

Building and Development Branch

Ontario Government

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Re: ERO Posting #019-4974

The Atmospheric Fund (TAF) appreciates the opportunity to comment on the Ontario Building Code updates. TAF is a regional climate agency based in the Greater-Toronto Hamilton Area (GTHA) focused on a net-zero future.

We are disappointed to see Ontario's proposed building code update does not include any meaningful changes to reduce carbon emissions or improve energy efficiency. Homes and buildings are the [largest source of emissions](#) in the GTHA. Given that the Ontario Building Code (OBC) is only updated every five to seven years, not strengthening the code with this update-cycle is a major missed opportunity, and will put Ontario even further behind on reaching its climate targets for the coming decade.

The province's plan to harmonize the codes with the 2020 National Model Codes include adoption of tier 1 of the 2020 National Energy Code for Buildings (NECB) and tier 3 of the 2020 National Building Code (NBC). To the best of our knowledge, the Ministry has not released any research or analysis of how this proposal compares with current OBC standards, which is deeply problematic. Our analysis and consultation with experts in the industry suggests that this proposal would result in energy requirements that are roughly equivalent to the current OBC standards, and for some building types could weaken the standards. Thus, we conclude that this proposal would not result in any material improvement in energy and carbon performance compared to the current OBC standards set in 2017.

To achieve a net-zero future, the International Energy Agency (IEA) [recommends](#) governments take initiative by 2025 to ensure zero-carbon-ready building codes are implemented by 2030. The industry requires a gradual, predictable and phased transition to net-zero ready codes, in order to build the necessary experience and supply-chains. Effectively freezing energy efficiency requirements at 2017 levels would send the wrong signal to industry, and make it unduly disruptive and difficult to bring in a net-zero ready code by 2030. Ontario has historically been at the forefront of energy codes in Canada, and with each previous OBC update cycle has improved energy efficiency by 10-20%. The province should build on this leadership, and ensure a predictable transition for industry, by using this OBC update cycle to significantly strengthen energy efficiency standards for new buildings across the province.

We recommend strengthening energy efficiency standards for new buildings by:

- a. Aligning standards for Part 9 buildings (small buildings) with the forthcoming 2020 National Building Code Tier 4 standards¹;
- b. Aligning standards for Part 3 buildings (large buildings) with the forthcoming 2020 National Energy Code for Buildings Tier 2 standards;
- c. Reference the higher tiers of the national codes and allow municipalities to opt-in to them within their jurisdiction.

Requiring these tiers will ensure higher performance from new buildings in Ontario, resulting in lower energy bills for building and homeowners and decreased emissions from buildings. Further, including the higher tiers as optional standards would enable leading municipalities with strong development markets to make the transition to net-zero ready at their own pace, while working within a consistent province-wide framework.

We also recommend providing a clear market signal to industry by publishing a provisional schedule for future code updates and a clear timeline for requiring all new buildings to be net-zero ready. This will allow for developers and industry stakeholders to prepare for future code updates and will create market certainty. The proposed timeline will also allow the development community to ramp up skills development and grow capacity for constructing net-zero-ready buildings in the future.

We recommend the province support consistent code implementation and compliance through capacity building and compliance monitoring. In a recent [Value-for-Money report](#), the Ontario Auditor General found that the Ministry of Municipal Affairs “does not effectively oversee administration of code energy-efficiency requirements” and does not evaluate code performance. The report also found that building inspectors lack training and have an energy-efficiency knowledge gap. To address these issues and support consistent implementation of and compliance with the code across municipalities, **we recommend the province implement the code compliance and monitoring recommendations from the Ontario Auditor General².** One model to follow is the BC Energy Step Code Council, which supports building experts and other relevant stakeholders with training and capacity building opportunities, such as peer-support networks and updated guidance and materials. The province should communicate the importance of building codes through plain-language communications materials and should review and update its advisory services for building inspectors. Additionally, the province could further support building experts to consistently enforce the OBC by developing incentives and costing guidelines for the various tiers. Increased training and supports for building inspectors will help ensure the OBC is implemented and complied with consistently across municipalities in Ontario. Without consistent compliance, the objectives of the code to improve energy efficiency in buildings will not be achieved.

¹ We understand that the final 2020 NBC will not include a prescriptive pathway for Tier 4, but the province could develop its own as it has already proposed for Tier 3.

² Specifically recommendations 4 through 6 from the [Value for Money Audit: Reducing Greenhouse Gas Emissions from Energy Use in Buildings](#), November 2020.

Lastly, **we recommend re-introducing electric vehicle (EV) ready requirements to ensure new buildings are designed to allow for the cost-effective installation** of EV charging stations as needed. A recent [study](#) found that it is significantly cheaper to provide for EV charging capability at the point of construction than adding it in future years. The study also found that future-proofing new buildings also helps encourage EV adoption. With significant EV uptake anticipated in Ontario over the next decade, this requirement will save building and homeowners from the high costs and complications of adding EV charging to buildings which were not designed to accommodate it in future years.

Some might argue that these updates will compound the current housing affordability crisis in Ontario, however, the most cost-effective time to improve energy efficiency is at the time of construction. Building net-zero ready structures does have a slight cost increase (1-5%), but this is reasonable considering that buildings have long lifespans and the cost to retrofit later to the same standard is about [five-times higher](#). Requiring buildings to be built to higher energy efficiency standards also leads to lower energy bills for homeowners and tenants, and ensures they won't face the costs of retrofitting their homes in future years. Strong building codes protect consumers' wallets as well as the planet.

To avoid setting Ontario back on its climate targets, we strongly urge the province to strengthen energy efficiency standards in Ontario's building code. Waiting until 2028 to make these updates will only result in higher carbon emissions and higher energy bills for Ontarians in the coming years.

Sincerely,



Bryan Purcell

VP of Policy & Programs
The Atmospheric Fund

About the Atmospheric Fund

The Atmospheric Fund (TAF) is a regional climate agency that invests in low-carbon solutions for the Greater Toronto and Hamilton Area (GTHA) and helps scale them up for broad implementation. Please note that the views expressed in this submission do not necessarily represent those of the City of Toronto or other GTHA stakeholders. We are experienced leaders and collaborate with stakeholders in the private, public and non-profit sectors who have ideas and opportunities for reducing carbon emissions. Supported by endowment funds, we advance the most promising concepts by investing, providing grants, influencing policies and running programs. We're particularly interested in ideas that offer benefits in addition to carbon reduction such as improving people's health, creating local jobs, boosting urban resiliency, and contributing to a fair society.