

ENERGY STAR® in Canada

2015 ANNUAL REPORT



Canada

ENERGY STAR® in Canada

2015 ANNUAL REPORT

Natural Resources Canada's Office of Energy Efficiency
Leading Canadians to Energy Efficiency at Home, at Work and on the Road

This publication is also available at nrcan.gc.ca/energy/products/energystar/about/12531.

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ENERGY STAR® CANADA

The simple choice for energy efficiency

ENERGY STAR Canada is strong and steady

As ENERGY STAR Canada for products approaches its 15th anniversary, the program – and its familiar blue symbol – continue to be a significant factor in moving Canadians toward energy efficiency. ENERGY STAR for New Homes marked its 10th anniversary in 2015 and enjoyed its biggest annual growth to date.



Also, two new building types for Canada were added to the ENERGY STAR Portfolio Manager® benchmarking tool for buildings.

ENERGY STAR Canada is a voluntary government-industry partnership and an international partner in the United States (U.S.) ENERGY STAR program. The program was created to help consumers, businesses and industry save money and protect the environment through adopting energy-efficient products, new homes, buildings and practices.

About 2,000 Participants in every sector of the Canadian economy drive the Canadian program's success. They include manufacturers, trade associations, retailers, institutions, energy efficiency program providers, small businesses and new homes builders. The program serves as a national platform and catalyst to deliver real energy efficiency by addressing market barriers.

This annual report offers snapshots of ENERGY STAR Canada news and activities during 2015. These highlights show innovation and growth in high-efficiency products and new homes offered to Canadians; confidence in ENERGY STAR as a decision-making tool for consumers; and that ENERGY STAR is an influential agent in transforming the marketplace.

Research shows that Canadians feel ENERGY STAR and energy efficiency are important. The ENERGY STAR symbol is instantly recognized by almost 90 percent of Canadians. Almost the same high proportion considers the symbol the most helpful tool they have for becoming energy-efficient. Further, 70 percent of Canadians say they prefer to buy ENERGY STAR certified products instead of non-certified products.

In 2015, the **Canadian Home Builders' Association** (CHBA)

conducted its first Home Buyer Preference Survey.

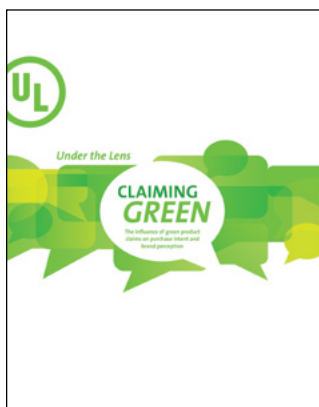
The survey posed 200 questions to more than 1,500 home buyers about features they want in a new home. CHBA reported that one of its most striking findings was that no respondent would compromise on energy efficiency. Of the top 10 "must have" features, energy efficiency held three spots: 2nd was energy-efficient appliances; 3rd was an overall energy-efficient home; 4th was high-efficiency windows.

Canadian
Home Builders'
Association



► *Energy Star Canada is strong and steady (continued)*

In yet another poll, **UL Environment** looked at green product claims and the effects on consumers' perception of the product brand and their intent to purchase. The survey covered four product categories: electronics, home improvement, personal



care and cleaning products. In electronics, the one category related to ENERGY STAR, the report states that ENERGY STAR certification "is becoming a baseline expectation for products in this category, ranking number one in terms of influence on purchase decision, positive impact on brand perception, and willingness to pay a 10 percent premium." The survey also

found that consumers trust certification labels above all. Among these labels, they trust and value the ENERGY STAR symbol the most.

The **Canada Green Building Council** has made ENERGY STAR a go-to standard in Version 4 of its Leadership in Energy and Environmental Design (LEED®) rating system for buildings that was launched in Canada in November 2014. For example, the Minimum Energy Performance prerequisite for LEED v4 Interior Design and Construction (IC+D) registered projects is that 50 percent of eligible products

must be ENERGY STAR certified or the equivalent. This prerequisite applies to appliances, office equipment, electronics and commercial food service equipment. Applicants can increase their LEED score for IC+D projects by increasing the number of ENERGY STAR certified products in the building.



One point is earned if 70 percent of eligible products are ENERGY STAR certified; two points are earned at 90 percent. Every additional point brings the project closer to LEED certification.

Similarly, ENERGY STAR certification or the equivalent is a common benchmark in the consumer-facing portions of residential and commercial demand-side management (DSM) programs offered by utilities. DSM programs incent energy users to reduce or shift energy consumption. This may include changing behaviours or replacing older products with high-efficiency ones.

Natural Resources Canada (NRCan) runs the ENERGY STAR program in Canada. The department and several Canadian utilities are members of the U.S.-Canada



Consortium for Energy

Efficiency (CEE). The CEE promotes the development and availability of energy-efficient products and services. For example, the 2014 *CEE Annual Industry Report* states that gas and electricity expenditures for Canadian DSM programs reached \$842 million in 2013, a 5 percent increase over 2012.

The 2015 *Energy Policies of IEA Countries – Canada 2015 Review* was produced by the **International Energy Agency (IEA)**. The review reported that ENERGY STAR Canada had aligned all its technical specifications with the U.S. **Environmental Protection Agency (EPA)** by the end of 2015 (with the exception of a few climate-driven products). This achievement reduces administrative burden on manufacturers and ensures full product information is available for consumers and utilities.

Looking ahead, as ENERGY STAR Canada marks its 15th anniversary in 2016, keep an eye on our [newsletter](#) and [website](#) and on Facebook and Twitter!

Energy efficiency results

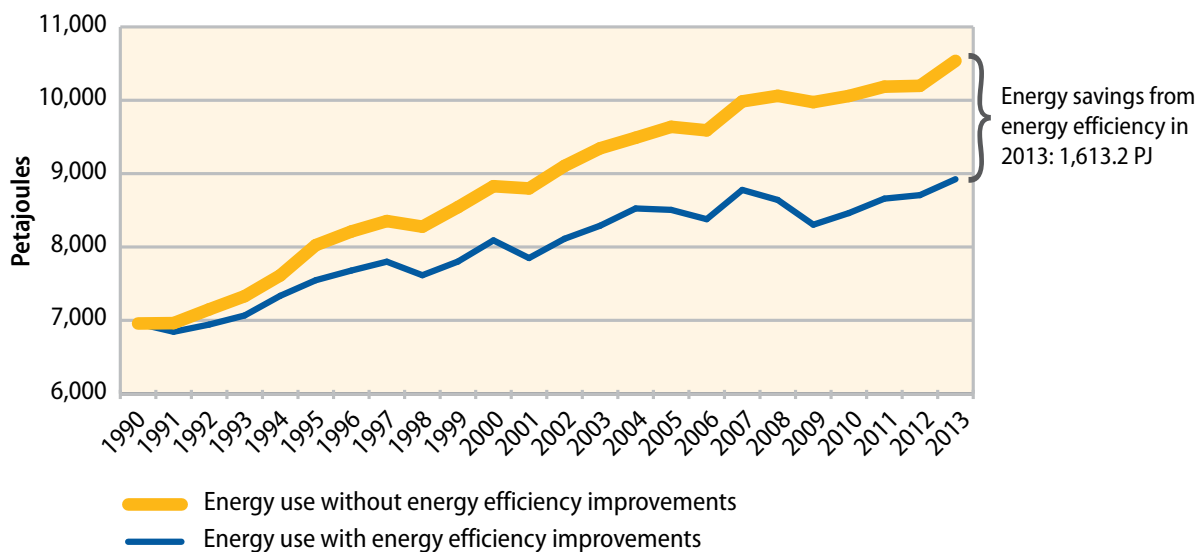
Improvement in Canadians' energy efficiency contributes significantly to reducing our energy consumption as a nation. And ENERGY STAR initiatives are on the leading edge of the advance in both the residential and commercial sectors.

Between 1990 and 2013, energy efficiency improved 24 percent across the economy. Secondary energy use in Canada increased 28 percent but would have increased 51 percent without energy efficiency improvements

This "energy efficiency effect" saved Canadians about 1,613.2 petajoules (PJ) of energy, decreased greenhouse gas (GHG) emissions by 85.4 megatonnes, and saved Canadians \$37.6 billion in 2013 alone.

Improvement in Canadians' energy efficiency contributes significantly to reducing our energy consumption as a nation.

Figure 1. Secondary energy use, with and without energy efficiency improvement, 1990–2013



Source: *Energy Efficiency Trends in Canada 1990 to 2013*, Natural Resources Canada, 2016.

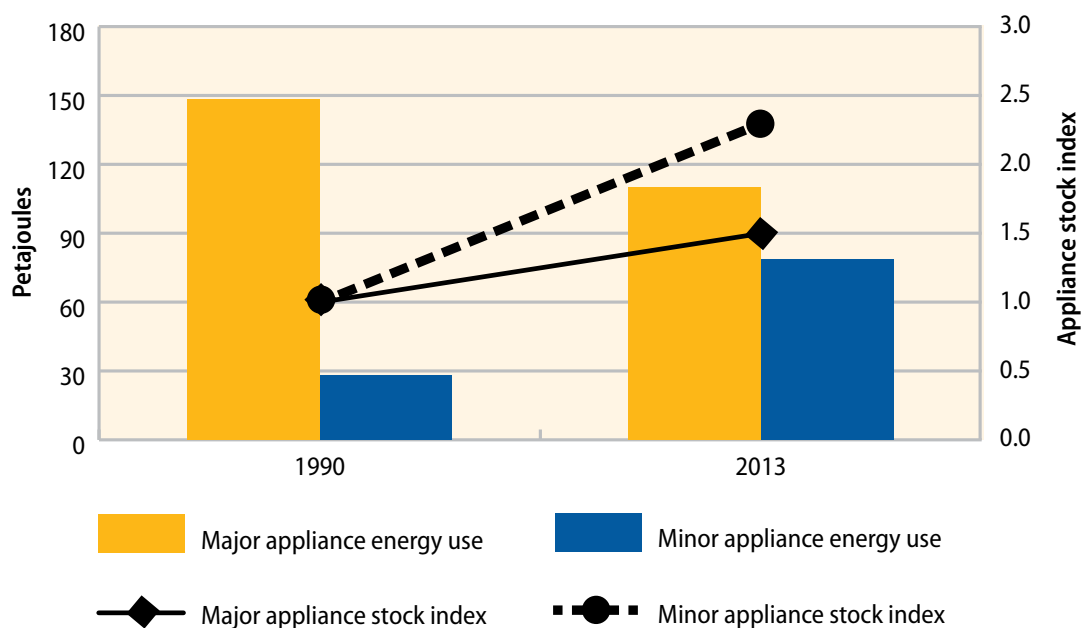
*Energy efficiency results (continued)***Residential sector**

Energy efficiency in the residential sector improved 45 percent, saving Canadians 639.2 PJ of energy and \$12.0 billion in energy costs in 2013. Major appliances improved significantly. For example, a 2013 dishwasher was three times more efficient than a 1990 model, and a 2013 refrigerator required only half of the energy of a 1990 model.

However, the increased number of minor appliances – counter-top conveniences such as toaster ovens or blenders – largely offsets the energy efficiency gains of major appliances.

Energy efficiency in the residential sector improved 45 percent, saving Canadians 639.2 PJ of energy and \$12.0 billion in energy costs in 2013.

Figure 2. Residential energy use and appliance stock index by appliance type, 1990 and 2013

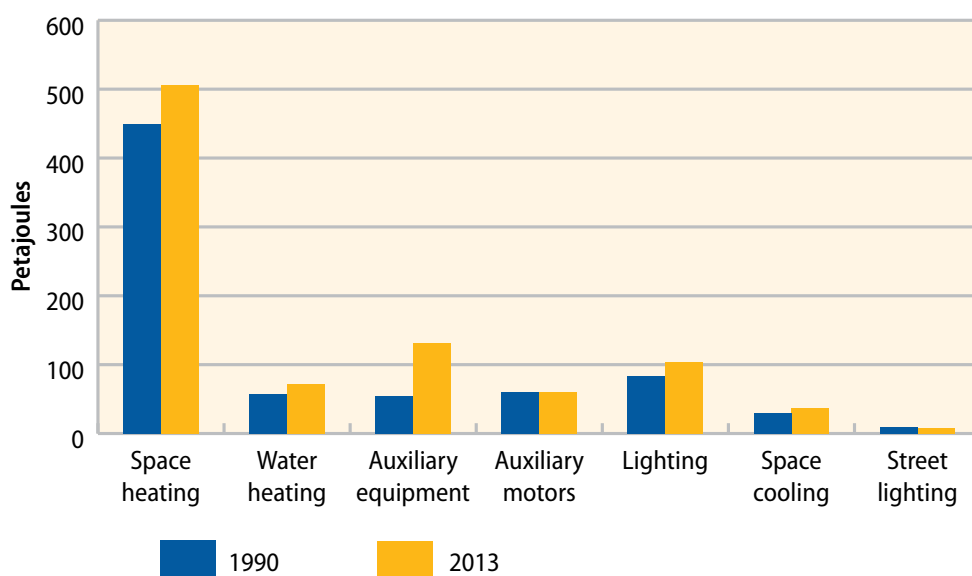


*Energy efficiency results (continued)***Commercial/institutional sector**

Energy efficiency in the commercial/institutional sector improved 33 percent, saving 241.8 PJ and \$5.4 billion in energy costs in 2013. However, the energy requirements of auxiliary equipment had a large increase (141 percent). This was due partly to increasing computerization of all work spaces related to commercial/institutional activities.

More specifically, ENERGY STAR certified products delivered 3.4 PJ in energy savings in 2015 – the equivalent of taking 66,000 cars off the road for the year. As well, ENERGY STAR for New Homes delivered savings of 0.45 PJ in 2015 – the equivalent of taking 9,500 cars off the road.

Figure 3. Commercial/institutional energy use by end use, 1990 and 2013



Source: *Energy Efficiency Trends in Canada 1990 to 2013*, Natural Resources Canada, 2016.

ENERGY STAR takes to social media

ENERGY STAR is a consumer icon in the conventional market landscape, but now with social media, there is a whole new dimension for the familiar blue symbol to populate. ENERGY STAR Canada sent out its first tweets in 2015 and started developing a social media presence for the brand in addition to its website.

Utilities win at ad awards

Many ENERGY STAR Participants are very active in social media, using platforms such as Facebook and Twitter to promote ENERGY STAR. For example, in 2015, six Canadian utilities – all ENERGY STAR Participants – won Utility Ad Awards at the E Source Forum in Denver, Colorado.

E Source, an American marketing research company, received more than 500 ads from 55 utilities for the competition. Canadian winners were:

- ▲ **Hydro One Networks Inc.** – Best Overall Campaign for Non-Investor-Owned Utility.
- ▲ **Toronto Hydro-Electric System Limited** – Best Residential Print Ad.
- ▲ **BC Hydro Power Smart** – Best Business Print Ad.
- ▲ **Union Gas Limited** – Second Best Digital Ad.
- ▲ **Newfoundland Power with Newfoundland and Labrador Hydro** – Crowd Pleaser award voted by E Source Facebook users.

New ENERGY STAR social media award

To recognize the efforts of Participants in these new social networks, ENERGY STAR Canada is launching a new award category for the 2016 ENERGY STAR awards: The Social Media Campaign of the Year Award. The criteria will focus on reach and frequency of ENERGY STAR messaging – in general and/or about certified products.

Hydro Québec promotes ENERGY STAR online.

In 2016, ENERGY STAR Canada will celebrate its 15th year. Watch for our Facebook posts and Twitter tweets!





Connectivity challenge

Connectivity goes hand-in-hand with the issue of “network standby” power; connected products constantly draw some electricity to remain accessible to a network. The amount of standby power each device uses can be quite small, but it could still be reduced by as much as 65 percent. The large number of connected products means the savings potential is enormous.

In 2014, the IEA reported about the 14 billion network-enabled devices worldwide. In 2013, these devices consumed 615 terawatt hours per year (TWh/yr) of electricity, 400 TWh/yr of which could be reduced.¹ By 2020, there are likely to be 50 billion connected devices globally. If nothing changes, the 65 percent of the electricity that could have been saved but was not could reach 739 TWh/yr by 2025.

Applied to Canada, these projections would consume 30 TWh/yr by 2020, or about 5 percent of current national electricity consumption. This is equivalent to the annual energy consumption of 1 million Canadian homes.

ENERGY STAR is addressing connectivity head-on with specific provisions in product technical specifications. For example, in 2015, a “connected allowance” that limits how much energy can be used for network connectivity was included in the new specification for clothes dryers and in revised specifications for clothes washers and room air conditioners. Connectivity has also been addressed in technical specifications for:

- ▶ game consoles
- ▶ audio/video equipment
- ▶ televisions and set-top (cable and telecom) boxes
- ▶ office equipment such as computers, displays and imaging equipment
- ▶ IT devices such as large and small network equipment
- ▶ network-ready appliances and climate controls

Also in 2015, the ENERGY STAR program started discussions among its stakeholders about developing a five-year roadmap that focuses on topics related to network-connected appliances.



¹ *More Data, Less Energy: Making Network Standby More Efficient in Billions of Connected Devices*, International Energy Agency, 2014.



ENERGY STAR® for Products

ENERGY STAR technical specifications

ENERGY STAR technical specifications are the backbone of the program. Consequently, contributing to developing and implementing specifications is a substantial activity for ENERGY STAR Canada and its Participants throughout the year.

Specifications set the certification criteria, performance levels and test methods that products must meet to earn the ENERGY STAR symbol. The new or revised technical specifications take a multitude of factors into consideration. These factors include stretching the market to keep certified products in the upper echelon of energy performers and integrating new technologies, test methods and standards. Also, Participants are consulted on their capacity to bring change to the market. For example, a modern ENERGY STAR clothes washer uses about 70 percent less energy and 75 percent less water than a standard washer used 20 years ago.

ENERGY STAR

The simple choice for energy efficiency

The familiar ENERGY STAR symbol makes it easy to identify the best energy performers on the market. ENERGY STAR certified products meet strict technical specifications for energy performance, and they have been tested and certified by a recognized certification body. ENERGY STAR certified products save energy without compromising performance.

Given the integrated nature of the Canadian and U.S. markets, ENERGY STAR Canada uses the same technical specifications as the EPA, with a few exceptions. Specifications for heat/energy recovery ventilators and fenestration products (windows, doors and skylights) are wholly developed in Canada for Canadian climate conditions.

Clothes dryers now eligible

Notably in 2015, electric clothes dryers debuted as a new product eligible for ENERGY STAR certification. While energy efficiency has improved significantly over the years for many home appliances, the simple technology of dryers did not improve sufficiently to elevate the appliance to ENERGY STAR certification.

However, in 2013 and 2014, ENERGY STAR offered an emerging technology award to manufacturers whose products save 30 to 40 percent more than standard products. This push in technological innovation led not only to impressive heat pump dryers that meet the specification, but also to the development of innovative features in standard dryers. The improvements include advanced moisture sensors and a variety of heat settings.

These features led to a new ENERGY STAR specification for dryers. So as of January 1, 2015, Canadians were able to “save twice” by buying an ENERGY STAR certified clothes dryer to go with an ENERGY STAR certified clothes washer. In part, the washer removes significantly more water from the clothes, which allows the dryer to use less heat, thus saving energy and wear and tear on clothes. ENERGY STAR certified dryers use at least 20 percent less energy than regular models.



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ENERGY STAR technical specifications (continued)

Revised light bulb specification in the works

Also significant in 2015, ENERGY STAR Canada participated in the development of Version 2.0 of the technical specification for lamps/bulbs, which takes effect January 2, 2017. (Manufacturers and brand owners could start having products certified to Version 2.0 as of December 31, 2015.) The outcome

captured unique Canadian considerations about the game-changing shift from incandescent to LED dominance in the marketplace.

In a related activity, Version 2.0 of the ENERGY STAR technical specification for luminaires/lighting fixtures was published, which takes effect June 1, 2016.

In 2015, 1 new and 11 revised technical specifications came into effect.

ENERGY STAR technical specifications 2015		
Product type	Version	Effective date
NEW SPECIFICATIONS		
Clothes dryers	1.0	January 1, 2015
REVISED SPECIFICATIONS		
Appliances		
Clothes washers (residential)	7.1	March 7, 2015
Clothes washers (commercial)	7.1	March 7, 2015
Pool pumps	1.1	March 30, 2015
Electronics		
Televisions	4.1	September 30, 2015
Heating and cooling/ventilating		
Room air conditioners	4.0	October 26, 2015
Central air conditioners	5.0	September 15, 2015
Air-source heat pumps (residential)	5.0	September 15, 2015
Ventilating fans (residential)	4.0	October 1, 2015
Heat/energy recovery ventilators	2.0	March 1, 2015
Water heaters (includes heat pump, high-efficiency gas storage, solar, and gas tankless types)	3.0	April 16, 2015
Fenestration		
Windows, doors and skylights	4.0	February 1, 2015
Note: An increase in the version whole number indicates a significant change in the specification; an increase in the number in the decimal place indicates minor changes.		

*ENERGY STAR technical specifications (continued)***Focus on fenestration**

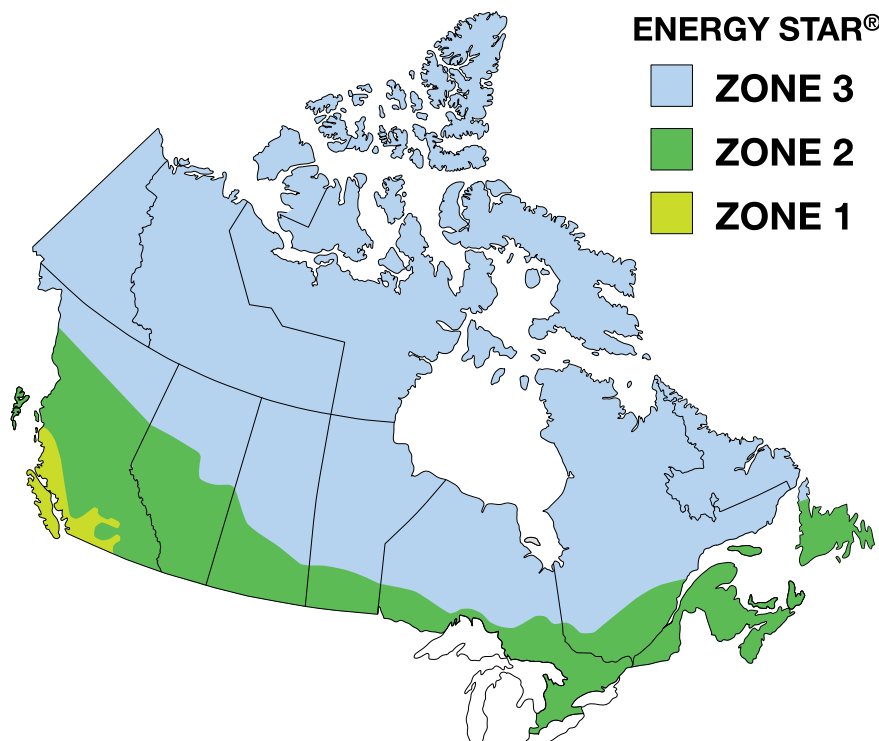
Even though windows, doors and skylights do not consume energy, they can be a significant source of energy loss; they are also a potential source of solar energy gain. So, every fenestration product represents an opportunity to improve a home's energy efficiency.

Residential windows, doors and skylights are developed wholly in Canada, as are their technical specifications. This practice is different than for most ENERGY STAR certified products. ENERGY STAR Canada develops them to meet Canadian climate conditions. For example, windows that have little solar gain are appropriate for the southern U.S. but not for Canada. These types of windows cannot meet the Canadian specification because performance modelling shows that these windows may actually increase annual utility costs when used in Canada.

The revised Version 4.0 technical specification for fenestration products includes stricter criteria for many locations in Canada and came into effect February 1, 2015. Version 4.0 also introduced changes to ENERGY STAR-related climate zones in Canada (see the map). The number of climate zones was reduced from four to three to align with climate zones in the *National Building Code of Canada 2010*.

In 2015, residential windows were also eligible for ENERGY STAR Most Efficient recognition if they met the more stringent requirements to be the "best of the best" energy performers. Qualifying windows were up to 40 percent more efficient than a standard double-pane window, compared to, on average, 8 percent improvement for basic ENERGY STAR. The extra cost of purchasing fenestration products that are ENERGY STAR certified is usually recouped in seven years or less because of lower energy costs.

Climate zone map of Canada for ENERGY STAR certification



ENERGY STAR technical specifications (continued)

ENERGY STAR Most Efficient 2015

The ENERGY STAR Most Efficient designation recognizes the “best of the best” in selected product categories for the current calendar year. The program identifies and advances highly efficient products in the marketplace.



The following product categories were eligible for Most Efficient 2015 designation. Product brand owners can submit models that meet the recognition criteria for the designation:

- ▶ dishwashers, residential
- ▶ clothes washers, large - larger than 2.5 cubic feet (70.8 litres)
- ▶ refrigerator-freezers
- ▶ televisions
- ▶ computer monitors
- ▶ ceiling fans
- ▶ ventilating fans
- ▶ windows, residential
- ▶ gas furnaces
- ▶ boilers
- ▶ central air conditioners
- ▶ air-source heat pumps
- ▶ geothermal heat pumps

Product Participants in action

The businesses and organizations that are Participants in ENERGY STAR Canada drive its success. Meet some of the 2015 leaders.

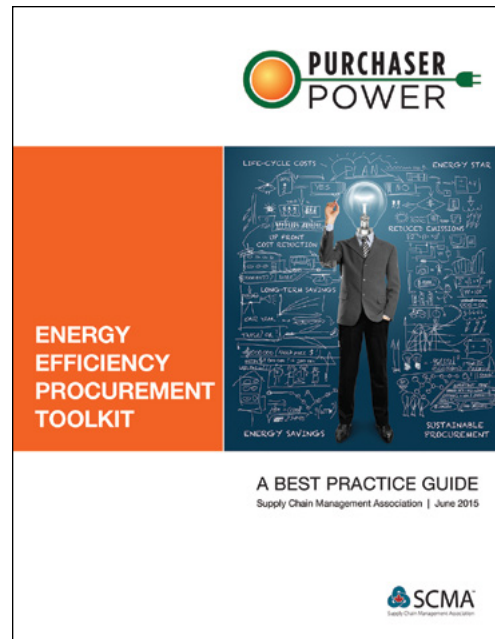
Whirlpool Supplies Laundry for 2015 PanAm Games

Whirlpool has been an ENERGY STAR participant since 2002 and continues to improve their products to meet the highest standards of energy efficiency. In 2015, they were the official laundry room at the 2015 PanAm Games in Toronto.



Supply Chain Management Association's new program

The Supply Chain Management Association (SCMA), Canada's largest association of supply chain professionals, celebrated its win as 2015 ENERGY STAR Recruit of the Year with its Purchaser Power Campaign.



The new program encourages companies to develop and implement procurement best practices, including purchasing ENERGY STAR certified products.

In response to a members' survey, SCMA developed and introduced three new tools in 2015: a toolkit of best practices, a self-reporting tool and in-person training. ENERGY STAR plays a leading role in each of them:

- ▶ The Energy Efficiency Procurement Toolkit is a comprehensive resource on energy efficiency procurement for professionals.
- ▶ The self-reporting tool allows organizations to track and estimate the savings that are tied to the purchase of energy-efficient products.
- ▶ In-person training empowers procurement professionals; SCMA started training events across the country in November 2015.

SCMA is a national not-for-profit association of more than 7,500 supply chain professionals.



*Product Participants in action (continued)***Efficiency Nova Scotia partners with Dalhousie University**

Efficiency Nova Scotia and Dalhousie University partnered on a fridge/freezer exchange program at the four university campuses. Efficiency Nova Scotia provided rebates and no-cost removal and recycling services to switch out older appliances.



Dalhousie's Sustainability Office conducted an energy survey of all faculties, departments and offices to look for older refrigerators and freezers. It found 505 fridges and mini-fridges and 140 freezers that were 10 years or older in labs, offices and kitchen spaces. The switch to ENERGY STAR certified units resulted in estimated annual savings of:

- ▶ 373,565 kilowatt-hours
- ▶ \$40,617
- ▶ 279 tonnes of carbon dioxide

Efficiency Nova Scotia was ENERGY STAR Advocate of the Year in 2013. Dalhousie, the first university to join ENERGY STAR, has been a Participant since 2009 and was ENERGY Participant of the Year in 2011.

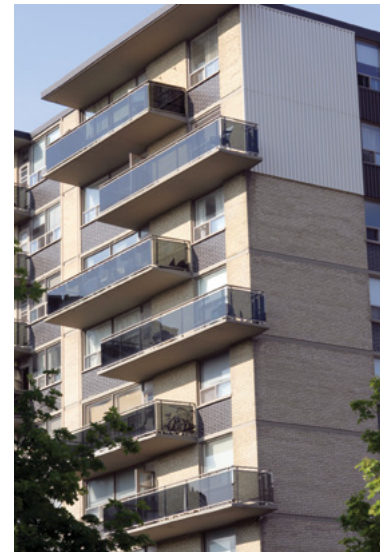
Toronto Community Housing retrofits save on energy costs

Purchasing ENERGY STAR certified products is an integral part of the capital repairs policy of Toronto Community Housing (TCH), the largest social housing provider in Canada.

In September 2015, TCH announced a joint project with Toronto Atmospheric Fund worth \$4.2 million to implement energy efficiency retrofits at seven multi-unit buildings. The high-impact upgrades will include purchasing high-efficiency refrigerators, boilers, lighting and motors.

In partnership with Toronto Hydro-Electric System Limited, TCH installed 39,600 ENERGY STAR certified light bulbs and 932 ENERGY STAR certified refrigerators and freezers in 4,903 residential units as part of the saveONenergy Home Assistance Program funded by the Independent Electricity System Operator (IESO).

TCH also replaced 2,268 refrigerators with new ENERGY STAR certified ones as part of its Appliance Replacement Program. The total energy savings from both of these programs is estimated at 2,873 megawatt-hours – equivalent to powering 240 typical Ontario homes for one year.



Toronto Community Housing has been an ENERGY STAR Participant since 2006, winning ENERGY STAR Advocate of the Year awards in 2006 and 2012. Toronto Atmospheric Fund was a Participant of the Year in 2003.

*Product Participants in action (continued)***LightSavers Canada helps tip LED street lighting**

Adoption of energy-efficient LED street lighting across Canada is reaching a tipping point, thanks, in part, to the work of LightSavers Canada.



This national market transformation program works with municipal lighting managers and their counterparts in municipal and provincial utilities to plan, procure and install LED street lighting. The adoption of LED lighting and adaptive controls in outdoor lighting applications can reduce electricity use by 50 to 70 percent.

A 2014 survey² of the national market, including 21 of Canada's largest cities, indicated that all sizes of municipalities are accepting LED street lighting. Now about 7 percent (68,400 lights) of the approximately 1 million street lights in these cities are LED bulbs, and up to another 65 percent (650,000) of LED bulbs are planned for the next few years. Market transformation is clearly well underway. Together, the number of existing and planned LED bulbs accounts for 20 percent of the 3.5 million street lights in Canada. The largest adopting cities include Montréal, Mississauga, Calgary, and Edmonton. Meanwhile, Toronto, with the largest Canadian asset of about 160,000 street lights, is actively considering a multi-year installation.

LightSavers, established by Toronto Atmospheric Fund in 2008, is now run by the Canadian Urban Institute and is jointly funded by NRCan and the Ontario Power Authority (now IESO).

Globe Electric wins a global award

Globe Electric capped its efforts to make and market a new generation of LED bulbs by winning a SEAD Global Efficiency Medal 2015 for the North America region.

Globe was recognized for making the most energy-efficient LED bulb that is a commercially available in the category of general lighting service lamp with light output of at least 800 lumens and colour temperature between 2,700 and 3,000 K.

The Global Efficiency Medal competition demonstrates the levels of efficiency that are possible today and highlights innovative new technologies that can further push the boundaries of efficiency and slash energy consumption. The Super-efficient Equipment and Appliance Deployment (SEAD) Initiative is a voluntary collaboration among governments that promote the manufacture, purchase and use of energy-efficient appliances, lighting and equipment worldwide.

Globe Electric won a 2015 ENERGY STAR Award as Lighting Manufacturer of the Year. The company won the same award in 2008 and Recruit of the Year award in 2007.



² *The Future of LED Roadway Lighting in Canada*, ICF International, November 2014.

Program administration

Protecting the ENERGY STAR brand

The ENERGY STAR brand has great value as an icon for consumers, and it is the responsibility of the ENERGY STAR program and its Participants to maintain its integrity.

In 2015, the program received an influx of complaints about door-to-door solicitation that used the ENERGY STAR name to sell home heating products. Program staff liaised with federal and provincial consumer protection agencies about the deceptive practice, published an online consumer caution, and increased its brand monitoring activities.

NRCan investigated and took action when organizations that were not Participants in the program were using the ENERGY STAR symbol. Also, program staff worked with manufacturers to close a loophole in a testing procedure that was allowing less efficient products to be certified along with more efficient ones.

Finally, program staff continued to liaise with our EPA colleagues to investigate and address transborder cases of inappropriate use of the ENERGY STAR logo.

The ENERGY STAR program provides guidelines for Participants on how to use the ENERGY STAR symbol. Program staff continually monitor their application, from reviewing websites and social media, advertisements, and product packaging, to answering Participant inquiries and investigating complaints.



CONSUMER CAUTION!

Homeowners should be aware of any type of deceptive door-to-door sales tactics that claim to have Natural Resources Canada backing. **Natural Resources Canada and its legitimate brands – ENERGY STAR, EnerGuide and EcoENERGY – NEVER perform or authorize others to perform unsolicited inspections on home equipment or visit homeowners to sell products.** EnerGuide home evaluations are always arranged through licensed service organizations, and Natural Resources Canada never performs or authorizes others to perform unsolicited energy assessments or evaluations. Consult our website for a [listing of licensed service organizations](#) that deliver EnerGuide home evaluations in your area. [See more details](#) about unauthorized inspections and sales of home equipment and ways to deal with deceptive door-to-door services.

*Program administration (continued)***Product Finder is now bilingual**

In 2015, NRCan was pleased to contribute to the launch of a French version of the Product Finder application used by the Canadian and the U.S. ENERGY STAR programs to list certified products for almost all categories. This development ensures that consumers can find and compare certified products in either French or English.

Further Canada-U.S. collaboration on the tool added a feature that allows users to select products that are available only in Canada or only in the United States. This is useful for consumers but also for Canadian utilities and provincial agencies that run energy efficiency programs.

Terminology changes

ENERGY STAR Canada adopted two new terms in 2015 as part of efforts to align with the U.S. ENERGY STAR Program:

- ▶ **certified** – To describe products that meet ENERGY STAR technical specifications:
 - The term ENERGY STAR “certified” is used now instead of ENERGY STAR “qualified.”
 - The French version of the term is nom de produit “certifié /e/s” ENERGY STAR instead of nom de produit “homologué /e/s” ENERGY STAR.
- ▶ **product brand owner** – To describe the originator or owner of a product:
 - The term “product brand owner” is used now instead of “manufacturer” as a more inclusive description. Many companies contract outside manufacturers to produce their brand, or they purchase products to re-brand.

Database changes

ENERGY STAR Canada adopts and adapts tools and best practices so it can serve Participants better. In 2015, the program:

- ▶ Introduced automatic archiving to its database of fenestration products to keep information on certified windows, doors and skylights current.
- ▶ Overhauled its stakeholder database so the program can better communicate with Participants and other interested parties with the information they need and want.



ENERGY STAR® for New Homes

ENERGY STAR for New Homes celebrates 10 years

In its 10th anniversary year, the ENERGY STAR for New Homes program continued to play a key role in moving the housing sector in Canada toward decreased energy use. Within its first decade in Canada, more than 50,000 ENERGY STAR homes were labelled, including almost 9,000 in 2015 alone. This translates into \$3 billion of annual sales and energy savings for Canadians of about 445,000 gigajoules of energy every year – or the equivalent energy needed to run 9,500 cars.

The program is designed for builders to build energy-efficient new homes simply and cost-effectively, by using common building practices. This results in savings and increased comfort for Canadians in their homes.

Certified homes, which include new detached, attached and low-rise multi-unit residential buildings, are on average built to be 20 percent more energy-efficient than a new house built to code. Common features include ENERGY STAR certified windows, high-efficiency heating equipment, heat recovery ventilators and specific air tightness targets.


In 2015, more than 800 builders were licensed to deliver the ENERGY STAR for New Homes program.

Growing the standard

The ENERGY STAR for New Homes program helps to bring innovative technologies and new construction techniques to the forefront of residential construction, lowering costs and encouraging their adoption in the wider market. The program works closely with key

industry stakeholders to ensure that the standard remains timely, innovative and accessible for a wide range of builders.

In 2015, additional options were introduced within the ENERGY STAR for New Homes Version 12 Standard. These options are for builders in Alberta, British Columbia, and Newfoundland and Labrador, as well as for low-rise multi-unit residential buildings. The additional options provide those builders with increased flexibility when building ENERGY STAR certified homes, making the options more accessible to homeowners across the country. 2015 also saw the first houses labelled in Alberta to Version 12 of the ENERGY STAR for New Homes Standard.

	AN ENERGY STAR® QUALIFIED HOME	00001E
ENERGY STAR	MAISON HOMOLOGUÉE ENERGY STAR	
Address / Adresse :		
<input type="text"/>		
Built by / Constructeur :		
<input type="text"/>		
Verified by / Vérificateur :		
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Certified Energy Advisor / Conseiller en efficacité énergétique accrédité		
ENERGY STAR File Number / Numéro de dossier ENERGY STAR :		
<input type="text"/>		
Date / Date :	Version / Version :	
<input type="text"/>	<input type="text"/>	
<small>ENERGY STAR is administered in Canada by Natural Resources Canada. / L'ÉNERGY STAR est administré au Canada par Ressources naturelles Canada.</small> <small>Service Organizations are licensed by Natural Resources Canada. / Les organismes de service sont accrédités par Ressources naturelles Canada.</small> <small>Service Organization seal must be present to be valid. / Cette étiquette n'est valide que si le sceau d'un organisme de service y est apposé.</small> www.newhomes.nrcan.gc.ca www.maisonsneuves.nrcan.gc.ca		

*ENERGY STAR for New Homes celebrates 10 years
(continued)*

Supporting innovation

2015 was the first full year that the ENERGY STAR for New Homes program required that combination systems for space and water heating (also called combo systems) be tested to the CSA P-9.11 test method. This is the first residential efficiency program to require this test method, paving the way for higher-performing combo systems being distributed in Canada.

Since the method was adopted, manufacturers have developed and tested over 50 systems adapted to the Canadian market. This progress has strengthened Canadian industry capacity, moved Canada toward higher energy efficiency standards and helped reduce GHG emissions from the residential sector. Adoption of the new test method has also increased confidence in the performance of combo systems being used in ENERGY STAR certified new homes, which benefits all Canadians who purchase these homes.

Other achievements in 2015 include publishing *ENERGY STAR for New Homes Administrative and Technical Procedures*. These procedures have helped clarify communication about program requirements, so that the program can continue to be delivered as effectively as possible.

Going beyond builders

Key stakeholders are also incorporating the ENERGY STAR for New Homes Standard into energy efficiency programs at the provincial or municipal level. For example:

- ▶ The City of Surrey, British Columbia, is piloting a density bonus as part of an energy efficiency policy. The policy allows developers to build more houses in the same area if they construct the units and buildings in compliance with the ENERGY STAR for New Homes Standard. The pilot is taking place in the West Clayton area, where construction of 6,000 units that will house 17,000 people over the next 10 years is anticipated.
- ▶ Efficiency Nova Scotia developed the New Home Construction program to help homeowners and builders integrate energy efficiency technologies into their building plans. ENERGY STAR for New Homes has been incented through the program since 2013, and as of 2015, has resulted in over 280 ENERGY STAR certified homes being labelled.

The ENERGY STAR for New Homes program will continue to create conditions that allow builders to provide Canadians with a simple choice for more efficient and environmentally friendly living.

New home by Arista Homes, ENERGY STAR New Home Builder of the Year 2015



ENERGY STAR was celebrated at the 2015 EnerQuality Awards Gala!

The residential construction industry celebrated the 10th anniversary of the ENERGY STAR for New Homes program on February 19, 2015, at the annual EnerQuality Awards Gala. EnerQuality is the largest service organization delivering the ENERGY STAR for New Homes program. At the gala, 12 builders and energy efficiency experts were recognized for their dedication to the ENERGY STAR for New Homes program and for energy-efficient building practices.

Additionally, Peter Gilgan, founder and CEO of Mattamy Homes, received the EnerQuality Hall of Fame Award. As Canada's largest new home builder, Gilgan noted that energy efficiency and good business coincide:

"I sincerely believe that there are ways for our industry to make mammoth differences [on the environment] on a much grander scale than any of us really thought was possible before. I can tell you at our company we are committed to making that happen."

enerQUALITY
BETTER BUILT HOMES™





ENERGY STAR® Portfolio Manager

Portfolio Manager scores 20 percent of floor space

Commercial and institutional buildings commonly waste 30 percent³ of the energy they consume, so opportunities abound to use energy more efficiently. Benchmarking is a natural first step – and ENERGY STAR Portfolio Manager is the leading tool for the job.

Portfolio Manager is free online and, thanks to Canada-U.S. collaboration, is a common platform for measuring and assessing the energy performance of commercial and institutional buildings in both countries. The tool allows building owners and operators to enter their data and receive an ENERGY STAR score of 1 to 100 for their building type. For example, a score of 75 means the building performs better than 75 percent of all comparable buildings nationwide.

In 2015, two building types were added to the tool: supermarkets and food stores and medical offices. That brings to five the number of building types available with Canadian ENERGY STAR scores.

By the end of 2015, 13,229 buildings in Canada were registered in Portfolio Manager, which represents about 162 million square metres of floor space or 20 percent of commercial floor space in Canada.

Portfolio Manager was launched in Canada in 2013, and related success stories are accumulating. The following are stories from 2015:

- ▶ Horizon Health Network integrated ENERGY STAR Portfolio Manager at its 12 hospitals and more than 100 other medical service facilities in New Brunswick, northern Nova Scotia and Prince Edward Island. Saint John Regional Hospital received an ENERGY STAR score of 86, which demonstrates top performance. Another smaller health facility improved its score from 18 to 56 by addressing issues identified through benchmarking.
- ▶ The Kingston General Hospital in Ontario earmarked \$10 million in 2010 for projects to improve energy use. ENERGY STAR Portfolio Manager gave the hospital an energy performance score of 78. This result confirmed that its efforts have made it one of the most energy-efficient acute care hospitals in Canada.
- ▶ Businesses from across the Greater Toronto Area (GTA) reduced their collective energy use by 12.1 percent between 2011 and 2014 as participants in CivicAction's Race to Reduce. The race was a friendly corporate challenge that targeted a 10 percent reduction. The 196 participants represent about 40 percent of the GTA's commercial office space. They benchmarked their efforts with ENERGY STAR Portfolio Manager: the top 17 buildings averaged a score of 95.5 – 37 points above the national average.



³ U.S. Environmental Protection Agency, ENERGY STAR website: energystar.gov/buildings/facility-owners-and-managers/existing-buildings/save-energy

ENERGY STAR® Award Winners 2015

Participants in ENERGY STAR Canada are committed to promoting a culture of energy efficiency among Canadians. Every year the program recognizes those who demonstrate excellence in the manufacture, marketing and promotion of ENERGY STAR certified products and ENERGY STAR certified new homes.

Note: The awards recognize activities in the previous calendar year, i.e. 2014.



Manufacturer of the year – appliances	Whirlpool Canada LP sold more than 625,000 ENERGY STAR certified units for \$1 billion in sales across Canada in 2014. The company markets 360 base models that are ENERGY STAR certified – 80 percent of its portfolio. In 2014, electric clothes dryers became eligible for ENERGY STAR certification, and Whirlpool was the first company to design and manufacture a certified model.
Manufacturer of the year – electronics	Samsung Electronics Canada certifies models in every product category in its portfolio that are ENERGY STAR eligible. This includes more than 700 models in 11 product categories by the end of 2014 – many in consumer electronics such as its innovative televisions. Samsung prominently displays the ENERGY STAR symbol on its packaging and website and communicates the benefits of purchasing ENERGY STAR certified products.
Manufacturer of the year – lighting	Globe Electric marked 2014 with the culmination of efforts to develop, manufacture, market, and educate retailers and consumers about its new generation of LED bulbs. Globe grew its offering of ENERGY STAR certified LED models that are ENERGY STAR certified from 16 to 41 – and sales grew 300 percent. The company markets more than 300 ENERGY STAR certified models in Canada.
Manufacturer of the year – fenestration products	All Weather Windows Ltd. makes only ENERGY STAR certified models, and in 2014 sales grew by 7 percent to more than 500,000 units. It increased its Most Efficient 2014 offerings by 11 percent to 461 models. The company also played a significant role in developing the revised ENERGY STAR technical specification that came into effect in February 2015.
Retailer of the year	The Home Depot Canada grew its offering of ENERGY STAR certified products in 2014, increasing LED models alone by more than 60 percent. More than half of The Home Depot's own Eco Options products are ENERGY STAR certified. In 2014, The Home Depot provided millions of dollars in rebates for energy-efficient products, most of them ENERGY STAR certified – a 110 percent increase over 2013.
Utility of the year – provincial	Hydro-Québec offered financial incentives for its windows for rental properties, refrigerator replacement for low-income households and lighting programs in 2014. More than 3 million customers took advantage of mail-in and instant rebates for ENERGY STAR certified LED bulbs and fixtures. This amounted to more than 13, 000 LED fixtures and almost 4 million LED bulbs sold – eight times more than in 2013.

Utility of the year – regional	PowerStream Inc. provided an incentive that resulted in the purchase and installation of almost 10,000 ENERGY STAR certified furnaces and central air-conditioning systems in its service area north of Toronto. It partnered with GE Appliances Canada to run a year-long contest to promote its peaksaver PLUS® program. And PowerStream also expanded its Smart Kids campaign into new distribution channels.
Promotional campaign of the year	Manitoba Hydro partnered with Summerhill Group and five large retailers in 2014 to implement the Power Smart Residential LED Lighting Program. With a 50 percent instant rebate, almost 200,000 ENERGY STAR certified LED bulbs were purchased during the one-month promotion. Five streams of online ads generated 1.5 million impressions, and Manitoba Hydro's website saw a 2,700 percent increase in the number of visits to its lighting pages.
Advocate of the year	The Canadian Coalition for Green Health Care focused, in 2014, on promoting the procurement of ENERGY STAR certified products as a best practice through its HealthCare Energy Leaders Ontario (HELO) initiative. The coalition and the HELO team helped energy managers from health care facilities learn about the benefits of ENERGY STAR. As a result, thousands of ENERGY STAR certified products were purchased and installed.
Promoter of the year ENERGY STAR Most Efficient	Vinyl Window Designs Ltd. (VWD) developed nine products to meet the 2014 Most Efficient technical specification. Also, most of its other products are ENERGY STAR certified. The company makes extensive use of the ENERGY STAR symbol and messaging on its website and in information materials. VWD focusses on cooperative advertising with its dealer partners, as well as training service and sales staff about the benefits of ENERGY STAR.
Recruit of the year	The Supply Change Management Association promotes sustainability to its 7,500-plus members. In 2014, it conducted a benchmarking study to ascertain awareness of activities around ENERGY STAR and sustainable procurement practices. The association then ran an awareness campaign on sustainable procurement, including ENERGY STAR, which reached almost 20,000 supply chain professionals as well as the business community at large.
Sustained Excellence	Canadian Tire Corporation has integrated a sustainability strategy into its business since 2008 and consistently helped customers save energy and money through the promotion and sale of ENERGY STAR certified products. In 2014 alone, the company offered coupons and rebates in partnership with nine utilities. The company also added 80 product models to its ENERGY STAR offerings and expanded its operations into New Brunswick and Newfoundland and Labrador. Promotional activities included delivering a weekly flyer that prominently features ENERGY STAR to about 11 million households. The results were impressive – a 52 percent increase in sales of ENERGY STAR certified products over 2013.
New homes builder of the year	Arista Homes Limited has built more than 600 ENERGY STAR certified homes in the Greater Toronto Area since 2008. Arista identified lack of awareness of the benefits of an ENERGY STAR certified home as a significant barrier to sales. The company responded with a committed effort to educate sales and technical staff and key construction and trades people through training courses, seminars and design charrettes. Training is also available to clients and prospective homebuyers to learn about the benefits of an ENERGY STAR certified new home.

energystar.gc.ca