CACEA Canadian Association of Consulting Energy Advisors

July 18, 2025

Canadian Board for Harmonized Construction Codes (CBHCC)
CBHCCSecretary-SecretaireCCHCC@nrc-cnrc.gc.ca

Cc: Cindy Gareau, CACEA executive Director
manager@cacea.ca

Re: CBHCC seeking input on addressing embodied greenhouse gas emissions in the National Model Codes

To Whom it May Concern:

Please find below the response developed by the Canadian Association of Consulting Energy Advisors' (CACEA) Technical Committee regarding the draft policy direction for embodied greenhouse gas (GHG) emissions in the National Model Codes. These comments pertain to those buildings which are addressed under Part 9 of the National Building Code (NBC) (housing and small buildings).

1. Evaluation Metrics and Implementation

- It is recommended that thorough modelling be undertaken to understand what limitations may be imposed on new construction design and material selection when taking into consideration both operational energy and embodied GHG emissions. Specifically, it is important to review how policies covering the limitation of both may interact and ensure that homes built in cold climate zones (IECC Zone 6 and higher) do not experience roadblocks in achieving embodied GHG emission targets due to the amount and type of materials that must be used to meet low operational energy use requirements.
- It is recommended that a performance path option for Part 9 construction be included, which will allow for flexibility in how the embodied GHG requirements are achieved. This can help alleviate some of the challenges faced by builders in achieving the targets based on location and material availability, as noted above. A clear understanding of how the performance of the building will be modelling and tested must be established prior to implementation in the code. This included the recognized modelling program/software(s), and the professionals, such as Registered Energy Advisors (EA), who will be designated as those which can measure and verify the performance of the home once complete.
- The inclusion of a trade-off provisions within the embodied GHG emissions requirements is recommended to provide additional flexibility for new construction. While this may be limited to trade-offs within those elements considered for the GHG emissions scope, it is recommended to evaluate the possibility to allow trade-offs when considering both embodied GHG emissions *and* operational energy, to facilitate a more holistic approach.

- It is recommended that the requirements for measuring and reporting embodied GHG emissions be reviewed and updated on an on-going basis (within 1 year after introduction, and every 2 years after that). Introducing the opportunity for the residential building community and associated professionals including CACEA to provide feedback on new code requirements can generate greater efficiencies within the code and broader acceptance of new requirements by the building community.

2. Social and Economic Impacts

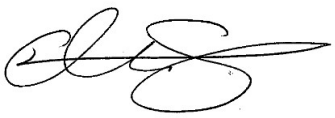
- Consideration must be given to the economic and social impacts embodied GHG emissions requirements will have on the residential building industry – more specifically, how the introduction of these requirements will affect building material availability and supply, particularly in rural and remote regions. As highlighted in the previous section, the inclusion of performance-based metrics or trade offs may help reduce perceived or real negative impacts by allowing greater flexibility in how the requirements may be achieved.

- It is recommended that thorough forecasting or modelling be completed prior to the inclusion of embodied GH emissions requirements in the National Building Code (NBC) to understand the cost implications of building to higher performing tiers. Both embodied GHG emission and operational energy targets in the NBC are important steps to reduce the carbon footprint in new construction. However, we believe these targets must be considered using a holistic approach that includes (geographic) location, design, material availability, and workforce education and availability prior to implementation.

- Finally, prior to the implementation of embodied GHG emission requirements in the NBC, it is recommended that a thorough education and awareness campaign be undertaken with the residential building community, specifically builders, developers, building officials, EAs, and the trades. Past examples (BC Energy Step Code) have shown that educating the building community about upcoming changes well in advance of implementation can help alleviate pushback, misinformation and timely adoption. In addition, it can contribute to industry preparedness, including professional development, market/material availability, and industry education and upskilling.

We appreciate the opportunity to provide our comments and feedback to the Embodied GHG draft policy position, currently being developed by the CBHCC. Should you have any questions or require clarification on any of the points discussed above, please don't hesitate to contact us.

Sincerely,



Alison Conroy
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