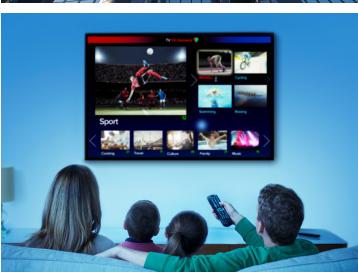


# ENERGY STAR® Canada Annual Report 2022









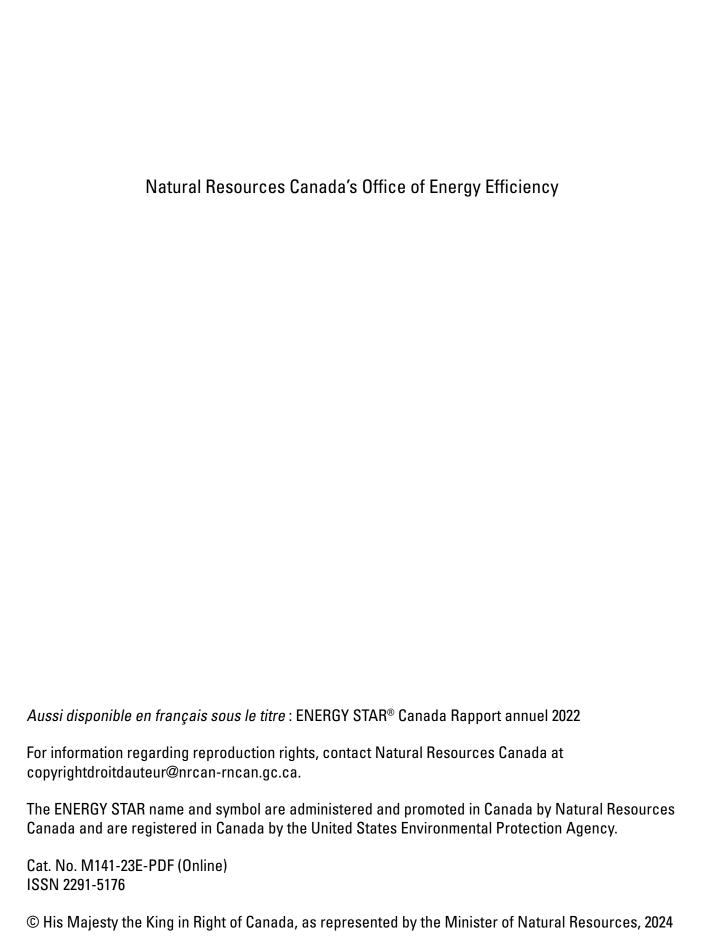




# **ENERGY STAR®**Canada

**Annual Report 2022** 

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# **ENERGY STAR® Canada – A Key Player in Achieving Canada's Environmental Goals**

In 2020, the Government of Canada introduced a strengthened national climate plan called <u>A Healthy Environment and a Healthy Economy</u>. This plan builds on the <u>Pan-Canadian Framework on Clean Growth and Climate Change</u> to help meet the Government's climate change targets to reduce Canada's greenhouse gas by 40 to 45% from 2005 levels by 2030 and to be net-zero by 2050.

Natural Resources Canada (NRCan) delivers a wide range of programs that support Canada's climate plan and are integral to achieving Canada's GHG emissions targets. In particular, ENERGY STAR Canada, with its unique focus on enhanced energy efficiency across multiple sectors, is well-placed to support Canada on its path to achieving net-zero GHG emissions by 2050 and thereby minimizing the impacts of climate change.

ENERGY STAR Canada is managed and delivered by the Office of Energy Efficiency within NRCan. Since its inception in Canada in 2001, ENERGY STAR Canada has expanded its initial focus on enhancing energy efficiency in consumer products to promoting energy efficiency in new residential homes, industrial facilities, and commercial and industrial buildings. Central to the success and reach of ENERGY STAR Canada are a solid reputation and the understanding that ENERGY STAR is synonymous with energy efficiency and related cost savings.

ENERGY STAR Canada works directly in support of Canada's strengthened climate plan through:

- ♦ ENERGY STAR for Products: Influencing consumer purchasing habits by promoting and making available a wide range of ENERGY STAR certified high-efficiency products including those that will contribute to improved overall home energy efficiency
- ♦ ENERGY STAR for New Homes: Increasing the demand and supply of energy-efficient and more comfortable new homes while reducing energy consumption and related costs
- ♦ ENERGY STAR for Industry: Promoting and improving energy efficiency in industrial facilities through ENERGY STAR certification based on energy benchmarking to reduce energy consumption, GHG emissions, and owner operating expenses
- ENERGY STAR for Buildings: Helping Canadian building owners and managers increase capacity for strong energy management practices and energy efficiency gains through tools such as ENERGY STAR Portfolio Manager®

# **ENERGY STAR®**Canada



### What is **ENERGY STAR Canada?**

ENERGY STAR Canada was introduced in Canada in 2001 through an international collaboration with the United States Environmental Protection Agency. ENERGY STAR Canada is a voluntary partnership between the Government of Canada and program participants to make available and promote high-efficiency products, homes, buildings, and industrial facilities.

ENERGY STAR Canada provides Canadians with the knowledge and tools to encourage them to use energy-efficient products in their homes. ENERGY STAR Canada also supports energy efficiency across multiple sectors of the economy through the ENERGY STAR for New Homes, ENERGY STAR for Industry, and ENERGY STAR for Buildings initiatives.

### The Power of the ENERGY STAR Symbol

The ENERGY STAR symbol is the internationally recognized and trusted mark of high energy efficiency. Behind every ENERGY STAR label lies a product, new home, industrial facility or building that is certified to consume less energy than its counterparts, thereby curbing emissions that fuel climate change.

Canadians have come to recognize and value the ENERGY STAR symbol and are keen to support an endeavour that allows them to make an individual contribution to reducing their environmental impact while at the same time supporting Canada's commitment to climate change mitigation.



### Safeguarding the ENERGY STAR Symbol

NRCan has renewed its commitment to safeguarding the integrity of the ENERGY STAR symbol with recent updates to the *ENERGY STAR Canada Brand Book*. The Brand Book provides guidelines for how the ENERGY STAR logo can be used on products and new homes; in benchmarking the energy performance of buildings or industrial facilities; and in communicating the ENERGY STAR commitment to partners and customers. The Brand Book also advises against unauthorized usage of the logo and offers a procedure for reporting misuse.

According to a <u>recent survey</u>, **86%** of consumers associate ENERGY STAR with energy efficiency. Moreover, **70%** of Canadians believe that ENERGY STAR certified products provide them more benefits including financial savings. High volumes of ENERGY STAR certified home office and home electronic product purchases attest to these positive perceptions.

# Introducing the ENERGY STAR® Canada Family Tree

Over the years, ENERGY STAR Canada has expanded and advanced a growing demand for improved energy efficiency across multiple sectors. Meet the ENERGY STAR family!





## **ENERGY STAR for Products**

ENERGY STAR for Products led the way for other ENERGY STAR programs in Canada. Indeed, Canadians first became familiar with the ENERGY STAR symbol as a trusted mark of energy efficiency through its placement on common household items including lighting products; appliances; windows and doors; electronics; and heating and cooling equipment. Products bearing the ENERGY STAR symbol have been tested and certified to meet or exceed strict specifications for energy performance, all without sacrificing expectations of quality or performance. Currently, there are over 1,000 organizations participating in the program, including manufacturers, retailers and utilities working toward the common goal of helping Canadians choose energy efficiency wherever possible.



## **ENERGY STAR® for New Homes**

The ENERGY STAR for New Homes initiative encourages energy-efficient construction in new housing as a means of reducing GHG emissions. A new home that is built to meet NRCan's <a href="ENERGY STAR">ENERGY STAR for New Homes Standard</a> is recognized as meeting a higher energy efficiency standard than a typical new home built to the local building code and is subsequently awarded ENERGY STAR certification. In practical terms, an ENERGY STAR certified new home is, on average, 20% more energy-efficient than other new homes, thanks to the incorporation of features such as higher levels of insulation; efficient heating and cooling systems; airtight construction; and energy-efficient windows and glass doors. Increased energy efficiency means reduced energy costs for homeowners and money back in their pockets.

### **ENERGY STAR Home Benefits**

Owners of ENERGY STAR certified homes also enjoy more comfortable indoor living in homes that are well sealed to reduce drafts and cold spots. Proper air sealing also minimizes the potential for dust and pollen to get inside the home, improving air quality. Higher insulation levels and energyefficient windows contribute to the overall comfort of the home and more balanced temperatures. Ultimately, owners of ENERGY STAR certified homes enjoy the satisfaction that comes from knowing they are doing their part to reduce energy use, reduce GHG emissions, and slow climate change while saving on monthly energy bills.





#### **ENERGY STAR Fun Fact**

Every owner of an ENERGY STAR certified home can save up to \$300 per year in utility costs. These are savings that you get as soon as you start living in your new home.



### **ENERGY STAR® for Industry**

#### **Industry Certification Across Multiple Sectors**

ENERGY STAR for Industry offers Canadian industrial facilities two streams for demonstrating leadership in energy efficiency. First is the industry certification program that offers industrial facilities in eight sectors the opportunity to earn ENERGY STAR certification and to proudly display the ENERGY STAR symbol. To achieve ENERGY STAR certification, an industrial facility



must score **75 or higher** (on a scale of 1-100) using the sector-specific energy performance indicator. In this way, the performance of an industrial facility is being benchmarked against similar facilities in its sector.

Facilities in the following eight industrial sectors are eligible to apply for ENERGY STAR certification. Stay tuned because this list is expected to expand:

- \* Automobile assembly
- \* Automobile engine
- Automobile transmission
- ★ Commercial bakeries

- ★ Cement manufacturing
- ★ Frozen fried potato processing
- ★ Fertilizer
- ★ Steel mills

### **ENERGY STAR Challenge for Industry Sets a High Bar**

Second is the ENERGY STAR Challenge for Industry. This challenge sets a high bar: reduce a facility's energy intensity by 10% within 5 years and earn the right to proudly display the ENERGY STAR Challenge for Industry logo. Participating in this challenge alone demonstrates a commitment to tracking, monitoring and reducing energy consumption over time. The benefits of participating are compelling: reduce costs; increase profitability; protect the environment; and strive for the highly recognizable and valued ENERGY STAR recognition.





# **ENERGY STAR® for Buildings**

NRCan administers ENERGY STAR programs for both new and existing commercial and institutional buildings. For existing buildings, NRCan offers ENERGY STAR Portfolio Manager® and ENERGY STAR certification. For new construction, NRCan offers the ENERGY STAR Multifamily High Rise Pilot Program.

#### **ENERGY STAR Portfolio Manager**



ENERGY STAR Portfolio Manager is a free, online, bilingual benchmarking tool adapted for Canada, allowing building

owners and operators to monitor, track, and report on building energy use, GHG emissions, water and waste. This interactive energy management tool allows you to securely track and assess energy and water consumption across your entire building portfolio. Whether you own or manage, Portfolio Manager can help you set investment priorities, identify underperforming buildings or verify efficiency improvements.

ENERGY STAR Portfolio Manager is a foundational tool used by stakeholders, including provinces, territories, municipalities, and others to support their benchmarking, labelling and disclosure initiatives. Moreover, Portfolio Manager is the only tool whereby a building can receive an <a href="ENERGY STAR score">ENERGY STAR certification</a>.

When a building is ENERGY STAR certified, it means that it is performing better than at least **75**% of buildings nationwide and meets other requirements. In 2022, building types eligible for an ENERGY STAR score and building certification with Portfolio Manager included:

- Multifamily housing
- ★ Warehouses
- ★ Hospitals
- Hotels/motels
- ★ Schools (K-12)
- Retail stores

- \* Supermarkets and food stores
- ★ Commercial office buildings
- ★ Medical offices
- ★ Ice/curling rinks
- Senior living communities and residential care

### What is building energy benchmarking?

Benchmarking is the ongoing review of energy consumption to determine whether a building's energy performance is getting better or worse. Energy benchmarking provides concrete data that encourages building operators to strive for continuous improvement.

### **ENERGY STAR® Multifamily High Rise Pilot Program**

The <u>ENERGY STAR Multifamily High Rise Pilot Program</u> is a five-year certification program, available in Ontario and British Columbia, recognizing multifamily high-rise buildings that are designed to be at least **15% more energy-efficient** than those built to the provincial energy code and that meet other program requirements.

# New Brunswick Adopts ENERGY STAR® Portfolio Manager® and Reduces 48,000 Equivalent Tonnes of Greenhouse Gas Emissions.

The <u>Government of New Brunswick</u> (GNB) uses ENERGY STAR Portfolio Manager as the primary tool in their unified approach to reporting GHG emissions and identifying reduction opportunities and targets. GNB championed the <u>Service New Brunswick</u> (SNB) Energy Management Branch to spearhead the adoption of Portfolio Manager as the energy reporting tool for over 1,000 government-owned facilities including schools and hospitals.



<u>Horizon Health Network</u> uses the tool to track and monitor energy in 41 healthcare facilities. The Energy Network communicates ENERGY STAR scores internally through newsletters, intranets and memos and publicly through their social media channels. Horizon's Saint John Regional



Hospital was the first hospital to become ENERGY STAR certified, followed by the Dr. Everett Chalmers Regional Hospital, the Miramichi Regional Hospital, the Moncton Hospital, the Upper River Valley Hospital, and the Sussex Health Centre. Furthermore, the Saint John Regional Hospital and the Dr. Everett Chalmers Regional Hospital have received the ENERGY STAR Building of the Year award.

SNB also collaborated with utilities to ensure a comprehensive approach and engaged <u>Énergie NB Power</u> to adopt <u>web services</u>. Énergie NB Power supports and promotes the use of ENERGY STAR Portfolio Manager by offering their customers access to automatic uploads of their utility data into Portfolio Manager through web services. They also provide free Portfolio Manager webinars and training to consultants, municipalities, and commercial building owners.



GNB **reduced their GHG emissions by over 48,000 CO<sub>2</sub> equivalent tonnes** in the last 5 years. Through this integrated approach, GNB is a model for responsible resource management and dedication to a sustainable future.

Learn more about GNB's great work.

# **2022 ENERGY STAR® Canada Accomplishments**

In 2022, ENERGY STAR Canada continued to play a pivotal role in promoting energy efficiency and sustainability. By empowering individuals, businesses and industries to make informed choices about energy-efficient products, homes, building features and industrial facilities, ENERGY STAR fostered a culture of environmental stewardship while contributing to a greener future. Here are some notable accomplishments during 2022.



### **ENERGY STAR for Products**

A secret to the success of ENERGY STAR in Canada is consumer awareness and education. It is no small wonder that ENERGY STAR for Products focuses significant attention on promoting the ENERGY STAR brand and educating Canadians on what the ENERGY STAR symbol represents. In 2022, NRCan launched two advertising campaigns focused on promoting ENERGY STAR certified products. The first campaign focused on office equipment and electronics while the second campaign focused on brand awareness generally. ENERGY STAR for Products also launched an <u>awareness survey</u> to provide insight into the Canadian general public's awareness, understanding, attitudes and perceptions related to ENERGY STAR labelling to inform future awareness efforts and program delivery.

To ensure that products associated with the ENERGY STAR label meet its high standards for energy performance, quality, and functionality, NRCan strengthened the detection of non-compliance mechanisms by developing an inspections strategy and initiating the Compliance Regulatory Energy Efficiency Database.

### **Did You Know?**

Everyday devices such as computers, coffee makers, televisions, telephones and laptop chargers that you leave plugged in use power even when they are turned "off." This is called "phantom power" or "standby power," and it can account for up to 10% of your electricity bill. Don't pay for energy you are not using!

Here are some ways to save energy and money:

- Unplug, unplug, unplug.
- Use a power bar that can be turned off.
- Buy ENERGY STAR certified products that use less energy when they are on AND use less phantom power than noncertified products.



#### 12 Days of ENERGY STAR Campaign Turns 5!

The annual 12 Days of ENERGY STAR campaign celebrated its 5th anniversary and went down as being the most successful campaign to date. This educational awareness campaign took place over multiple social media platforms including X (formerly Twitter) and Facebook. Clearly, Canadians took notice as there were over 20,000 entries to the contest for free giveaways of appliances, lighting products, a pool pump and a heat pump, to name a few. Furthermore, the campaign resulted in high levels of traffic driven to X, Facebook, and the ENERGY STAR Canada website. Want to get involved? Be sure to follow us on social media: Facebook and X (Twitter)!

ENERGY STAR for Products also offered Canadians a vast array of energy efficiency information through <u>blogs</u> on a broad menu of topics that are relevant for our changing lifestyles, including enhancing energy efficiency in home offices, pool operations, and gaming and entertainment systems.

### efficiencyPEI – Helping P.E.I. Go Green

efficiencyPEI, a program offered by the Government of Prince Edward Island (P.E.I.), provides advice and programs to residents to promote sustainable energy use and reinforce the importance of energy management for the economic, social, and environmental well-being of P.E.I. residents and businesses. For those interested in reducing their



of P.E.I. residents and businesses. For those interested in reducing their day-to-day energy consumption, efficiencyPEI makes it easy to learn more about energy savings through the plentiful resources on their website such as Home Energy Assessments, Energy Saving Tips, and New Home Construction Incentives.

In 2022, efficiencyPEI accomplished the following tasks:

- ★ installed ENERGY STAR certified products for 478 low-income residents as part of the Winter Warming Program
- completed two instant savings campaigns that provided in-store rebates on over 44,000 ENERGY STAR certified products
- ★ installed 335 ENERGY STAR certified products, including heat recovery ventilators, water heaters and boilers through the Energy Efficiency Equipment Rebate program

efficiencyPEI was awarded the distinction of being Energy Efficiency Program Administrator of the Year and Advocate of the Year as part of the <a href="2023 ENERGY STAR Canada Awards">2023 ENERGY STAR Canada Awards</a>. These are efficiencyPEI's seventh and eighth ENERGY STAR Canada awards.

In 2022, ENERGY STAR for Products achieved an estimated **33 petajoules** of cumulative annual energy savings and avoided about **3.5 Mt of GHG emissions**.

#### Canada Greener Homes

More and more Canadian consumers are drawn to purchasing products labelled with the ENERGY STAR symbol because a more energy-efficient product means lower energy costs and ultimately more money in the consumer's pocket. In 2022, NRCan made it even more compelling for Canadians undertaking home retrofits to choose ENERGY STAR products in their efforts to reduce energy consumption in their homes through the Canada Greener Homes Initiative. Under this initiative, Canadian homeowners could qualify for grants of up to \$5,000 to undertake energy efficiency improvements to their existing homes, including the purchase and installation of eligible ENERGY STAR products such as windows, doors and heat pumps.

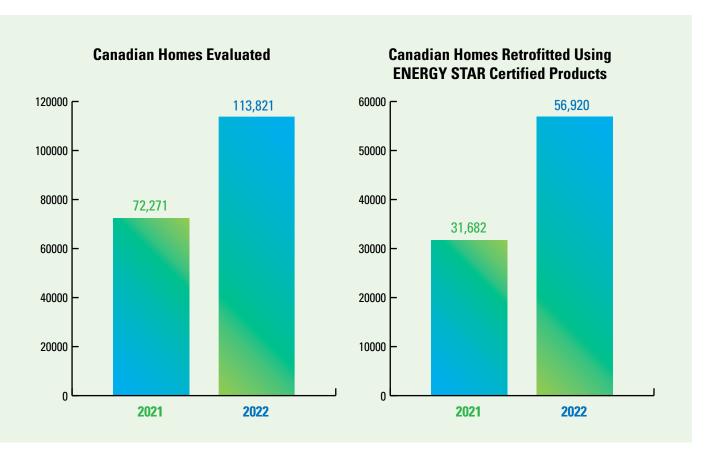
The Canada Greener Homes Initiative was launched in 2021. As the charts below indicate, the number of homes evaluated as part of the Canada Greener Homes Initiative has increased significantly from 2021 to 2022. Similarly, the number of homes retrofitted using ENERGY STAR certified products almost doubled from 2021 to 2022.

Homes Initiative in 2021, over **310,000 grant applications** have been received and **\$262 million** in grant money has been distributed to Canadian homeowners.

Since the launch of the Canada Greener

Please note that the Canada Greener Homes Initiative is no longer accepting new applications.

Please click here for current information and news.



Note that in the ENERGY STAR Canada Annual Report 2021, the information reported for Canadian Homes Evaluated is incorrect. The number should have been 72,271 homes instead of 51,263.



### **ENERGY STAR® for New Homes**

ENERGY STAR for New Homes continues to be successful in encouraging prospective homeowners to look to the trusted brand of ENERGY STAR when making home purchase decisions. In 2022 alone, **over 3,500 new homes** were awarded ENERGY STAR certification, bringing the total of ENERGY STAR certified homes in Canada to over **112,000**.

With 90 ENERGY STAR certified homebuilders across Canada and the ENERGY STAR for New Homes standard going above and beyond the building code in your region, it is time to give an ENERGY STAR certified home serious consideration!

# **ENERGY STAR for New Homes on a Path to Continuous Improvement**

In 2022, NRCan undertook a strategic review of the ENERGY STAR for New Homes initiative including engagement with a wide range of key stakeholders such as builders, homeowner advocacy groups, municipalities, utilities, and

38% of Canadians are aware of the ENERGY STAR certification for new homes, up from only 26% in 2020.

76% of Canadians believe that an ENERGY STAR certified home offers better value than a home that is not certified. Furthermore, 59% say they would opt for an ENERGY STAR certified home even if it cost \$5,000 more than a home that is not certified because saving money on energy bills is rated as the most important feature of ENERGY STAR certified homes.

licensed program participants. The review aimed to inform the future delivery of the ENERGY STAR for New Homes initiative to increase participation and impact. In addition, the review provided an opportunity to prepare the housing market for the National Building Code 2020 higher energy performance tiers.

# **Huron Creek Developments – A Leader in Green Home Construction**

Huron Creek Developments in Kitchener, Ontario, is an innovator in new home construction and community development. All Huron Creek homes are certified under the ENERGY STAR for New Homes program, a commitment showcased across their various marketing platforms including Instagram, Facebook, and X (formerly Twitter). Huron Creek is committed to helping reduce the carbon footprint of their homes by "building better and more with less" and adopting many environmentally conscientious practices as a standard in all the homes they build. Through their dedication to ENERGY STAR certification and net-zero construction, Huron Creek is helping to drive the transition toward a net-zero future.



Huron Creek was this year's winner of the ENERGY STAR Award for Builder of the Year—Small size and has previously been the recipient of Builder of the Year—Mid-size. Learn more about the 2023 ENERGY STAR Canada Awards at the end of this report.



### **ENERGY STAR® for Industry**

### **ENERGY STAR Challenge for Industry Produces Winners**

In 2022, **46 facilities** participated in the ENERGY STAR Challenge for Industry, up from 30 in 2021 and 25 in 2020 – looks like it is catching on! This year's challengers represent a wide range of sectors: food and beverage; paper; chemical; transportation equipment; and manufacturing.



Most noteworthy was the success enjoyed by two facilities that undertook and achieved the ENERGY STAR Challenge for Industry. First, <a href="Hexion Canada">Hexion Canada</a> achieved a 17.4% reduction in energy intensity in one of their Canadian facilities (within only three years!) to be labelled an ENERGY STAR Challenge for Industry achiever. Also significant, one of <a href="Cascades Canada's">Cascades</a> facilities in Quebec successfully completed the ENERGY STAR Challenge by realizing a 12.5% reduction in energy intensity over a five-year period, also earning the title of ENERGY STAR Challenge for Industry achiever.



Responsible Chemistry

#### **ENERGY STAR Certification Takes Off**

During 2022, **11 industrial plants** earned ENERGY STAR certification, up from seven in 2021. It is noteworthy that of the 11 plants that earned ENERGY STAR certification in 2022, three of them were first time entries and of those, one represents the first successful entry from the fertilizer sector.





In Canada, there are 17 provinces and municipalities using ENERGY STAR Portfolio Manager® to receive reports for their programs. During 2022, there was a staggering 45% increase in the number of buildings registered with ENERGY STAR Portfolio Manager to over 42,000. This jump is in no small part owed to the province of Ontario's energy and water reporting and benchmarking and broader public sector programs.

### **ENERGY STAR Building Certifications in Canada Going Steady**

In 2022, <u>182 buildings</u> earned ENERGY STAR certification. A building achieving an ENERGY STAR score of 75 or higher, on a scale of 1-100, can earn ENERGY STAR certification and enjoy the public recognition of being energy-efficient.













### **Utilities Making Energy Benchmarking Even Easier!**

In 2022, Hydro Québec and Énergir joined other utilities including NB Power, BC Hydro, Fortis BC, and Manitoba Hydro in adopting ENERGY STAR Portfolio Manager web services. This is an important feature that allows buildings to receive utility data automatically uploaded into Portfolio Manager.

### **Did You Know?**

NRCan offers Canadians a valuable source of data on the commercial and institutional buildings sector with our Energy Benchmarking Data Snapshots. These snapshots are a valuable source of information for policy development, reference, research, planning and more.

The Energy Benchmarking Data Snapshots provide Canada-specific information for:

- Buildings registered in ENERGY STAR Portfolio Manager
- Benchmarking by province and territory
- Benchmarking by city

- ★ Energy use distribution
- Distribution of buildings
- Energy use profiles

#### **ENERGY STAR Fun Fact**

ENERGY STAR Portfolio Manager is not just used by provinces and municipalities for reporting purposes. Various other organizations all over Canada are using this benchmarking tool for their energy efficiency and incentive programs.

# **ENERGY STAR® Catches on With Multifamily High-rise Buildings**

This year marked the first multifamily high-rise certification in Canada! The <u>Delmanor's seniors community</u> in Aurora, Ontario, has the distinction of being the first newly constructed ENERGY STAR Multifamily High Rise building to achieve at least **15% more energy efficiency** than those multifamily high-rise buildings built to meet Ontario's energy code. Delmanor is a five-storey, 242-unit building consisting of apartment-style independent and assisted-living spaces.

The certification of this building was completed in partnership with EnerQuality, which worked with NRCan to finalize the review and approval process.









### 2023 ENERGY STAR® Canada **Award Winners**

Winners of the 2023 ENERGY STAR Canada Awards have been announced – a total of 30 awards were handed out to recipients representing utilities, manufacturers, retailers, associations, home builders and buildings.

Note: The awards recognize activities and performance from the previous calendar year.

The Honourable Jonathan Wilkinson, Minister of Energy and Natural Resources Canada, congratulated award winners and recognized them for their exceptional contributions in promoting the most energy-efficient products, homes and buildings. Recipients were lauded for helping Canadians reduce energy waste and take action on climate change. To find out more about the 2023 recipients and their significant contributions to energy efficiency, click here. You can also catch up on the contributions of previous winners.



### **Keep in Touch With ENERGY STAR®**

Follow ENERGY STAR Canada on any of our social media channels for energy-efficiency tips, rebates, contests and much more.

energystar@nrcan-rncan.gc.ca energystar.gc.ca







