

Bill 57 – Environment Goals and Climate Change Reduction Act

Good afternoon. My name is Lara Ryan and I am a sustainability consultant. I spent 12 years in the green building sector as Regional Director for the Canada Green Building Council. In addition to ESG consulting for private sector clients, I am currently working on an Energy Benchmarking, Disclosure and Labeling pilot and a Net Zero Energy Ready Workforce Coalition for the provincial government and a Retrofit pilot project for HRM. I am also on the board of the Nova Scotia Nature Trust.

I applaud the new government's action on the new Environmental Goals and Climate Change Reduction Act and I thank you for the opportunity to make suggestions for amendments to the proposed legislation.

Buildings represent significant potential for economic growth through innovation, investments and job creation. Nova Scotia's built environment is a significant contributor to GHG emissions. By constructing low-emission buildings and retrofitting Nova Scotia's existing building stock, the government will lower emissions, create new jobs, and scale-up investments and innovation. At the same time, these investments will ensure its building stock is more resilient to future climate conditions such as extreme weather, forest fires, flooding or droughts. Over 80 per cent of existing buildings will still be in operation in 2030 and 50 per cent in 2050, and therefore it is essential that existing buildings are addressed to meet GHG reduction targets for the building sector.

Near-term government action is needed to ensure that zero-carbon-ready buildings become the new norm across the world before 2030 for both new construction and retrofits. This requires governments to act before 2025 to ensure that zero-carbon-ready compliant building energy codes are implemented by 2030 at the latest

The cost of not adopting a zero-carbon approach increases with each passing day. Every building not designed or recommissioned to low-/zero-carbon will contribute to increased carbon emissions—and will inevitably require major investments in mechanical equipment, ventilation systems, and building envelopes to meet future GHG reduction targets.

Nova Scotia should set a clear goal of zero carbon for new construction by 2030, which research shows is financially and technically viable for the industry. This would provide clarity to developers, designers, and builders about future performance expectations and help them assemble the expertise, processes, and investments needed to be successful.

Nova Scotia could do this by adopting the 2020 National Energy Code for Buildings and the 2020 National Building Code within 18 months of it being published by the Government of Canada, and to require all new buildings to be net-zero energy ready and to be zero-carbon-ready by 2030, at the latest.

For Nova Scotia to achieve significant reductions in GHG emissions and energy use it is crucial that significant improvements in the efficiency of its existing building stock are realized. Benchmarking is the process of data collection through which a building's resource use is monitored to assess performance and enable comparison with similar buildings. Typically, benchmarking programs require owners of buildings over a certain size to track and often also publicly report their resource use performance data

(energy use, water use, and GHG emissions). Energy benchmarking is a foundational piece for a retrofit economy that can help improve the effectiveness of energy efficiency projects and support programs and policy for all building types.

Having access to building performance data also allows owners to assess how their buildings are performing and helps to drive improvements by identifying opportunities for energy and GHG reductions and allows prospective tenants and buyers to make more informed choices about where to buy or rent.

In 2019 Nova Scotia began a three-year energy benchmarking pilot project managed by Efficiency Nova Scotia. Using learnings from the pilot, Nova Scotia should enact mandatory benchmarking, disclosure and labeling for provincially owned and operated buildings as soon as possible with the phased rollout to all large commercial buildings beginning by the end of 2022.

Building code amendments can also activate retrofits in the existing building stock by triggering energy efficiency upgrades in buildings undertaking substantive renovations. Energy conservation and efficiency are critical components of a strategy to reduce GHG emissions from buildings. However, there is also a need for mechanisms that direct the building industry towards low- and zero-carbon energy choices and building designs.

The majority of carbon pollution reductions in the building sector need to come from existing buildings. Building code changes tackling energy efficiency will not be sufficient to reach the required GHG emissions reductions in the building sector. Energy efficiency will generally, but not always, lead to reduced GHG emissions. Without a greenhouse gas intensity emission metric (GHGI), reductions in carbon from buildings are likely to be incremental.

Using a GHGI metric with other measures that encourage high energy performance and sustainable building design will help drive choices about the types of energy that are used in buildings and promote decarbonization through electrification to leverage on-site renewable energy generation in buildings.

To achieve the large reductions in GHG emissions required from building design and retrofit decisions, the Government of Nova Scotia should consider including a GHGI metric in addition to energy efficiency performance metrics.

Respectfully submitted

November 1, 2021

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