



Advancing Energy Efficiency in the Built Environment: Progress Report 2019

Build Smart

Canada's Buildings Strategy

We're putting all our energy in the right place!

The Goal

Canada's greenhouse gas (GHG) emissions reduction target is 30% below 2005 levels by 2030. This is a critical objective in support of Canada's transition to a low carbon future.



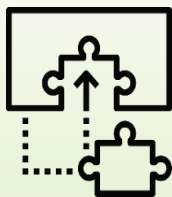
The Issue

Residential, commercial and institutional buildings make up 17% of Canada's GHG emissions. Improving energy efficiency in our homes and buildings can help us lower energy costs, live more comfortably, drive economic growth and reduce climate change.



The Solution

Build Smart: Canada's Buildings Strategy is Canada's implementation plan to move forward to a clean energy future by making homes and buildings more energy efficient. By investing in energy efficient improvements to our homes and buildings – including hospitals, schools, and our places of work – we are investing in our environment, economy, and even our personal health and overall comfort.



Impacts of Energy Efficiency



31.4%

The amount Canada **boosted its energy efficiency** between 1990 and 2016



\$45B

Saved by Canadians on **energy bills** in 2016 as a result of **efficiency improvements** since 1990



98,000

Efficient new homes built since Canada's **ENERGY STAR for New Homes** and **R-2000** initiatives



88%

Of Canadians who recognize **ENERGY STAR**, compared to 83% in 2016



1,000,000

Efficiency retrofits resulting from **EnerGuide home evaluations**, 35,000 more than last year



234M m²

Of floor space in Canada is registered in the **ENERGY STAR Portfolio Manager** benchmarking tool since 2011



20,500

Buildings registered in the **ENERGY STAR Portfolio Manager**, representing almost 30% of the commercial/institutional sector since 2011



1,260,000

Homes rated to date using **ENERGUIDE Rating System**, an increase of 50,000 since 2018



18.7%

Higher occupancy rates in **energy efficient buildings**

We are committed to sharing solutions to Build Smart together!

COME ON IN, THE FUTURE FEELS FINE. Learn more about Canada's Buildings Strategy and how, together, we can Build Smart and create homes and buildings designed for living today and tomorrow.

nrcan.gc.ca/Buildsmart



Build Smart Elements & Actions



Making new buildings more efficient

PCF Commitment: Federal, provincial, and territorial governments will work to develop and adopt increasingly stringent model building codes, starting in 2020, with the goal that provinces and territories adopt a “net-zero energy ready” model building code by 2030.

Recent Actions:

- Work is underway through the Canadian Commission on Buildings and Fire Codes (CCBFC) to publish a more stringent model code for buildings, including the Net Zero Energy Ready (NZER) code, in 2020.
- Training materials are being developed to increase energy code compliance among designers, builders and building inspectors.
- The first set of Net Zero Challenge awards were presented in fall 2018 at the Building Owners and Managers Association (BOMA) Canada’s annual gala event in Calgary.

Bringing existing buildings into an energy-efficient future



PCF Commitment: Federal, provincial and territorial governments will work with industry to develop a model code for existing buildings by 2022, with the goal that provinces and territories adopt the code. This code will help guide energy efficiency improvements that can be made when renovating buildings.

Recent Actions:

- A guidance document has been drafted outlining the policy and technical considerations related to the alterations of existing buildings in the National Building Code.
- Work is progressing on the development of advanced recommissioning training materials to support capacity building within the commissioning industry.



Improving energy efficiency for appliances and equipment

PCF Commitment: The federal government will set new standards for heating equipment and other key technologies to the highest level of efficiency that is economically and technically achievable.

Recent Actions:

- To improve the energy efficiency of appliances and equipment, three amendments to Canada’s Energy Efficiency Regulations were introduced in 2018, covering 38 product categories.
- Federal, provincial, and territorial governments endorsed “Paving the Road to 2030 and Beyond: Market Transformation Roadmap for Energy Efficient Equipment in the Building Sector” in August 2018, thereby creating a new approach to advancing the energy efficiency of equipment.

Labelling building energy use - setting energy use data free



PCF Commitment: Federal, provincial, and territorial governments will work together with the aim of requiring labelling of building energy use by as early as 2019. Labelling will provide consumers and businesses with transparent information on energy performance.

Recent Actions:

- The ENERGY STAR score is now available for eight building types, ten will be available by 2021 and 21 by 2026.
- In the past year, ENERGY STAR certification was launched for commercial and institutional buildings and 119 buildings were certified.
- In March 2019, an online platform was launched for home energy labelling and disclosure for provinces, territories, municipalities and other partners to use in support of programming that includes the sharing of home energy use ratings.

Research, Development & Demonstration (RD&D)

- LEEP projects funded in 2018 will result in 16 new buildings constructed and two deep-energy retrofits conducted totalling 540 residential units and 40,000m2 of commercial/institutional floor space across six Provinces/Territories and covering all Canadian climate zones.
- In 2018, 17 LEEP Forums and Workshops were delivered involving 1000 participants in eight provinces (BC, AB, SK, ON, NB, PEI, NS, & NL).

