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Submission to the [Energy Efficiency Standards Regulation - Amendment 7 Consultation](#)

**Residential Windows - Regulatory Proposal**

Ministry of Energy, Mines and Petroleum Resources, Energy Efficiency Branch

Submitted by email to [cameron.shook@gov.bc.ca](mailto:cameron.shook@gov.bc.ca)

## About Canadian Home Builders' Association of BC (CHBA BC)

CHBA BC represents over 2,100 member companies in the residential construction industry who work as home builders, renovators, tradespeople, suppliers, service professionals, and others. CHBA BC members are small and medium-sized businesses creating jobs and economic benefits in all areas of the province. Overall, the residential construction industry represents over 207,184 on-site and off-site jobs, \$12.6 billion in wages, and \$28.3 billion in investment value.

## Overview

The Province of British Columbia has established energy efficiency as a B.C. Building Code objective since 2008, and continues to drive energy efficiency improvements through the introduction of the Energy Step Code in British Columbia in April 2017.

Currently, the B.C. Energy Efficiency Standards Regulation (EESR) requirement for residential windows and sliding glass doors is aligned to the B.C. Building Code 2018, to have a U-factor equal to or less than 1.80 W/m<sup>2</sup>K (for climate zones 4 and 5.) New editions of the B.C. Building Code are published roughly every five years, with a view to harmonizing with the National Building Code of Canada.

In the discussion below, we outline some of the considerations and challenges expressed by our industry. Implementation challenges should be resolved before any expansion to higher levels of performance can be realized at an affordable cost to homebuyers or owners. CHBA BC believes strongly that affordability and evidence-based decisions must be a key objective when regulation changes are considered.

## Discussion

### *Industry Engagement Required*

The Energy Efficiency Standards Regulation (EESR) lists the energy efficiency requirements for products and devices that are commonly installed in residential construction. Given the direct impact of this proposed regulation for residential windows on the home building industry, meaningful and ongoing interaction with our industry is essential to both properly monitor impacts and discuss relevant developments.

### *Ongoing Assessment of Aspirational Goals*

B.C.'s proposed regulation is aligned with the short-term aspirational goal for residential windows set out in the Market Transformation Road Map endorsed by the Energy and Mines Ministers in 2018<sup>1</sup>. While this short-term aspirational goal appears to be a modest change from existing codes and standards, the performance targets for residential windows as set out by the medium and long-term aspirational goals represent a more significant increase at a fairly accelerated pace. CHBA BC strongly recommends monitoring and evaluating any transitional issues that emerge as a result of implementing a regulation change before considering any regulated increase as outlined by the medium and long-term aspiration goals for 2025 and 2030. During this interim period, it is imperative that the government and industry properly monitor the market, evaluate compliance and address any concerns that may arise. For example, if there are significant enforcement issues with the current regulation, they should be fully addressed before any new regulation changes come into effect.

### *Voluntary Program Harmonization*

CHBA BC supports harmonizing voluntary programs with the aspirational goals for residential windows. The current and next versions of the Canadian ENERGY STAR<sup>®</sup> specification for residential windows, doors, and skylights<sup>2</sup>, are closely aligned with the short and medium-term aspirational goals, respectively. Future revisions of the ENERGY STAR specification program should consider updating the performance levels to align with the long-term aspirational goals. Programs such as ENERGY STAR provide information to consumers, but also send a market signal to manufacturers to develop new technologies that raise the level of performance for the industry. Voluntary approaches can help evaluate market penetration and help to mitigate unintended consequences that may be overlooked if regulations are changed before the industry is ready.

In addition, the EESR should consider adopting some of the guiding principles that the U.S. Environmental Protection Agency (EPA) employs when undertaking the revision specification process for ENERGY STAR products<sup>3</sup>. Specifically, EPA considers market share among a variety of other market indicators when deciding whether to propose a revised specification. In the latest specification revision for ENERGY STAR windows, doors and skylights, the market share for ENERGY STAR certified windows and doors is consistently high – above 80% since 2014. In contrast, the market share for compliant products under the proposed regulation change is only 40%, and this change represents only a small incremental improvement compared to the medium and long-term goals.

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<sup>1</sup> Natural Resources Canada, Energy and Mines Ministers' Conference. (2018, August). Paving the Road to 2030 and Beyond: Market transformation road map for energy efficient equipment in the building sector.

<sup>2</sup> Natural Resources Canada, Office of Energy Efficiency. (2019, April 25). ENERGY STAR<sup>®</sup> Technical Specification for Residential Windows, Doors, and Skylights Sold in Canada Version 5.0.

<sup>3</sup> U.S. Environmental Protection Agency. (2019, September). ENERGY STAR<sup>®</sup> Windows, Doors, and Skylights Version 7.0 Specification Discussion Guide.

The ENERGY STAR<sup>®</sup> mark is administered and promoted in Canada and is used with permission.

### *National Harmonization*

The timelines outlined by the aspirational goals should harmonize with relevant federal standards and National Building Code development cycles as much as possible. It is likely that manufacturers will focus efforts on areas with the greatest market share potential in relation to both national and international markets. If not harmonized with other jurisdictions, B.C.'s initiatives may not be sufficient to encourage the necessary research and development and product availability. For most building products and materials, North America is a single market.

### *Training*

As with many new technologies, proper installation is key to achieving the intended performance levels for windows. This becomes even more critical as higher efficiency windows may have size, weight, and other attributes that make installation more difficult. Provincial efforts should look beyond regulating higher performance windows and focus on providing more training and education to increase contractor familiarity with the design and installation practices for high performance windows. Such supportive action will directly encourage market transformation.

### *Enforcement*

There is a lack of confidence by industry that a robust compliance system exists across Canada for residential windows. Manufacturers have limited incentive to manufacture the highest performing products if it is perceived that compliance is not heavily enforced, especially in the renovation sector. CHBA BC supports federal and provincial government initiatives to ensure that product labelling is standardized across Canada and complemented by high rates of compliance to ensure fair competition.

### Follow up

Thank you for the opportunity to participate in this consultation. We recognize this is an ongoing conversation and would be pleased to participate in any additional consultations or discussions on this topic.