











Briefing Note: Home Energy Labelling

December 2020

Purpose

This note aims to update government on the benefits of a home energy labeling program – a measure we are pleased to note is included in the November 2020 Mandate Letter to the BC Minister of Finance - as one component of a potential new Building Energy and Greenhouse Gas Reduction Framework. A mandatory energy labeling program for new and existing homes would equip British Columbia consumers and other stakeholders with valuable information about a given home's energy performance, helping inform both purchase decisions and local-government energy efficiency programs, and ultimately helping local governments and the province meet their legislated climate targets.

Background

As early as 1994, researchers have regarded incomplete information on household energy consumption patterns as a market failure. Mandatory home energy labelling would address this failure by allowing information about a given home's energy performance to be shared with interested parties including homeowners, local governments, industry professionals, and potential home buyers.

- The Province of British Columbia does not currently have any requirements for home energy labelling; however, local government leaders have been discussing the opportunity with their provincial counterparts for at least six years.
- British Columbia local governments are unable to require either the reporting or disclosure of home energy labelling scores for existing homes.
- In 2014, the Union of British Columbia Municipalities resolved that the province consider adding energy assessment and EnerGuide label to the requirements for new Part 9 residential buildings. The government of the day declined the request, stating that the *BC Building Code* effectively specifies minimum emissions requirements.
- In 2016, the Pan-Canadian Framework on Clean Growth and Climate Change committed federal, provincial, and territorial governments to collaborate on building energy labeling that would in turn provide consumers and business with transparent information on energy performance.
- The 2018 CleanBC Plan committed the province to exploring a building energy rating requirement at the point of sales or lease. The Plan states that such a

¹ Levine, Mark D. et al. Energy Efficiency, Market Failures, and Government Policy. 1994. Retrieved from https://eta-publications.lbl.gov/sites/default/files/energy-efficiency-market-failures-and-government-policy.pdf

- rating system would "make it easier for buyers and renters to factor energy costs into their decisions while giving owners another incentive to make their buildings more efficient."
- The November 2020 Mandate Letter to the Minister of Finance includes direction for the Minister to work with the Minister of Energy, Mines, and Low Carbon Innovation to require realtors to provide energy efficiency information on listed homes.

Key Considerations

About Energy Labels

In Canada and British Columbia, legislation requires energy labelling for a broad range of consumer products including motor vehicles, furnaces, windows, lightbulbs, and kitchen appliances. However, there are no labeling requirements for the single largest purchase a given Canadian is likely to make—their home.

- Disclosure and labelling programs can help encourage energy efficiency and are an important part of many market-transformation strategies².
- For buildings in Canada, Natural Resources Canada (NRCan) administers the EnerGuide home energy label programs. The EnerGuide program can be used for both new and existing homes.
- The City of Vancouver is currently exploring a "virtual" home energy score that it plans to pilot in 2021.
- For new homes, there are also a number of industry-led voluntary labelling programs, including the Canadian Home Builders Association's Net Zero Energy Labelling Program, Built Green, the Passive House Institute's Passive House certification, and the Canada Green Building Association's Leadership in Energy and Environmental Design (LEED) program.

Benefits of Mandatory Home Energy Labels

Mandatory home energy labels benefit a wide range of parties.

- They benefit home shoppers, so that they can better understand the operational costs of a given property, and more readily identify efficiency improvements that will lower energy costs over the long term. This information increases transparency for home shoppers, improves their ability to differentiate between properties, and ultimatley provides an additional level of consumer protection.
- They help home sellers convey the value of their energy efficiency improvements, adding a selling point to their home.
- They give real estate agents insights into a home's efficiency and any onsite renewable energy features, so that they can more effectively market and value a property.
- Mandatory building energy labelling also supports workforce development, by increasing demand for home energy audits and home performance upgrades, potentially spurring job creation.

² Dunsky Energy Consulting. Home Energy Performance Labelling: Pilot Program Manual." May 2017

- Labels help all levels of government meet energy reduction targets by motivating homeowners and potential buyers to invest in energy-efficiency measures.
- In cases where regulations require reporting of home energy scores to a central green building database, policymakers and utilities will be better equipped to gain insights into where energy is being used in their residential sector.
- Regulators can also tie home energy labeling requirements to existing building GHG performance requirements and require or support upgrades to homes that fall short of a specified level.
- Research on home energy labeling for the City of Edmonton found that the benefits to homeowners of taking part in mandatory energy labeling are greater than the costs and identified a positive correlation between energy efficiency features and selling price in the city's residential market.³
- More generally, a home energy label—and the assessment summary that usually accompanies it—can provide valuable information to homeowners and potential buyers about the steps they can take to improve a home's energy performance and lower its greenhouse gas emissions.

Jurisdictional Scan

In numerous other jurisdictions throughout the world, policy makers use mandatory home energy labelling to improve consumer awareness and building energy performance—helping jurisdictions meet their climate goals.

- Since 2006, all 28 European Union member states have required energy performance labels for all buildings. Labels must provide details to prospective buyers/tenants at time of construction, rental, or sale. Home energy labelling disclosure is required throughout the European Union.
- In the United States, some form of home energy disclosure is required in at least five states (Alaska, Connecticut, Hawaii, Kansas, Massachusetts, and South Dakota) as well as cities such as Austin TX, Berkley CA, Chicago IL, Minneapolis MN, Montgomery Country MD, and Portland OR.
- Assessments for home energy labels can vary in how detailed they are and how, where, and to whom they are reported.
- Well-designed and successful home energy efficiency policies depend on the existing infrastructure involved in home construction, sales, and performance analysis. In North America, the Multiple Listing Service® real estate industry database can include energy-use data, home energy ratings, and information on a property's energy efficiency characteristics. Potential home buyers—especially those interested in low energy costs and other benefits of energy-efficient homes—can use this data to inform their purchase decisions.⁴

³ City of Edmonton, "A Community Energy Transition Strategy Policy Brief: Mandatory Energy Labelling & Disclosure" 2019. Retrieved from https://www.edmonton.ca/city_government/documents/PDF/MandatoryEnergyLabellingAndDisclosure.pdf

⁴ ACEEE. Policy Brief: Home Energy Efficiency Policies: Ratings, Assessments, Laels, and Disclsoure, 2018. Retrieved from https://aceee.org/sites/default/files/pdf/topic-home-energy-assessment.pdf

British Columbia-Current State

The Province of British Columbia does not currently require home energy labelling. However, municipal and provincial policy makers have been discussing the idea for at least six years.

- In 2014, the Union of British Columbia Municipalities resolved that the province consider adding energy assessment and EnerGuide label to the requirements for new Part 9 residential buildings. The government of the day declined the request, stating that the *BC Building Code* effectively specifies minimum emissions requirements.
- The 2018 CleanBC Plan committed the province to exploring a building energy rating requirement at the point of sales or lease. The Plan states that such a rating system would "make it easier for buyers and renters to factor energy costs into their decisions while giving owners another incentive to make their buildings more efficient." The November 2020 Minister of Finance Mandate Letter includes direction for the Minister to work with the Minister of Energy, Mines, and Low Carbon Innovation to require realtors to provide energy efficiency information on listed homes.
- For new construction, in jurisdictions referencing the BC Energy Step Code, local
 governments can require builders to submit to the jurisdiction having authority a
 home energy score as part of its permitting administrative requirements and for
 the label to be displayed within the home at time of occupancy (e.g., on the
 electric panel). However, this authority ceases as soon as the occupancy permit
 is issued.
- British Columbia local governments currently lack the authority to require home energy labelling. Local governments would like the ability to opt into a mandatory home energy labelling reporting and disclosure program to help them achieve their community energy and climate targets. Without this authority, the market failure created by the lack of information about home energy performance will persist.
- The Minister of Finance was issued a Mandate Letter in November 2020 that included direction for the Minister to work with the Minister of Energy, Mines, and Low Carbon Innovation on a measure that will require realtors to provide energy efficiency information on listed homes.

Next Steps

Potential next steps for government include the following actions.

- The province could share with local governments and other stakeholders the findings of its exploration to date into an energy rating requirement for homes and buildings, as per the 2018 CleanBC Plan.
- Government could enter into discussions with local government leaders and other stakeholders on options for enabling home energy labelling and/or energy efficiency information on listed homes within the next two years.

- In consultation with local government representatives and other stakeholders, the
 province could establish a workplan for launching a home energy labelling
 program within the next year. Such a plan would at a minimum, allow local
 governments to opt into a mandatory home energy labelling program within their
 jurisdiction.
- The province could further support the adoption of home energy labels by local governments by developing and funding on an ongoing basis a central platform for data reporting, storage, and disclosure.

Case Studies

Portland, OR

The City of Portland passed the Residential Energy Performance Rating and Disclosure code in December 2016 and the program officially kicked off in early 2018. The program applies to homes within the City of Portland boundaries that are either single-detached, or a side-by-side rowhouse style complexes. Due to the nature of how the energy use measurements are conducted, apartments or stacked homes are not able to be included in the program yet.

Homeowners are required to obtain a home energy score prior to listing any applicable property to be sold. The onus of procuring the home energy assessment is on the owner and must be advertised with the home's for sale listing. In addition to disclosure on the listing, the owner must then also register the home on the US Green Building Registry.⁵ This program works in alignment with the city's 2050 goal of reducing carbon emissions by 80%.⁶

As of May 2019, 10,000 homes have participated in the home energy score program. There is a \$500 fine for non-compliance, which the city has indicated is significantly more than the cost of assessment and posting the label for the home. Initially the realtor community was reluctant to get on board with the program, however after implementation the city worked with the realtor community to address some of their common concerns (i.e. requiring the score to be completed prior to time of listing and not at time of closing.)

Austin, TX

The City of Austin passed the Energy Conservation Audit and Disclosure (ECAD) ordinance in 2008, which requires assessments and disclosures for all homes and

⁵ City of Portland. Home Energy Score. "Determine if you need a home energy score."

⁶ City of Portland. Home Energy Score. "Home Energy Score Program."

⁷ City of Portland. Home Energy Score. "Sellers start receiving fines this month for missing Home Energy Score."

⁸ ACEEE Policy Brief. Home Energy Efficiency Policies: Ratings, Assessments, Labels, and Disclosure."

buildings served by Austin Energy. ECAD has been built into the city code and requires all homes 10 years or older to be audited prior to listing them for sale.⁹

This measure is helping the city reach its Austin Climate Protection Plan goals to reduce CO2 emissions by more than 365,000 metric tonnes by 2020 and offset 900 megawatts of peak energy demand by 2025. The state also offers loan programs for energy efficiency upgrades to help homeowners reduce energy use in their homes through a program called LoanSTAR and PACE financing.¹⁰

Over half of the houses sold in Austin between 2009 and 2012 were in compliance. Since the program was introduced city staff report that the energy use performance in the housing stock has improved. There are fines for non-compliance, which range from \$500 to \$2,000 depending on the building type.

Initially realtors in the community were concerned about the impact of the program, however after city staff worked with them to hear their concerns (i.e. requiring audit at time of sale and not listing, which doesn't give home buyers any leverage or homeowners any incentive to improve performance). The city also used the American Recession Recovery Act funding to expand the number of energy auditors available in the city.¹¹

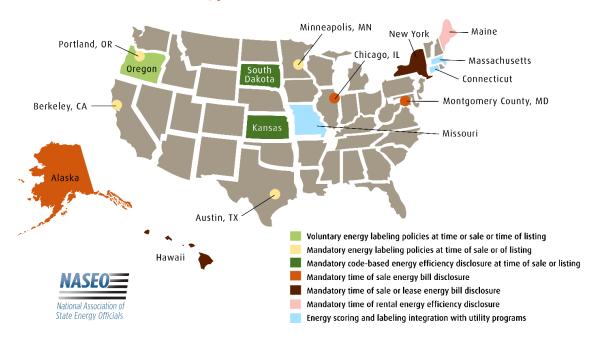
⁹ <u>Austin Energy. Energy Conservation Audit and Disclosure Ordinance.</u>

¹⁰ ACEEE Policy Brief. Home Energy Efficiency Policies: Ratings, Assessments, Labels, and Disclosure."

^{11 &}lt;sub>lbid.</sub>

Other Resources

Residential Energy Disclosure Policies in States and Cities



Map Source: https://www.naseo.org/issues/buildings/home-energy-labeling