CAGBC Feedback on the Draft Policy Framework for Climate Change Mitigation (Wave 2)

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CAGBC supports the latest modifications to the policy document

Follows revisions made after the first wave of consultation.

Reaching Canada's climate goals, as announced in the 2030 Emissions Reduction Plan, requires a mandatory focus on GHG emissions, operational and, later, embodied carbon. The Canada Green Building Council (CAGBC) believes that with solid policies and incentives to support the transition period, building codes with substantial operational GHG reduction requirements will support innovative and highly efficient building design while creating affordable places to live, work and play.

RECOMMENDATION ON MODIFICATIONS FOLLOWING WAVE 1 CONSULTATION

Document: Policy Considerations for Developing and Implementing Greenhouse Gas Emissions Provisions in the National Model Codes

Page 1: Given that technical development of the operational GHG emissions is underway, the focus of policy development at this time is on operational GHG emissions, and policies that pertain exclusively to embodied GHG emissions will be addressed **starting in 2025**.

Embodied GHG emissions are a complicated issue but of utmost importance. According to Architecture 2030, around 75 percent of new buildings' emissions between 2018 and 2030 will come from materials and construction processes. To integrate embodied GHG emissions in the 2030 building codes, the Canadian Board for Harmonized Construction Codes (CHBCC) must start its work on disclosure and requirements by 2025 at the latest. The CHBCC will be able to draw from experiences gained through National Research Council (NRC) initiatives (LCA^2, Construction 4.0), Natural Resources Canada (NRCan) programs such as Buy Clean and Low-Carbon Building Materials Innovation Hub, and the Treasury Board Secretariat's (TBS) Standard on embodied carbon and Greening Government Strategy (which sets a 25 percent reduction target for embodied carbon starting in 2025). There are many examples of municipal standards CHBCC can draw on, such as those in Toronto or Vancouver, and increasingly, companies in the green building sector are working toward reducing embodied GHG including manufacturers, building owners, architects, and general contractors. Voluntary standards such as Zero Carbon Building – Design and LEED also offer examples to draw from.

CONSULTATION WAVE 2: FEEDBACK ON POLICY RECOMMENDATIONS

Recommendation 2: the need to accommodate the breadth of Provincial and Territorial (PT) fuel policies, plans and individual PT targets, and coordinate with elements that extend beyond the boundary of the code;

The need to accommodate regional differences must be limited by two general principles:

1. Building codes must consider that electrification of buildings is the main avenue to reductions in GHG emissions, as space heating contributes the most to operational emissions.

2. Building codes should consider how the grid will be in the future, to recognize that mechanical system decisions impact the energy source for heating for 15-30 years and the federal government is targeting a clean grid in every region of the country by 2035.

Recommendation 3: regional differences (e.g., ability to fuel switch, availability of low embodied carbon materials, especially in Northern and remote areas)

Regional differences represent a significant challenge, whether it is differing climate, access to low-carbon materials, or infrastructure. Consideration must be given for regions such as the Northern territories where it will be particularly difficult to decarbonize. Most provinces have easily identifiable opportunities for decarbonization. Regardless of the region, CAGBC has demonstrated there is a pathway for all Canada's large buildings to reach net-zero, and for most of the building archetypes CAGBC studied, a favourable business case was demonstrated.[1]

Recommendation 5: impact on affordability (e.g., the interplay between energy efficiency and GHG requirements with respect to operational GHG emissions);

Affordable and equitable access to low-carbon and energy-efficient homes and buildings is paramount and one of the core principles of any progressive green building policy.[2] When considering this important principle, the 'total cost of ownership' should come into play.[3] Building owners need to calculate the building's carbon footprint and cost over the lifetime of the structure, and especially consider the implication of rising carbon costs. Homeowners, renters, and commercial tenants need to have access to transparent and credible information on the carbon performance and costs at the time of purchase or leasing.

Investing in energy generation systems (such as solar), improved airtightness and efficient HVAC systems will bring energy savings now and make buildings more resilient to extraordinary weather events, which will occur more frequently as temperatures rise. Without investment in resiliency, the cost of building insurance and repairs will have an increasing impact on both Canadian family's budgets and asset management strategies.[4] The ability to safely shelter in place during extreme heat or cold will also be negatively impacted, especially when paired with the threat of power loss. This can lead to displacement and mortalities.

Recommendation 8: adoption and implementation considerations including market readiness, training, capacity building (monitoring, reviewing and enforcement), and developing tools to enable PTs to harmonize.

Private training facilities, unions, postsecondary institutions, and manufacturers offers training for workers to gain low-carbon skills. To meet the demand for low-carbon building and retrofits, we must coordinate between industry and academia to bridge the skills gap and increase the number of entrants to the building sector. This includes engagement and training of mid-career professionals who need to update their skills.

The labour shortages will impact the speed of project delivery but should not affect the ambition of Canada's building codes. CAGBC, along with the Delphi Group, recently published a study on the "Green Retrofit Economy" demonstrating where the shortages are now, and where they will be in the future. Workforce capacity and development can be discussed outside of the building codes through federal, provincial, and territorial negotiations on federal transfers (Labour Market

[1] Decarbonizing Canada's Large Buildings - Canada Green Building Council (CAGBC)
[2] New Global Policy Principles from WorldGBC - Canada Green Building Council (CAGBC)
[3] Life-Cycle Cost Analysis (LCCA) | WBDG - Whole Building Design Guide
[4] Some insurers stop covering California homes over costs linked to wildfires. Is Canada next? | CBC Radio

Development Agreements and Workforce Development Agreements) and other federal policies (e.g., immigration). Provinces and Territories will also need to step up the different funding programs to train a larger cohort, attract and retain professional skills (e.g., electricians, electrical or control engineers, carpenters etc.). As well, they need to draw in new entrants from under-represented communities such as women, immigrants, indigenous peoples, and people of colour.