

Advancing Energy Efficiency in the Built Environment

Progress Report 2019

The Pan-Canadian Framework on Clean Growth and Climate Change (PCF), announced by Canada's First Ministers in December 2016, is Canada's vision for action to help meet its climate change objectives. Canada's greenhouse gas (GHG) emission reduction target is 30% below 2005 levels by 2030 – a critical objective in Canada's transition to a low carbon future.

Energy will play a key role in meeting this objective, with energy production and use accounting for over 80 percent of Canada's GHG emissions. One-third of targeted PCF emissions reductions can be achieved through ambitious energy efficiency measures in the buildings, industrial and transportation sectors, as well as through federal government leadership in greening its own operations. The Generation Energy Council Report released in June 2018 also identifies energy efficiency as one of the main pathways for Canada to reach a low-carbon future. Since residential, commercial and institutional buildings account for 17% of Canada's GHG emissions, the Buildings sector is an important area of opportunity to increase energy efficiency and reduce GHG emissions.

To make this a reality, Build Smart: Canada's Buildings Strategy, was adopted in 2017 by federal, provincial and territorial Energy and Mines Ministers. Build Smart is Canada's implementation plan for the PCF and articulates commitments by federal, provincial and territorial governments in moving toward a clean energy future by making homes and buildings more energy efficient.

At the 2018 Energy and Mines Ministers' Conference (EMMC), Ministers discussed the importance of advancing competitiveness in Canada's energy sector. Ministers also reviewed progress made on three specific initiatives under the Pan-Canadian Framework on Clean Growth and Climate Change.

- Setting Energy Data Free: Unlocking Access to Home Energy Use Data 1.
- 2. Market Transformation Road Map for Energy Efficient Equipment in the Building Sector
- 3. Update and Next Steps on Build Smart: Canada's Buildings Strategy

A commitment was also made at EMMC 2018 to provide an update on these three initiatives in 2019.

Please find brief updates for each initiative below and refer to the corresponding infographic for additional details.

Setting Energy Data Free: EnerGuide Home Labelling Portal (Please refer to Infographic 2 1.



Over the past year, Natural Resources Canada (NRCan), provinces, territories, and municipalities have been collaborating to develop an online tool to support the sharing of

























EnerGuide home energy use ratings. In March 2019, NRCan launched the tool through a demonstration to working group members, and subsequently shared with external partners and stakeholders in April 2019.

The EnerGuide Home Labelling Portal is a site that allows homeowners who have had an EnerGuide home evaluation to access their score online, review related recommended upgrades, and share their home energy performance data with others. The site provides homeowners with a quick snapshot of where their home stands compared to a reference home, using simple icons to represent the EnerGuide rating in gigajoules. It also provides visuals that explain the home's environmental impacts and benefits of making recommended upgrades.

This project builds on the application programming interface (API) presented at EMMC 2018 that opens access to EnerGuide home energy rating data, and demonstrates how EnerGuide data can be used to create public facing websites to serve various users. Provinces, territories, municipalities, utilities, real estate professionals, and other stakeholders will soon be able to access EnerGuide data through the API and create websites or apps for their own users, based on the needs of their energy efficiency initiatives.

2. Update on Market Transformation Road Map for Energy Efficient Equipment in the Building Sector (Please refer to Infographic 2)



Paving the Road to 2030 and Beyond: Market transformation road maps for energy efficient equipment in the building sector was endorsed at EMMC in 2018. The roadmap is a plan to create broad market adoption of next-generation, clean technologies needed for a low carbon building sector. The road map outlines long-term aspirational goals for three key equipment areas including window, space heating and water heating technologies – creating a new approach to advancing the energy efficiency of equipment.

Following the launch of the roadmap, work has been ongoing in developing a governance structure, to support the implementation of the roadmap and its related activities, which will require collaborative action from governments, industry and other key stakeholders across a wide spectrum of initiatives.

In the coming year, work plans will be developed for the three equipment areas, which will provide a strategic layer for the co-ordination of existing and new activities to support the overall goals of the market transformation roadmap.































Build Smart: Canada's Buildings Strategy consists of four pillars to achieve energy efficient homes and buildings by 2030. The pillars are:

- Making new buildings more efficient;
- 2. Bringing existing buildings into an energy-efficient future;
- 3. Improving energy efficiency for appliances and equipment; and
- 4. Labelling building energy use and setting energy use data free.

Over the past year, progress has been made across Canada and within the various jurisdictions to advance these four pillars. For example, at the federal level, work is underway to publish a more stringent model code for new and existing buildings, create a new approach to advancing the energy efficiency of equipment, and build and expand labeling and disclosure programs and tools.

Progress has also been made by provinces and territories across the country. For example, efficiencyPEI provided rebates for homes built to ENERGY STAR or better than code. Energy Efficiency Alberta provided energy efficiency incentives for many building applications. In Newfoundland and Labrador, the Energy Efficiency Loan Program encouraged energy efficiency retrofits through low-interest financing.

The Build Smart infographic for this year provides further details and updates on specific results achieved across the country.

Annexes:

- 1. Infographic on Setting Energy Data Free: EnerGuide Home Labelling Portal
- 2. Infographic on Market Transformation Roadmap
- 3. Infographic on Build Smart: Canada's Buildings Strategy























