



Natural Resources
Canada

Ressources naturelles
Canada

Energy Efficient Homes: Natural Resources Canada Initiatives

Building Knowledge – Spring Training 2026
Advance Building Science and Practical Application

Tracey Kutney, Housing Division
Office of Energy Efficiency
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Canada 



Canada's Housing Challenge is also an Energy Challenge

- Housing affordability is tied to both building costs and operating costs
- Energy costs are a growing share of total housing costs
- Emissions and climate resiliency continues to be a priority

Energy Efficiency is a Core Part of the Solution

- Lower operating costs for households
- Scalable pathway to high-performance housing

How OEE Supports Energy Efficient Housing

1. Codes & Standards

→ Working with NRC, PT partners and industry to raise the performance floor

2. Home Labelling & Tools

→ Enabling measurement, transparency, and comparability

3. Programs & Partnerships

→ Toward Net-Zero (TNZ) Program – Supporting residential energy efficiency adoption and addressing affordability barriers

4. Incentives & Recognition

→ Encouraging adoption and market transformation while recognizing those going above and beyond

National Approach to Home Labelling

Home energy labelling can help Canadians understand the energy performance of a house and where improvements can be made to improve affordability, comfort, and energy efficiency



Budget 2024 committed \$30M over 5 years to continue developing a National Approach to Home Labelling to Increase the number of Canadians that have information about how their home uses energy.

Three Pillars



National Home Labelling Platform

Launching Platform in May 2026



Virtual Home Labelling Standard

Launching VHL Guidelines in May 2026



Simplified Energy Assessment

Under Development



\$12M Home Labelling Fund

Evaluation of proposals underway

EnerGuide Rating System & HOT2000 Energy Modelling Tool

Since 1998, NRCan has administered the EnerGuide Rating System for Homes, Canada's national home rating and labelling system, with over **2.6 million homes labelled!**

Next Steps on EnerGuide / HOT2000

Convert HOT2000 desktop application to an online, "cloud-based", application

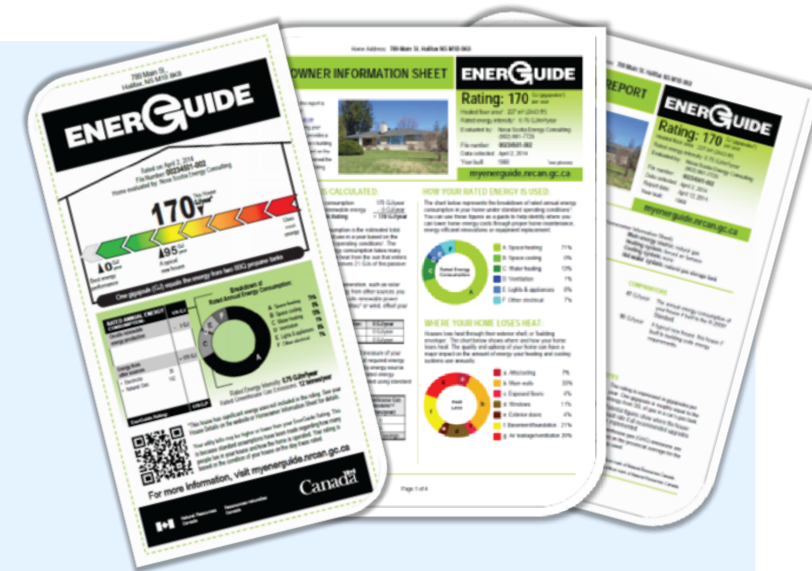
Benefits

- Facilitates use, maintenance, improvements and scalability
- Redesigned user interface and integration of separate tools like the heat pump calculator
- Removes major workarounds and resolve major bugs
- Allows for the integration/addition of new features (e.g. online tools and dynamic links)

Timeline

Currently in the early stages of scoping the full project. Stakeholders will be engaged as the project advances.

Modernization also implies a redesigned architecture of related back-end IT systems such as: information storage / database, file submission (currently in the portal), grant calculator and data transfer to partners.



ENERGY STAR for New Homes - Modernization



The modernization of the ENERGY STAR for New Homes program aims to increase participation by **simplifying** the program and making it more **accessible**, while maintaining a trusted pathway for builders to exceed minimum code requirements.

Where We Are Now:

- Strategic review and modernization work is well underway
- Initial proposals developed across key areas (program requirements, compliance, QA, administration, IT)
- Engagement phase active – gathering input to validate direction and refine options through our ESNH Advisory Committee

Who We Are Engaging:

- Builders (production, custom, volume builders)
- Energy Advisors (EAs) and Service Organizations (SOs)
- Homeowner Groups (Canadians for Properly Built Homes)
- Industry associations (e.g., CHBA and regional HBA representatives)
- Provinces and Territories / Authorities Having Jurisdiction (AHJs)

What this means for industry... (what you may be wondering):

- No immediate changes today – current program requirements remain in place
- Future updates will be phased and communicated in advance
- Expect clearer requirements, improved tools, and more consistent delivery
- Opportunity to shape the program through ongoing engagement
- Increased alignment with codes = reduced duplication over time

Canada Greener Homes Initiative: Key Results & Insights

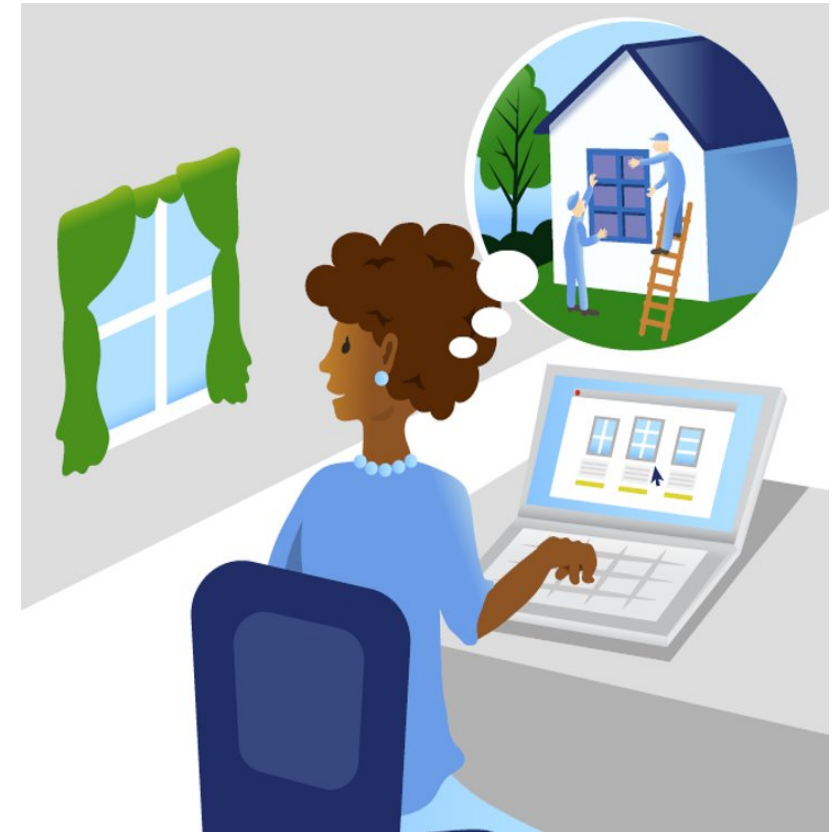
- The Canada Greener Homes Initiative helps homeowners save money, creates jobs, and fights climate change.
- The initial Grant and Loan programs are now closed, but the following programs remain available through the Initiative:
 - The Canada Greener Homes Affordability Program (CGHAP)
 - Oil to Heat Pump Affordability Program (OHPA)

CGHAP
<ul style="list-style-type: none">• Open in Manitoba in 2025• Other P/Ts negotiating funding agreements.

OHPA (Oil → Heat Pump)
<ul style="list-style-type: none">• ~\$10K-\$25K per home• ~\$1,377 annual savings• ~2.8 t GHG reduction / home

Grant (Closed Dec 2025)
<p>\$1.8B distributed</p> <ul style="list-style-type: none">• Top retrofits:<ul style="list-style-type: none">• Heat pumps (~229K)• Windows/doors (~145K)• Insulation (~74K)

Loan (Closed Oct 2025)
<ul style="list-style-type: none">• Up to \$40K interest-free (10 yrs)



Toward Net-Zero (TNZ) Homes and Communities Program:

TNZ supports projects that help Canadian households and communities improve residential energy efficiency and move toward net-zero building emissions by 2050 through three streams:

EE Tech – overcoming barriers

Codes – capacity build, adopt & implement

Home Labelling

- **\$25M, FY 23-24 to FY 25-27**
 - Oversubscribed
- **50% of projects** benefitted rural / remote communities across Canada
 - 45% of funding to Indigenous-led projects
- **\$7.7M (30%)** of the TNZ budget focused on workforce, upskilling over 2,000 tradespeople
- Informed the Home labelling fund program



313D's (HVAC Installers) consistently overestimated their abilities. While comfort levels for most modules were high, actual performance did not align.

This gap between confidence and performance may lead to errors in critical tasks, especially in areas requiring strict adherence to codes and safety standards.

Bridging the Skills Gap for Heat Pump Proficiency, 2025

An aerial photograph of a suburban neighborhood during autumn. The houses are scattered among trees with vibrant yellow, orange, and red foliage. In the background, a city skyline is visible under a cloudy sky.

We value your input.

Please reach out at:

tracey.kutney@NRCan-RNCan.gc.ca

Thank you!