Established in 1889, the Ontario Association of Architects (OAA) is the self-regulating body for the province's architecture profession. It governs the practice of architecture and administers the Architects Act *in order to serve and protect the public interest.*

The Secretary, Canadian Board for Harmonized Construction Codes
1200 Montreal Road, Building M-20
Ottawa, ON K1A 0R6

Sent by email to: CBHCCSecretary-SecretaireCCHCC@nrc-cnrc.gc.ca

June 12, 2023

Re: CBHCC Consultation on Greenhouse Gas Considerations in the National Model Codes

To Whom It May Concern:

The Ontario Association of Architects (OAA) continues to monitor and respond to proposals to harmonize the Ontario Building Code with the National Codes. In particular, the Association is concerned with advancing energy efficiency as a key piece of the harmonization process.

The OAA supports the Canadian Board for Harmonized Construction Codes (CBHCC) proposal related to greenhouse gas emissions in principle. With regard to "technical solutions" to embodied greenhouse gas emissions, the Association urges CBHCC to consider what is already happening in other jurisdictions.

In the European Union, for example, the International Organization for Standardization (ISO) are in use. They define the scope for many methodologies and metrics, including life cycle analysis and grid intensity, to calculate operational emissions. In fact, there is a full suite of ISO standards for different aspects of operational carbon and lifecycle (embodied) carbon, and energy accounting that have seen international adoption. These standards cover:

- Net operational emissions;
- Primary operational energy (factors in grid intensity); and,
- Lifecycle carbon and energy.

The Association urges CBHCC to look to existing international models and approaches to understanding operational emissions, rather than reinventing the wheel, so to speak.

In the midst of the global climate emergency, policymakers ought to look towards reducing carbon emissions from buildings as a key factor in advancing climate action. Based on estimates from various sources, approximately one third of greenhouse gas emissions come from the built environments in which Canadians live, work, and play. Improving the energy efficiency of our buildings and accelerating our progress toward net zero carbon is critical if Canada and Ontario intend to meet their stated greenhouse gas emissions targets.

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As such, the OAA encourages the implementation of energy step codes, both in the Ontario and National Codes. The Association has long supported objective targets based on Total Energy Use Intensity (TEUI) for a wide range of building occupancies as a best practice, which is demonstrated by the OAA's own TEUI Calculator tool.

Objective, tiered performance metrics help everyone understand energy use in buildings and can help position Canada to achieve its emissions reduction targets. Further, they reduce red-tape, are standards-agnostic, and improve the efficiency of designers by allowing use of a wide range of standards to arrive at EUI goals and eliminate the need for modelling against a reference building to prove a 'better than' scenario. As well, the inclusion of tiers will provide a framework to move toward net zero standards by 2030, something that does not otherwise seem possible in the next eight years.

The OAA is committed to leading by example and undertook a deep energy retrofit of their own headquarters, which was completed in 2020, meeting the 2030 challenge a decade early. This net-zero project embodies a commitment to demonstrate first-hand how existing buildings can be adapted rather than replaced, as the profession continues to strive towards climate stability.

The OAA enjoys a longstanding, collaborative relationship with government and policymakers, and looks forward to continued work with CBHCC to ensure that energy efficiency remains a key part of the National Model Codes.

Sincerely,

S. T. Vilardi

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President

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