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ENERGY STAR in Canada Annual Report **2013**



ENERGY STAR
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ENERGY STAR in Canada Annual Report 2013

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 in Canada — trusted by Canadians



The ENERGY STAR symbol has become a consumer icon in Canada as the identifying mark of high-efficiency products and new homes.

New research shows that the vast majority of Canadians surveyed – 88 percent – say ENERGY STAR is the most useful tool they have to help them be energy-efficient.¹ Indeed, Canadians buy millions of units of ENERGY STAR certified products every year across a wide range of categories — from ceiling fans and light bulbs to furnaces and fridges.

The ENERGY STAR mark tells consumers they are buying a model that has been tested and certified to meet stringent technical specifications and is typically in the top 15 to 30 percent of its class in terms of energy performance. ENERGY STAR certified new homes are 20 percent more energy-efficient than typical new builds.

Not only do these high-efficiency homes and products make the lives of individual Canadians more comfortable and cost-effective, on a national scale they add up to major energy savings and avoidance of greenhouse gas (GHG) emissions for Canada.

The ENERGY STAR Initiative in Canada is a voluntary industry-government partnership in which businesses and organizations sign up as participants and commit to making, selling and promoting ENERGY STAR products and new homes. This national network of participants includes 1,000 manufacturers, retailers, utilities and advocacy organizations in the products area and another 1,290 builders and service organizations in the ENERGY STAR for New Homes Initiative.

¹ *Energy Efficiency and Canadians — Opinion Research for the Canadian Energy Efficiency Alliance, CEEA, 2013.*



Energy efficiency results

When it comes to saving money and reducing impacts on the environment, energy efficiency delivers substantial results for Canada. ENERGY STAR certified products and equipment are at the cutting edge of these savings in residential and commercial/institutional settings.

Energy efficiency across the economy delivered energy savings of 1,680.7 petajoules (PJ) between 1990 and 2010.² This translates into \$32.4 billion in savings for Canadians and 93.3 megatonnes of GHGs avoided even while population and gross domestic product grew.³

² *Energy Efficiency Trends in Canada 1990 to 2010*, Natural Resources Canada.

³ *ibid.*

Without these significant ongoing improvements in energy efficiency, energy use would have increased by 46.6 percent between 1990 and 2010 instead of 22.3 percent (Figure 1).

The residential sector accounted for \$9.0 billion of these savings, due in large part to more efficient major appliances, lighting and furnaces, even while small appliances proliferated significantly (Figure 2).

The commercial/institutional sector achieved \$5.6 billion in energy savings while its use of auxiliary equipment⁴ grew by 143 percent in 10 years (due largely to computerization). This change presents a substantial opportunity to promote ENERGY STAR purchasing (Figure 3).

Across the Canadian economy, in 2013 alone, ENERGY STAR certified products delivered 3.4 PJ in energy savings – the equivalent of taking 66,000 cars off the road for the year.

⁴ Defined in *Energy Efficiency Trends in Canada 1990 to 2010* as including "... computers, photocopiers, refrigerators and desktop lamps. It also includes equipment that can be powered by natural gas, propane or other fuels, such as clothes dryers and cooking appliances." Auxiliary motors are excepted.

Figure 1. Secondary energy use, with and without energy efficiency improvements, 1990–2010

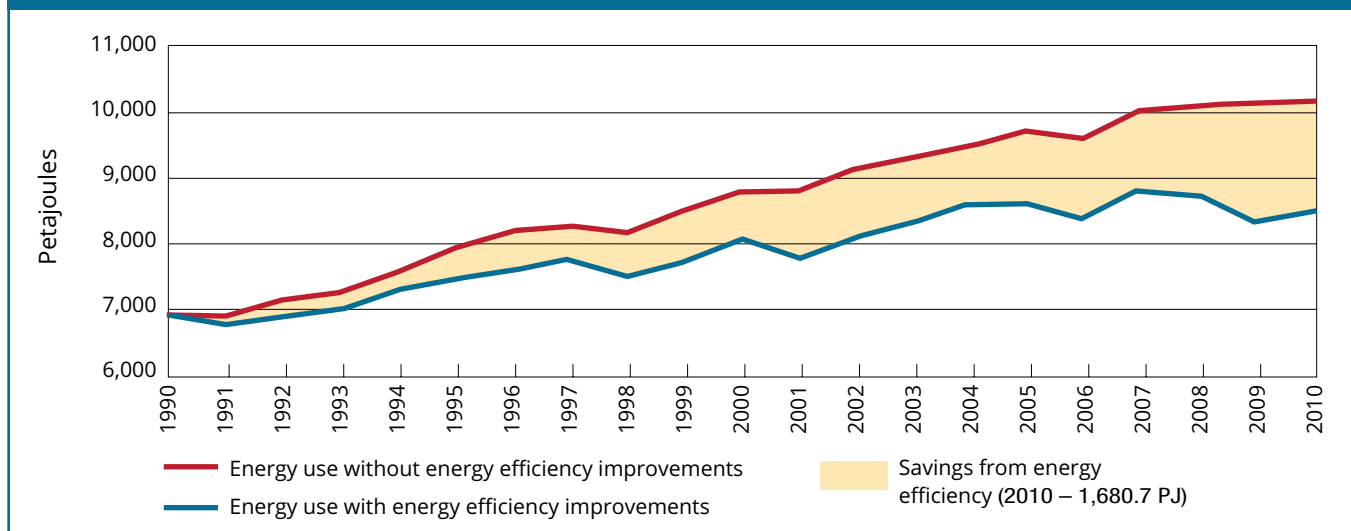


Figure 2. Residential energy use and appliance stock index by appliance type, 1990 and 2010

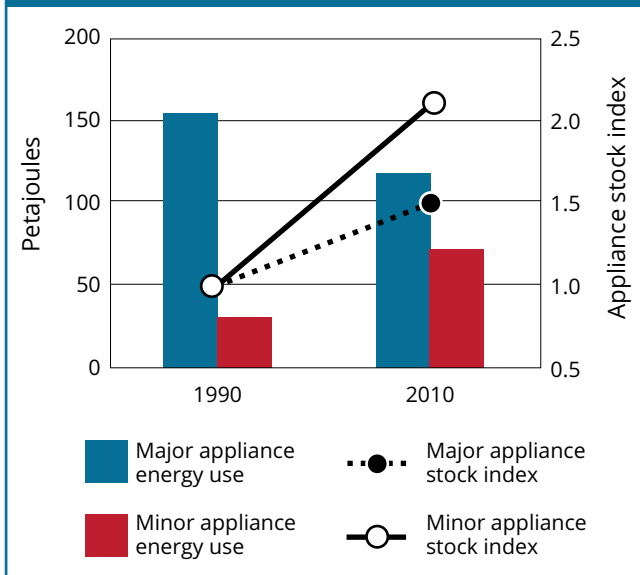
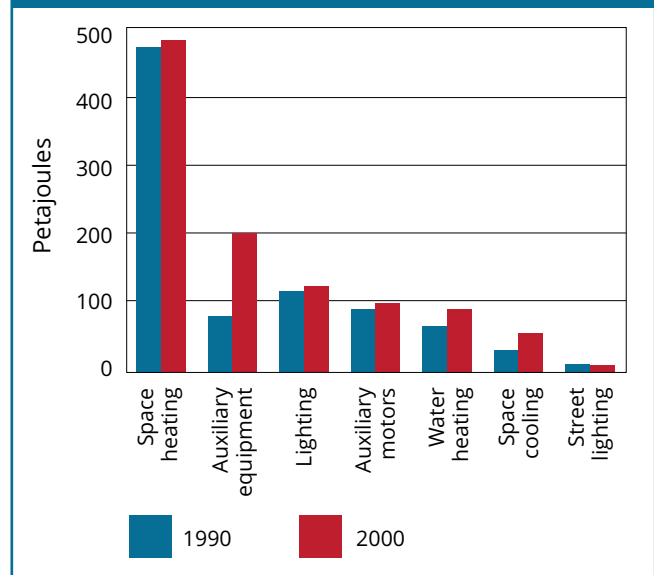


Figure 3. Commercial/institutional energy use by end-use, 1990 and 2010



ENERGY STAR in Canada — activities in 2013

Working in harmony— aligning with the U.S.

In 2013, the ENERGY STAR Initiative in Canada continued its harmonization efforts with the ENERGY STAR Program of the U.S. Environmental Protection Agency (EPA). Most importantly, we implemented a decision to use the same technical specifications as the United States does for ENERGY STAR certification.

This alignment recognizes how highly integrated the product markets in our two countries have become since Canada joined the U.S. program as an international partner in 2001. It also respects

the voluntary nature of industry's participation in ENERGY STAR.

Using the same specifications ensures that no unnecessary costs or administrative burden fall on manufacturers, product brand owners or importers; for example, having to run two similar but different certification tests for the same product model. Participants can also submit information once for listing in both countries.

Alignment also provides certainty and continuity for energy efficiency program managers in utilities, provinces, territories and municipalities who may tie product rebates and incentives to ENERGY STAR certification.

Canadian consumers benefit as from a 'one-stop shop' for ENERGY STAR certified model lists.

Due to our colder climate, ENERGY STAR in Canada still develops technical specifications for, and certifies, residential fenestration products—windows, doors and skylights—as well as heat/energy recovery ventilators.

ENERGY STAR Most Efficient products



The ENERGY STAR Most Efficient designation became a full-fledged offering in 2013 after a successful two-year pilot. This designation recognizes the most efficient products among those that qualify for the ENERGY STAR symbol in select product categories for that calendar year. When consumers see the Most Efficient designation, they know the products they are looking at are the “best of the best” of ENERGY STAR or the cutting edge of energy-efficient technology and innovation.

The product categories and product models are selected on an annual basis. Both categories and models may be added, removed or changed each year. In 2013, the categories were:

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

ENERGY STAR technical specifications: new and revised

As the market evolves, so do the technical specifications for ENERGY STAR certification. Contributing to the drafting of and compliance with new and revised specifications is a substantial activity for the ENERGY STAR Initiative and its participants, to the benefit of Canadian consumers. For example, in 2013, pool pumps for residential in-ground swimming pools became eligible for ENERGY STAR certification, giving Canadians the opportunity to save 70 percent of the energy used to operate a pool.



ENERGY STAR product specifications in 2013 – new and revised

Product type	Version	Effective date
New specifications		
Pool pumps	1.0	February 15, 2013
Commercial water heaters	1.0	March 20, 2013
Small network equipment	1.0	September 3, 2013
Data centre storage	1.0	December 2, 2013
Revisions completed		
Audio/video	3.0	May 1, 2013
Clothes washers	6.1	February 1, 2013
Clothes washers (small commercial)	6.1	February 15, 2013
Commercial dishwashers	2.0	February 1, 2013
Commercial icemakers	2.0	February 1, 2013
Displays	6.0	June 1, 2013
Enterprise servers	2.0	December 16, 2013
Furnaces	4.0	February 1, 2013
Residential water heaters	2.0	July 1, 2013
Room air conditioners	3.1	October 1, 2013
Televisions	6.1	June 1, 2013
Vending machines (refrigerated)	3.1	February 1, 2013
Revisions in progress		Projected effective date
Battery charging systems	2.0	2014
Commercial ovens	2.0	2014
Commercial refrigerators and freezers	3.0	2014
Computers	6.1	2014
Fenestration	4.0	2014
Heat/energy recovery ventilators	2.0	2015
Imaging equipment	2.0	2014
Lamps (light bulbs)	1.1	2014
Residential refrigerators and freezers	5.0	2014
Telephony	3.0	2014
Water coolers	2.0	2014

New and improved ENERGY STAR website!

In 2012–2013, the ENERGY STAR website in Canada went through some major improvements. This was part of a larger government-wide effort to ensure that Canadians, including those with disabilities, were able to find, understand and use the information and services provided by departments online. The new website is built around 70 energy efficiency product profiles in 11 categories, including a new section on data centres.

The Participant Resources section contains all the information that participants require, including guidelines, technical specifications and news about our ENERGY STAR awards. Participants can also access our Participants-only extranet site from this location.

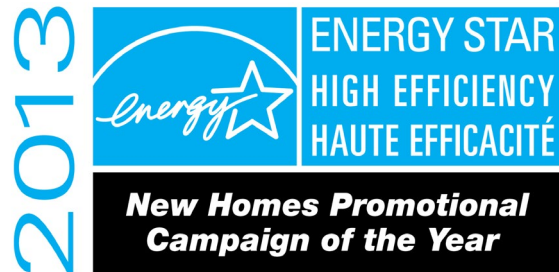
ENERGY STAR for New Homes: Update

The ENERGY STAR for New Homes Program provides homeowners with access to energy-efficient new homes and builders with a means of building these homes in a timely, simple and cost-effective manner using common building practices.

New ENERGY STAR award introduced

To recognize the exceptional efforts of builders participating in the program, a new ENERGY STAR Market Transformation Award was added in 2013 to acknowledge an outstanding promotional campaign by a builder. This recognition is in addition to the award for excellence among new home builders that was introduced the previous year. See the 2013 ENERGY STAR award winners section of this report for more information on the 2013 winners.

New ENERGY STAR for New Homes Standard introduced



A key accomplishment for the department and its stakeholders was the introduction of the 2012 ENERGY STAR for New Homes Standard, which requires ENERGY STAR homes to be 20 percent more energy-efficient than a typical home. The new standard became effective in Canada on December 1, 2012, and key highlights include:

- a minimum of 400 kilowatt-hours of electrical savings a year
- high-performance ENERGY STAR windows, patio doors and skylights
- efficient heating and cooling systems
- a heat recovery ventilation system in every home
- options for builders to install a variety of ENERGY STAR products

New tools and processes

Also, as part of the implementation of the new standard, the department:

- Released an online tool that permits licensed service organizations to submit house files for compliance to the standard through the Internet, thereby improving ease of access and efficiency.
- Introduced a new process to provide an open and transparent mechanism (including public review) for the public and industry to submit requests for changes to the standard.

More than 37,000 new homes in Canada earned the trusted ENERGY STAR label from 2005 to 2013.

2013 ENERGY STAR award winners

Each year, Natural Resources Canada recognizes participants who have demonstrated particular excellence through its annual ENERGY STAR Market Transformation Awards. Winners earn the prized recognition of being the best in their class — and use of a special ENERGY STAR winner's symbol.

2013 ENERGY STAR winners for products

Manufacturer of the Year – BSH Home Appliances Ltd.

BSH takes pride in its German engineering and offers only ENERGY STAR certified appliances – 88 models. In 2012, BSH introduced its Ascenta line of dishwashers to compete with entry-level brands.

Manufacturer of the Year, Fenestration – All Weather Windows Ltd.

The country's largest fenestration manufacturer, All Weather Windows Ltd. achieved 100 percent ENERGY STAR certification of its 1,200 window and 8,000 door/sidelite models. In 2012, it shipped more than 400,000 ENERGY STAR certified units.

Retailer of the Year – Sears Canada

This major retailer, a long-time promoter of ENERGY STAR, offers more than 2,000 ENERGY STAR certified products. In 2012, Sears sold 825,000 ENERGY STAR certified units, including all their windows, patio doors, dehumidifiers, tankless water heaters and televisions.

Utility of the Year, Provincial – Hydro-Québec

Hydro-Québec helped increase the availability of ENERGY STAR certified products in the Quebec market for another year running! It partnered successfully with retailers and used rebates to promote LED bulbs, televisions, windows and patio doors.

Utility of the Year, Regional – FortisBC

FortisBC, known for its Energy Efficiency and Conservation programs, played an integral role in the market uptake of ENERGY STAR qualified water heaters in 2012 with its ENERGY STAR Water Heater Program for tankless, hybrid and condensing storage tank models.

Promotional Campaign of the Year – Hydro-Québec

Hydro-Québec sent a strong message to consumers — along with a \$10 rebate — promoting the long life and energy savings of LED bulbs. The campaign included in-store promotions that resulted in increased LED sales of between 62 percent and 96 percent across the outlets.

Advocate of the Year – Efficiency Nova Scotia Corporation

Efficiency Nova Scotia promotes “better energy use” for home, business and community, through information, technical assistance, rebates and financing options. In 2012, it collaborated with Philips Lighting Canada and Air Miles for Social Change, to promote ENERGY STAR certified products.

Sustained Excellence – Whirlpool Canada LP

Over the years, this appliance giant has invested millions of dollars in consumer education, employee training, advertising and promotion around ENERGY STAR certified products. In 2012, more than 80 percent of Whirlpool’s 350 base models were ENERGY STAR certified, including all its refrigerators.

2013 ENERGY STAR award winners for new homes

New Homes Builder of the Year – Tartan Homes

Tartan Homes is an Ottawa-area builder and early adopter of the ENERGY STAR for New Homes program in Canada. Tartan’s goal is to make ENERGY STAR certified homes “available, accessible and affordable” for a broad range of home buyers. See its [Energy Efficiency](#) video online.

New Homes Promotional Campaign of the Year – Eastforest Homes Ltd.

Eastforest Homes, a builder in southwestern Ontario, based its creative campaign on the concept that “Eastforest has **MORE** – more designs, more options and more ENERGY STAR.” The “MORE” campaign was prominent on its website and at its design studio and presentation centres. View its “[More](#)” booklet online.
