Installing one of today's energy-efficient furnaces can reduce your home-heating costs by up to 25 percent per year. Depending on the efficiency of your old furnace, you could recover the higher initial cost of your new high-efficiency system in about seven years.

Unless you have discovered a magic heat source, well over half of your annual energy bills go toward keeping your home warm and comfortable in winter. That is not to mention the money you may be spending to cool your home in summer.

But do not despair – help is available! Heating and cooling systems that display the ENERGY STAR symbol use less energy than new non-qualified equipment – and they will use a lot less energy than old equipment that may be installed in your home now.



What is the bottom line? ENERGY STAR qualified heating and cooling systems work just as well as conventional products (or better) and will begin saving you money as soon as they are installed. Look for the ENERGY STAR symbol to make sure you are getting the best return for your heating and cooling dollars.

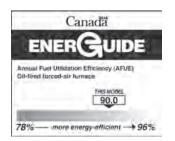
A new high-efficiency oil or gas furnace uses less energy – so why not start saving today?

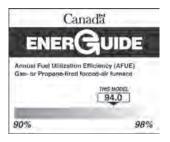
Save additional energy and money by installing a programmable thermostat. Setting your home's temperature back a few degrees when you are at work or asleep overnight provides optimal savings.

If your heating system is nearing the end of its expected life, why wait for it to fail and leave you out in the cold? Replacing it now with an ENERGY STAR qualified model will save you money and give you peace of mind.

To qualify for ENERGY STAR:

- The annual fuel utilization efficiency (AFUE) requirement for oil furnaces is 85 percent.
- Oil- and gas-fired boilers must have an AFUE of 85 percent or higher (many units are also used to heat domestic water as an integrated system).
- For gas and propane furnaces, the regulated minimum energy performance levels are currently the same as ENERGY STAR levels in Canada. This category is suspended until February 1, 2012, when the revised ENERGY STAR specification for gas and propane furnaces comes into effect. The revised specification requires qualifying furnaces to have an AFUE of 95 percent or higher. The energy consumption of the furnace fan must be no more than 2 percent of the total energy consumption of the furnace.





Before replacing your furnace, make sure your home is properly sealed against air leaks. By sealing the home first, you will be able to reduce its heat load requirement and purchase a more accurately sized furnace or boiler. The right-size

equipment will run at peak efficiency, saving you even more money.

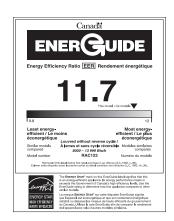
Keep your furnace well maintained, and change or clean furnace filters every few months. Dirty air filters block airflow and can damage the heat exchanger.



Not all air conditioners are created equally – some models use far more energy than others to get the job done.

Significant improvements have been made in air-conditioning technology over the past 15 years. Although many Canadians consider this equipment to be a necessity, it does not have to be a drain on your budget.





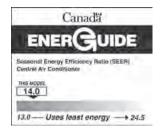
You can achieve affordable, efficient and effective home cooling on hot summer days by purchasing an air-conditioning system bearing the ENERGY STAR symbol.

The ENERGY STAR symbol is your assurance that a room air conditioner is at least 10 percent more energy-efficient than conventional models.

An ENERGY STAR qualified central air

conditioner is about 8 percent more energy-efficient than a non-qualified system. With either option, choosing ENERGY STAR ensures you will come out ahead.





A heat pump can provide year-round climate control in some regions of Canada, heating your home in winter and cooling it in summer.

Installing an ENERGY STAR qualified heat pump that is sized correctly for your home can deliver substantial energy savings, increase household comfort and reduce pollution and greenhouse gas emissions.



An air-source heat pump absorbs heat from the outdoor air in winter and transfers it to your home; in summer, the cycle is reversed. ENERGY STAR qualified air-source heat pumps are about 6 percent more energy-efficient for heating and about 8 percent more efficient for cooling than standard models.

A properly installed unit will ensure that your new air conditioner or heat pump performs at ENERGY STAR stated levels. Ask your installer to check your new unit for the proper refrigerant level and airflow.

When replacing an air conditioner or a heat pump, make sure you dispose of the old one properly, so chlorofluorocarbons (CFCs) are recycled and reused. Never send an old air conditioner to a landfill site.

For split systems, ENERGY STAR qualified units must have matched indoor and outdoor units. Set your air conditioner at 25°C (77°F) when you are home, and set it higher when you go out (a programmable thermostat makes this easy to do). For each degree you operate an air conditioner below 25°C (77°F), you use from 3 to 5 percent more energy.

Ground-source heat pumps use the thermal energy of the ground or groundwater to provide a source of heating or cooling for a home. ENERGY STAR qualified systems, depending on the category, are typically 10 to 50 percent more energy-efficient than non-qualified equipment.



FANS AND DEHUMIDIFIERS

Ceiling and ventilation fans

ENERGY STAR qualified ceiling fans move air up to 20 percent more efficiently than standard models. If your ENERGY STAR qualified ceiling fan does not include lighting and you wish to add it, be sure to purchase an ENERGY STAR qualified light kit, with either pin- or screw-based CLFs.

A 60-watt (W) ceiling fan costs between 10¢ and \$2 to operate monthly, while an air conditioner can cost between \$7.50 and \$41 a month. Fans do not actually cool a room; they cool you by circulating air.

To qualify for ENERGY STAR, a ceiling fan with lighting must be 50 percent more energy-efficient than a standard fan/light combination and must move air up to 20 percent more efficiently than a standard model.

ENERGY STAR qualified ventilation

fans, such as those found in range hoods and bathrooms, typically use about 65 percent less energy than standard models. Better blade design enables them to move more air more efficiently, and their high-performance motors last longer. A minimum one-year warranty is required, and noise levels cannot exceed strict criteria set according to the type of fan.



If a ventilating fan contains a light fixture, the total lamp wattage must not exceed 50 W. Fans with a night light must use a bulb that consumes 4 W or less.

Residential dehumidifiers

Portable residential dehumidifiers may also display the ENERGY STAR symbol if they perform at high levels of energy efficiency. ENERGY STAR qualified dehumidifiers use about 15 percent less energy to remove the same amount of moisture as conventional units.



The energy efficiency of a dehumidifier is measured by its energy factor (EF), or the amount of water it removes per kilowatt hour (kWh) of energy used. The EF is usually found on the nameplate of the unit. The higher the EF, the more energy-efficient the unit. To qualify for ENERGY STAR, standard-capacity dehumidifiers (up to 35.5 litres of water removal per day) must have an EF between 1.20 and 1.80, depending on their capacity. High-capacity units must have an EF of 2.5 or higher.

WATER REMOVAL CAPACITY		MINIMUM ENERGY FACTOR
(L/day)	(pints/day)	(L/kWh)
	Standard-capacity dehumidifi	iers
≤11.8	≤25	1.20
>11.8 to ≤16.6	>25 to ≤35	1.40
>16.6 to ≤21.3	>35 to ≤45	1.50
>21.3 to ≤25.5	>45 to ≤54	1.60
>25.5 to <35.5	>54 to <75	1.80
	High-capacity dehumidifiers	5
≥35.5 to ≤87.5	≥75 to ≤185	2.50

The following table can be used as a guide when selecting a standard-capacity dehumidifier for residential use.

AREA TO BE DEHUMIDIFIED	HUMIDITY CONDITIONS* (MOISTURE ACCUMULATION PER DAY) (L)			
Square meters	Damp ¹	Wet ²	Very wet ³	
46 m ² (500 sq. ft.)	6	7	8	
93 m² (1000 sq. ft.)	8	9	11	
139 m² (1500 sq. ft.)	10	12	14	
186 m² (2000 sq. ft.)	12	15	18	
232 m ² (2500 sq. ft.)	15	18	21	
279 m ² (3000 sq. ft.)	18	22	24	

¹ Damp – An area that feels damp and where a musty odour prevails, especially in humid weather. Damp spots may appear on the walls and floor.

²Wet – The space feels and smells wet, walls or floor sweat, or seepage is present.

³ Very wet – Walls sweat, and the floor is almost always wet.

^{*}If capacity is not measured in metric units, remember that two pints are equivalent to approximately one litre.

HOME ENTERTAINMENT EQUIPMENT



Today's entertainment systems are complex. A typical system might include a television; disc players for CD, DVD and Blu-ray; audio amplifiers; external CD or MP3 connectors; and a set-top box to deliver a cable signal. These systems use energy, many even when they are turned off.

That energy adds up. A recent California study says that television-related activity can consume as much as 10 percent of the energy used by an average household in the state. Canadians' consumption is probably comparable, given that we average more than two televisions per household. Such consumption not only raises our energy costs but also puts unnecessary strain on our electricity infrastructure.

The bigger a television screen, the more energy it uses. A 52-inch (in.) liquid crystal display (LCD) uses about twice as much power as a 32-in. model. The type of television you buy makes a difference, too. Plasma televisions can use as much as two to three times the electricity to produce an image of the same brightness as an LCD model. Add in other devices, and your



energy consumption creeps up. Even when your system is powered down, energy continues to flow into it. Known as standby power, this uninterrupted supply of electricity powers such features as clocks, timers, remote controls and set-top boxes that are always on or ready to receive information.



What can you do to reduce your system's energy consumption?

- Only buy what you know you will need.
 Limit your devices to ones you know you will really use.
- Pick a screen and sound system that fits with the size of your viewing or listening area.
- Make sure your television's brightness setting is on "home mode." It uses about 25 percent less energy than the brighter setting that retailers use for display.
- Plug all your devices into a power bar that you can easily reach, and switch it off when you are not using your system.

Look for the ENERGY STAR symbol when you shop and when you choose a cable service provider. That way you will be sure you are getting the best return for your energy dollar from your home entertainment system. Stringent specifications on ENERGY STAR qualified equipment apply to most of the ways your system can use energy, whether it is for imaging, stand-by power, audio amplification and more. ENERGY STAR is available for a full range of the products you will need to make your entertainment experience enjoyable, economic and energy-efficient.



HOME OFFICE EQUIPMENT



Computers are a common feature in Canadian homes today – but convenience comes at a cost.

Whether members of your household use a computer to work at home, bank and shop

on-line, surf the Web or stay in touch with family and friends, this piece of equipment probably gets used every day.

Unfortunately, computers can use a lot of power. One way to minimize their impact on your electricity bill is to choose a computer system and other home office equipment that carry the ENERGY STAR symbol.

ENERGY STAR qualified computers will help you save even more energy and money, thanks to a new ENERGY STAR specification that includes strict energy efficiency requirements in active mode, as well as in sleep mode.

ENERGY STAR qualified computers, monitors, printers, fax machines, copiers and other business machines automatically switch to sleep mode when they are

turned on but have not been actively used for a preset period. Some of these products must have two sleep modes to qualify for ENERGY STAR

An ENERGY STAR qualified computer in sleep mode uses only a fraction of the electricity used by a typical model without enabled power management features. Computers that operate in low-power mode much of the time not only save energy but also run cooler and last longer. So make sure these features are activated.



If you are not in the market for a completely new system, consider replacing just the monitor. An ENERGY STAR qualified LCD flat-panel monitor can be up to 20 percent more energy-efficient than conventional models.



Are you buying a new computer? Consider a laptop. Laptops are designed to be more energy-efficient than desktops due to their size and portability. Laptops

Plug your home office equipment such as a computer, monitor, speakers, printer and scanner into a power bar that you can turn off easily when the equipment is not in use. may seem to be more expensive, but remember, you are getting both a processing unit and a monitor, and you will save money on energy costs.

LEARN MORE

Natural Resources Canada's Office of Energy Efficiency offers information to help Canadians become more energy-efficient at home, at work and on the road.

Visit our Web sites:

- energystar.nrcan.gc.ca
- oee.nrcan.gc.ca

To obtain additional free copies of this publication or other publications on energy efficiency, please contact:

Energy Publications

Office of Energy Efficiency Natural Resources Canada c/o St. Joseph Communications Order Processing Unit 1165 Kenaston Street PO Box 9809 Stn T Ottawa ON K1G 6S1

Tel.: 1-800-387-2000 (toll-free)

Fax: 613-740-3114

TTY: 613-996-4397 (teletype for the hearing-impaired)

NOTES		

The **ENERGY STAR**® symbol can be displayed in various ways:













Natural Resources Canada's Office of Energy Efficiency

Leading Canadians to Energy Efficiency at Home,

at Work and on the Road

