## **ENERGY STAR®**

in Canada Annual Report

2014















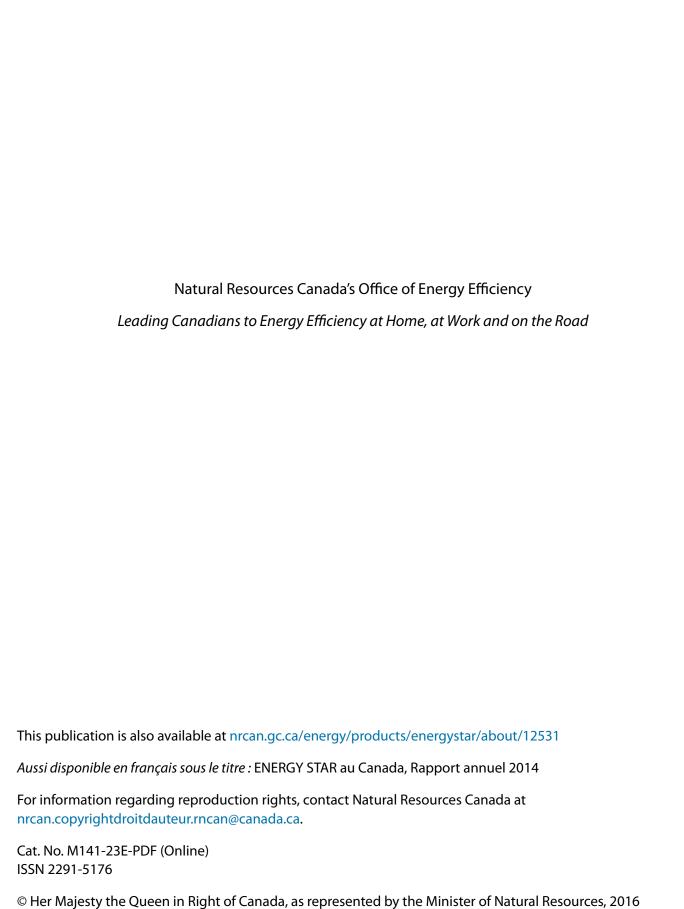


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## **ENERGY STAR®'s Sustainable Success**

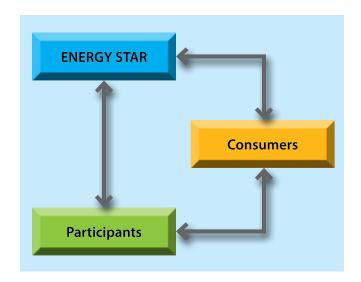


## Sustained nation-wide efforts deliver success

The ENERGY STAR Initiative in Canada is administered by the Office of Energy Efficiency (OEE) at Natural Resources Canada (NRCan). But it is the nation-wide network of ENERGY STAR Participants – manufacturers, brand owners, retailers, new home builders, public institutions, utilities, industry associations and energy efficiency advocates – that makes the program a reality. There are 1,800 ENERGY STAR Participants across the country – 1,000 for products and 800 for new homes.

"ENERGY STAR is a leading example of a successful voluntary initiative between government and industry," says Dianna Miller, Chief, ENERGY STAR Products. "The Government of Canada provides the tool – the respected and recognized ENERGY STAR symbol – and our Participants put it to work for the benefit of Canadians."

Together, government, industry and consumers are "transforming the way Canadians use energy" by engaging in a virtuous cycle of improving energy efficiency.



**ENERGY STAR's virtuous cycle** 

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How does ENERGY STAR®'s virtuous cycle work?

### Office of Energy Efficiency

ENERGY STAR in Canada is an international partner in the United States (U.S.) ENERGY STAR Program, and its officers work closely with the U.S. Environmental Protection Agency. The OEE especially contributes to the development and implementation of new and updated technical specifications; in 2014, updated specifications for 10 products came into effect.

As well, the OEE develops ENERGY STAR technical specifications for residential fenestration products made or sold in Canada in consultation with stakeholders. These windows, doors and skylights are suited specifically for Canada's cold climate.

In 2014, Version 4.0 of the fenestration specification was updated to have more stringent energy performance requirements and reduce the number of climate zones that apply to Canada from four to three. This specification is slated to go into effect February 1, 2015.

The OEE also actively engages the residential construction industry to implement the ENERGY STAR for New Homes Standard, which requires homes to be on average 20 percent more energy-efficient than typical new homes.

The OEE works with the certification bodies that test and certify ENERGY STAR eligible products. It also monitors compliance with ENERGY STAR requirements and guidelines and handles any complaints or problems that arise in relation to the initiative.

**ENERGY STAR certified products:** 

- ✓ Save energy.
- ✓ Save money on utility bills.
- ☑ Reduce impacts on the environment.

The OEE provides information for both residential and commercial consumers as well as for our Participants through our redesigned ENERGY STAR website and other information products.

This government stewardship and involvement increases the credibility of the ENERGY STAR symbol in Canada. In Canada and the U.S. more than 80 percent of people recognize the symbol. Also, recent research shows that 88 percent of Canadians surveyed say ENERGY STAR is the most useful tool they have for becoming energy-efficient.

### ENERGY STAR Participants

For ENERGY STAR Participants, the strength of the ENERGY STAR symbol – including its international recognition – is confirmation for continuing to make, promote and sell these high efficiency products in the Canadian market.

The blue ENERGY STAR symbol gives manufacturers and new home builders a competitive edge in the market and helps differentiate their products from other models. Similarly, Participant retailers tell us it



makes it easier for them to help consumers who are looking to save money on product operation costs. That little blue star considerably narrows the range of product models the consumer has to consider.

Our Participant utilities in every province and territory tell us the program is often the backbone of their energy efficiency programs. Because consumers equate ENERGY STAR with energy efficiency, it makes sense for utilities to use ENERGY STAR certification as a ready-made eligibility criterion for rebates and incentives.

ENERGY STAR Participants also make a commitment to "walk the talk" by sharing the energy efficiency message throughout their organizations – with employees, customers, suppliers and stakeholders. They buy ENERGY STAR certified products themselves and make an effort to reduce their organization's energy consumption.

#### **ENERGY STAR...at a glance:**

- ✓ Recognized mark of high efficiency.
- **☑** Stringent technical specifications.
- **☑** *Tested and certified by third parties.*
- ☑ Backed by the Government of Canada.

#### Canadian consumers

ENERGY STAR certified products are available in Canada in 70 categories from appliances to lighting and heating systems, and ENERGY STAR qualified new homes are now available in every province. In the end, Canadians speak through their actions: buying millions of ENERGY STAR certified products every year and adopting behaviours that save energy, save money and reduce impacts on the environment. Across the Canadian economy, in 2014 alone, ENERGY STAR certified products delivered 3.4 PJ in energy savings – the equivalent of taking 66,000 cars off our roads for the year.

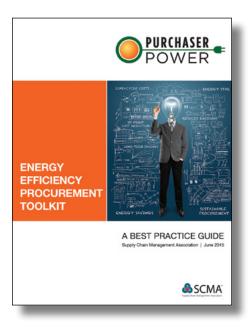
## **Participant Power**



## SCMA flexes its procurement power

ENERGY STAR® Participants come in all sizes – from single retail shops to global appliance manufacturers. In 2014, ENERGY STAR in Canada gained a powerful industry ally with a wide reach: the Supply Chain Management Association (SCMA) – the largest association of supply chain professionals in the country.

With more than 7,500 members working across the private and public sectors, SCMA is one of the principal sources of supply chain training, education and professional development in the country. SCMA also grants Supply Chain Management Professional designation through its accreditation program.



Developing policies and best practices that use ENERGY STAR certified products as a benchmark for procurement is an easy and effective way for organizations to save energy and money and deliver on sustainability goals and corporate social responsibility commitments.

SCMA marked its new status as an ENERGY STAR Participant by launching its Purchaser Power program to promote sustainable procurement practices as a means of increasing the competitive advantage of Canadian organizations.

SCMA plans to engage supply chain professionals through activities such as awareness campaigns, information sessions, training, case studies and tailored information materials. Plans include three tools in 2015: a toolkit of best practices, a self-reporting tool and in-person training in major centres across the country.

While many organizations purchase energy-efficient products, few track the energy savings derived from sustainable procurement. By tracking savings, procurement professionals can demonstrate their direct contribution to the bottom line and highlight the recurring dividend tied to the systematic purchase of energy-efficient products.

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## Hospitals turn energy \$ into patient care \$

Greening hospitals is gathering momentum across Canada. Improving the environmental performance, including energy efficiency, of these large institutions offers great opportunities for energy and cost savings that can be dedicated to patient care.

The Ottawa Hospital won the ENERGY STAR award for Advocate of the Year in 2014. This major facility joined forces with the Canadian Coalition for Green Health Care to promote the ENERGY STAR Health Care Energy Leadership Program.

The coalition publishes a free, online newsletter that reports on a wealth of activities and issues in the field, including stories about green best practices. The *Green Digest* is sponsored by the Canadian Healthcare Engineering Society and Philips Lighting Canada.

The hospital and coalition also promoted the new building score for Canadian health care facilities that became part of ENERGY STAR Portfolio Manager®.







## Energy-efficient products? There's an app for that!

In the future, retail sales staff may be armed with instant information on energy efficiency right at the point of sale. In 2014, ENERGY STAR Participant My Sustainable Canada tested a prototype mobile application at three Future Shop stores in Waterloo, Ontario. Sales staff used the app with customers to comparison shop for major appliances (i.e. kitchen and laundry) using information on life-time energy consumption and the associated utility costs and greenhouse gas emissions.

Key findings from the project include:

- Sales associates felt that an eco-app would be a useful closing tool and could help them increase sales.
- Half of the customers surveyed said that having energy cost information would make them more likely to buy energy-efficient products.
- More than 60 percent of senior Future Shop managers surveyed felt that training on energy and sustainability is currently insufficient and that training on sustainability and the mobile application would be beneficial.

The pilot project, supported in part by NRCan, establishes the groundwork for future initiatives to refine the application and distribute it to more retailers across Canada.



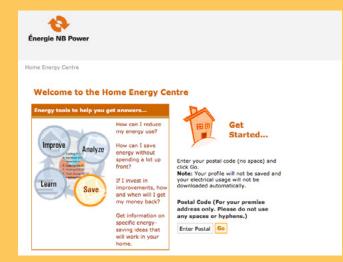
## Winning websites from Participant utilities

The Internet is usually the first place Canadians look for information, including information about energy efficiency. ENERGY STAR Participants do a great job of spreading the word – and the details – through their websites and, increasingly, through social media such as Twitter and Facebook.

In 2014, E Source Companies LLC (a company that provides research and advisory services to utilities and large energy users) assessed 101 utility websites for 30 key features that residential customers want to find. The reviewers rated these features based on ease of use and if they were in fact available. The top-rated sites in Canada were:

- Énergie NB Power
- BC Hydro
- Union Gas Limited

The study also found that the usability of utilities' websites has improved significantly as, increasingly, residential energy consumers are interacting with their utilities via their websites from a variety of devices (including mobile ones).



#### **Énergie NB Power**



#### **BC Hydro**



## **OEE Works**



## ENERGY STAR® website a hit!

In 2014 we introduced the redesigned ENERGY STAR in Canada website, which incorporated best practices in the field. The site proved popular with Canadians looking for information on energy-efficient products.

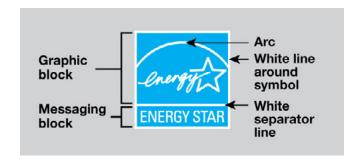
Our Searchable product list was consistently in the top 10 most-visited pages on the NRCan website. Consumers can use the list tool to find and compare brands, features and the energy efficiency of product models. We also worked with our ENERGY STAR counterparts in the United States to develop a French-language version of their online Product Finder tool to give all Canadians access to that information.



# Flying the ENERGY STAR flag!

In 2014 we offered free banners to Participants to promote ENERGY STAR. The large banners were designed for use indoors or outdoors and available in vertical or horizontal versions.





## Protecting the brand

One of ENERGY STAR in Canada's continual activities is ensuring the marketplace is in compliance with ENERGY STAR requirements. This can range from showing a new Participant how to use the ENERGY STAR symbol in product literature to responding to complaints that a business is using the ENERGY STAR symbol without authority.

We also keep Participants informed about their obligations through our communiques and quarterly newsletter *ENERGY STAR*° *News/Nouvelles*. In 2014, for example, we reminded members to ensure that:

- ENERGY STAR eligible products that are also subject to Canada's Energy Efficiency Regulations (the Regulations) meet all the requirements described in the Regulations.
- ENERGY STAR eligible fenestration products (windows, doors and skylights) must be properly labelled, visibly labelled and qualified for the climate zone in which the product is being sold or installed.

# ENERGY STAR Most Efficient products 2014

Each calendar year, a select list of ENERGY STAR certified products is eligible to qualify for the more stringent Most Efficient designation – the "best of the best" in energy efficiency. These models are attractive to consumers looking for the cutting edge in energy-efficient technologies that have exceptional energy performance and innovative features.



In 2014, the product categories were:

- air-conditioners
- ceiling fans
- clothes washers
- computer displays (monitors)
- gas boilers and gas furnaces
- heat pumps
- refrigerators
- ventilation fans
- windows

# ENERGY STAR technical specifications: new and updated

ENERGY STAR technical specifications evolve with the market so that ENERGY STAR certified products always represent the top 15 to 30 percent of energy performers.

Contributing to new or revised specifications set by the U.S. Environmental Protection Agency is a substantial activity for the ENERGY STAR Initiative in Canada and its Participants. Heat or energy recovery ventilators and fenestration products (doors, windows and skylights) are the only technical specifications wholly developed in Canada.

Notably in 2014, conditions in the lighting market changed, including the rapid commercialization of LED lamps and more stringent regulations for incandescent bulbs. Consequently, a new Lamps Version 1.0 specification replaced both the existing LED and compact fluorescent lamps (CFL) specifications.

Also reflecting changes in technology, the telephony specification was significantly revised. Version 3.0 includes voice over Internet protocol (VoIP) telephones that incorporate a power-saving "Off Mode" intended for low-use periods in business environments.



In 2015, ENERGY STAR certified clothes dryers will be available to match certified clothes washers.

Battery-charging systems (BCS) were retired from the ENERGY STAR family of products because cost-effective energy savings of BCS products have become very limited in the current market and regulatory environment.

Meanwhile, the market prepared for the debut of clothes dryers as an ENERGY STAR certified product effective January 1, 2015. This means that now both pieces of a matching laundry set can be ENERGY STAR certified.

## In 2014, 10 updated versions of specifications went into effect.

Product type	Version	Effective date			
Revisions completed					
Appliances					
Refrigerators and freezers	5.0	September 15, 2014			
Commercial food service equipment					
Commercial ovens	2.1	January 1, 2014			
Commercial refrigerators and freezers	3.0	October 1, 2014			
Electronics and office equipment					
Computers	6.0	June 2, 2014			
	6.1	September 10, 2014			
lmaging equipment	2.0	January 1, 2014			
Set-top boxes and cable boxes	4.1	December 19, 2014			
Telephony	3.0	October 1, 2014			
Heating and cooling					
Boilers	3.0	October 1, 2014			
Lighting					
Lamps (bulbs)	1.0	September 30, 2014			
Other					
Water coolers	2.0	February 1, 2014			

# ENERGY STAR Portfolio Manager, Canadian adaption

In August 2014, the OEE marked the first year of activity for the Canadian adaptation of ENERGY STAR Portfolio Manager®. As of that date, 7,400 buildings had been registered in the tool, which represents more than 16 percent of the commercial/institutional sector in Canada. More than 700 stakeholders have taken webinar training on how to use the tool.



The online benchmarking tool allows building owners and managers to measure and monitor the energy performance of their buildings on a scale of 0 to 100 and to see how they compare with others. For example, a score of 75 indicates that the building's energy consumption performs better than 75 percent of all comparable buildings nationwide. To calculate an ENERGY STAR score, users enter energy data for an entire year and some key operational characteristics, such as surface area, into Portfolio Manager.

The tool originally offered scores for only office buildings and school buildings (K–12). In May 2014, performance scores for Canadian hospitals became available, adding an important new class of buildings – with huge potential for energy savings – to the tool. Canadian energy performance scores for grocery (food retail) stores will be available in 2015.

NRCan practices what it preaches: the department is using ENERGY STAR Portfolio Manager for 18 key building sites. NRCan has entered more than 10,000 data points from more than 100 utility meters of historical data from 2005 to the present.

Another significant result is that corporate challenges and environmental programs such as Greater Toronto CivicAction Alliance's Race to Reduce, the Canada Green Building Council, and Vancouver City Council's Energy Retrofit Strategy all rely on ENERGY STAR Portfolio Manager.

## **ENERGY STAR for New Homes: Update 2014**

The ENERGY STAR for New Homes program makes energy-efficient new homes available to homeowners. It also allows builders to produce these homes in a timely, simple and cost-effective manner using common building practices. These homes, built to the ENERGY STAR for New Homes Standard, are on average 20 percent more energy-efficient than a typical new home.

## **ENERGY STAR homes available** across Canada

A key accomplishment for the program in 2014 was the publication of additional options within the standard for builders to build ENERGY STAR qualified homes in six additional provinces: British Columbia, Alberta, Newfoundland and Labrador, Prince Edward Island, New Brunswick and Nova Scotia. These additional options will give builders across the country more options and opportunities when building ENERGY STAR qualified homes. This will in turn make ENERGY STAR qualified homes more available across the country.

More than 50,000 new homes in Canada earned the trusted ENERGY STAR label from 2005 to 2014, and more than 9,000 homes were labelled in 2014 alone.

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#### New promotional tools for builders

As part of efforts to educate homeowners about the benefits of ENERGY STAR qualified homes, a new promotional poster was developed and made available to builders participating in the ENERGY STAR for New Homes program.

This is part of the series of promotional products the department is developing to help builders promote the added value that ENERGY STAR qualified homes bring to their customers.





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NRCan recognized eight organizations with 2014 ENERGY STAR Market Transformation Awards for demonstrating excellence in helping Canadians make energy-efficient choices.

Manufacturer of the Year	<b>Whirlpool Canada LP</b> , in 2013, marketed 350 ENERGY STAR certified base appliance models, accounting for up to 80 percent of models in some appliance categories.	
Manufacturer of the Year, Fenestration Products	<b>Centennial Windows &amp; Doors</b> , the first company to make ENERGY STAR certified windows in Canada, tripled its number of certified models between 2012 and 2013.	
Retailer of the Year	<b>The Home Depot Canada</b> partnered with its suppliers to grow its offering of ENERGY STAR certified products by almost 21 percent in 2013. Its offering of ENERGY STAR certified LED light bulbs grew by 37 percent.	
Utility of the Year, Provincial	<b>Hydro-Québec</b> promoted ENERGY STAR qualified LED lighting, windows, household appliances and televisions with demonstrable impact on the availability and sales of these products in Quebec.	
Utility of the Year, Regional	<b>Niagara-on-the-Lake Hydro</b> published the <i>CUT Cook</i> less <i>Book</i> , which includes recipes that use minimal or zero energy to prepare, recommendations for ENERGY STAR certified appliances and tips for reducing energy use.	
Promotional Campaign of the Year	<b>Hydro-Québec</b> sent a strong message about the long life of LED bulbs by showing a young boy stretching for a ceiling light with the tagline: "When it's time to change it, he be big enough to do it."	
Advocate of the Year	<b>The Ottawa Hospital</b> joined forces with the Canadian Coalition for Green Health Care to promote the ENERGY STAR Health Care Energy Leadership Program and ENERGY STAR Portfolio Manager.	
Promoter of the Year, ENERGY STAR Most Efficient	<b>Vinyl Window Designs Ltd.</b> , through its own research and development department, offered nine window models that qualified for ENERGY STAR Most Efficient and has nine more in development.	
Sustained Excellence	<b>Vinyl Window Designs Ltd.</b> employs almost 400 people in six manufacturing facilities in Canada, is a leader in introducing new technologies and invests substantially in upgrading its products.	
New Homes Builder of the Year	<b>Midhaven Homes</b> promoted ENERGY STAR in every aspect of its business, including through holding rigorous training for construction and sales staff and building 92 ENERGY STAR qualified homes in eight months.	
New Homes Promotional Campaign of the Year	<b>Midhaven Homes</b> focused on the multimedia message that an ENERGY STAR qualified home is the best home and best value, providing a healthier living environment that requires little conscious lifestyle change.	

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