



June 24, 2021

Chair Bailao and members of the Planning and Housing Committee  
City of Toronto  
100 Queen Street West  
Toronto, ON  
M5H 2N2

**RE: PH25.17 Toronto Green Standards Review and Update**

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Dear Chair Bailao and members of the Planning and Housing Committee,

The Building Industry and Land Development Association (BILD) is in receipt of the June 28<sup>th</sup> Planning and Housing Committee meeting agenda and we would like to take this opportunity to provide you with comments on agenda item PH25.17 Toronto Green Standards (TGS) Review and Update. We acknowledge that this report presents the updated TGS Version 4 (TGS v4) 2022 which is proposed to be applied to applications submitted under the Planning Act commencing May 1, 2022.

For background, BILD's Toronto Chapter had one consultation meeting with staff in advance of the preparation of this work. That meeting took place on May 26, 2021. Comments received at the meeting were discussed at that time, and any subsequent comments were directed to be submitted to this Committee meeting. This letter fulfills that direction from staff.

### **BILD Recommendation**

**This letter contains a number of questions, concerns or recommendations. As interested and affected stakeholders, we recommend that the Committee not endorse this update until these concerns or questions have been addressed.**

The list of general and specific comments are seen below:

### **General Comments**

- Following the Chapter meeting, BILD emailed City Staff to reiterate our primary concern that we felt this TGS update is premature in the absence of a current costing study to fully understand the financial implications of the changes. Staff had indicated their reliance on the previous costing studies (that span from 2017-2020), but pre-date these changes. However, we feel that this concern is compounded by the effects of the pandemic on construction costs, labour disruptions and material supply chains.
- We were consulted on the changes quite late in the process, without the opportunity to have further meetings after our initial meeting. It would be helpful to create an industry working group to advise and discuss new technologies being developed. We acknowledge that the City did reach out to specific developers, but the information was not widely shared.
- Before this work is approved, there should be a better understanding of how the City's development charge credits will be adjusted to reflect these changes. To date, DC credits have not kept up with increased TGS requirements. Additionally, some partial credit should be given to developers that utilize some of the tier 2 requirements as a part of their project. We recommends that the updated TGS V4 (2022) and DC credit policy be brought forward together for approval.

- As discussed at our Chapter meeting, we believe that the version codes for the TGS (i.e. Version 4) do not mean anything for the end-users/new home buyers and it would be more beneficial to simply use the year associated to the versions i.e. TGS 2022.
- We believe that a coordinated set of City staff for the review of TGS projects would be beneficial, as currently members are having to deal with various departments that often don't have aligned interests in the TGS.
- We believe that TGS projects should be monitored and success stories should be shared. This is also a means of establishing performance measures to determine the success of the program. It is our understanding that this was previously recommended and that the onus was put on the verifiers, however this never took off as they don't have budgets for this, when they do verification work.
- At the Chapter meeting, staff referenced the goal of retrofitting all buildings to have net zero emissions by 2050. We believe this is an enormous goal that would require a separate strategy and dedicated incentives to be able to accomplish.

### Specific Comments on Attachment 3 - Mid-high Rise Residential and Non-residential New Developments

#### **AQ 1.2 Electric Vehicle Infrastructure & AQ 1.3 Electric Vehicle Infrastructure**

- *We acknowledge that residential and non-residential development is directed to provide at least 25% of parking spaces, or one parking space, whichever is greater, with an adjacent Energized Outlet capable of providing Level 2 Charging or higher to the parking space. For multi-unit buildings, provide rough-in conduits to the remaining parking spaces to permit future Electric Vehicle Supply Equipment (EVSE) installation. For non-residential uses, include at least 5% of the parking spaces with a dedicated Energized Outlet to support opportunity charging.*
- *We also acknowledge that for multi-unit buildings, the direction is to provide each residential parking space, excluding visitor parking, with an adjacent Energized Outlet capable of providing Level 2 charging or higher, to the parking space.*
- These requirements are still unclear, specifically with respect to what is meant by "adjacent." These are extensive requirements given the number of electric vehicles that are currently on the road. It creates an oversupply and an underlying assumption that electric vehicles are going to become the most prevalent technology. It also reflects an unknown availability of power from Hydro One/Toronto Hydro (issues with infrastructure).

#### **AQ 2.4 Electric Bicycle Infrastructure**

- *We acknowledge the requirement that for residential, at least 15% of the required long-term bicycle parking spaces, or one parking space, whichever is greater, shall include an Energized Outlet (120 V) adjacent to the bicycle rack or parking space.*
- Our members are concerned that the provision of electrical outlets in the public domain could be misused, as the potential exists for unfettered use which would pose a financial burden to condominiums. Our members were also unclear if the City is suggesting a 1:1 ratio (outlet to space) or if two bikes should/could share. Additional burden is also placed on Property Management staff to manage electric bicycle space allocation (instead of it being on a first come first serve).

## GHG 2.2 Whole Building Life Cycle Assessment

- *We acknowledge the direction to conduct a whole building life cycle assessment (LCA) of the building's structure and envelope in accordance with the CaGBC Zero Carbon Building Standard v2 methodology that demonstrates a minimum of 20% embodied carbon reduction, compared with a baseline building.*
- *We also note that the City of Toronto is involved in two studies to benchmark embodied carbon in new construction. The results of the studies will refine and replace the targets above to ensure these Performance Measures can best be implemented in the Toronto context.*
- Our members are concerned with the shift from what was previously optional - to now being mandatory. The predominant issue relates to compliance and market access to acceptable materials. Our members are also unsure if this reduction can even be achieved, or if so, at what cost. Any evidence the city could provide would be appreciated. We suggest that this requirement be paused and explored further until these questions can be addressed.

## GHG 3.1 Energy Performance

- *We acknowledge the direction that projects must target the minimum Energy Use Intensity (EUI) and Thermal Energy Demand Intensity (TEDI) requirements, as outlined in attachment 3 of the staff report, or better. Refer also to TGS requirement GHG 1.1 Greenhouse Gas Emissions Limits.*
- Members are concerned with the mandatory requirement of Part 3 TEUI, TEDI & GHGI and are concerned as more onerous requirements come forward for tighter and better thermal envelope. This change represents a transition from limited design (current) to hampered design (proposed). Members also felt that this causes a reduction in available glazing and diminishes architectural articulation. Again, our members are unsure if this reduction can even be achieved, or if so, at what cost. Any evidence the city could provide would be appreciated. This also poses a logistical burden to acquire materials and financial burden as supply is limited.

## GHG 4.2 Enhanced Commissioning

- *We acknowledge the direction to complete the commissioning process (CxP) activities for mechanical, electrical, plumbing, and renewable energy systems and assemblies in accordance with ASHRAE Guideline 0-2013 and ASHRAE Guideline 1.1-2007 for HVAC&R systems, as they relate to energy, water, indoor environmental quality, and durability, to develop the owner's project requirements and basis of design.*
- Members expressed the concern that this requirement is very expensive, because of both the fee to carry out the study, as well as increased construction expenditures. It has been determined that the cost of enhanced commissioning is roughly 10% of the budget of regular commissioning (this adds to submittal review during construction, verification of systems manual, operator training, ongoing Cx Plan and warranty visit).
- We would like to confirm that the City is asking for "enhanced" but not monitoring based commissioning or BECx. Generally monitoring based commissioning from LEED is where there is the biggest cost increase both in terms of soft and hard costs.
- With respect to air leakage we are in general agreement with the testing component, but fixing air leakage issues can be expensive. This will also be a challenge when first implemented as contractors are not used to it.

- With respect to sub-metering, we would like to understanding what this information would be used for. Any additional context would be appreciated.

#### GHG 4.3 Whole Building Air Leakage Testing (WBALT)

- *We acknowledge the direction to conduct a Whole-building Air Leakage Test to improve the quality and air tightness of the building envelope. The project must target equal to or less than 2 L/s/m<sup>2</sup> (at 75 Pa) through whole-building air infiltration testing, as conducted in accordance with the City of Toronto Air Tightness Testing Protocol & Process Guideline.*
- Members are concerned as there is no information on how to undertake this direction and it could be detrimental - should the result not be sufficient. We suggest implementing this earlier with a select floor; to seal and test lower floors (above, below and at grade) and extrapolate to the entire building. Members also suggest that a back-up plan be provided (e.g. spray foam) should remedy be required.
- Members also indicated that there could be a potential Issue with sealing a floor (e.g. elevators, stairwells, opening, firestops, electrical closets) which may skew results, and expressed that this is an onerous requirement to perform work before typically completed (e.g. caulking).

#### WQ 1.3 On-site Green Infrastructure

- *We acknowledge the requirement that a Green Roof is required, covering at least 80% of Available Roof Space.*
- Members are concerned regarding the maintenance, repair and replacement of material on rooftops. They are anticipating the need for 1.0m minimum soil depth for intensive green roof which is an onerous requirement for additional structural bracing measures that would affect building height.
- Additionally, members suggest adding in an option for a blue roof either alone or in addition to green roof. As well as adding in an option of utilizing soil cells through area drains for SWM.

#### EC 1.1 Tree Planting Areas and Soil Volume

- *We acknowledge the direction to:*
  - 1) *Provide the total amount of soil required on the site and in the adjacent public boulevard to support tree canopy by using the following formula: 40% of the site area ÷ 66 m<sup>2</sup> x 30 m<sup>3</sup> = total soil volume required.*
  - 2) *Each separate new or retained tree planting area must have a minimum volume of 30m<sup>3</sup> of soil.*
- Members expressed that this is already demanding in TGS V3 at 30m<sup>3</sup>/tree, with 25% more soil recommended for Tier 2. As such we do not expect this requirement to increase much further. But if it does, the cost implication would come from finding the space to put it (drop slabs, soil cells, larger setbacks, on roofs), in addition to the additional soil.

#### EC 1.4 Watering Program

- *We acknowledge the direction to provide a watering and maintenance program for trees for at least the first 4 years after planting.*
- This is currently at 2 years and where irrigation is installed, this would be covered. If not, this could result in a longer maintenance period. It might be possible to build a longer warranty period into the specifications, so that the contractor has to maintain trees in good condition for

4 years instead of the typical 2. Sometimes the contractor is relieved of the warranty requirement as part of VE, but without a maintenance alternative in place, the trees can be forgotten. For trees in the right-of-way, the City normally takes them over (if they are in good condition) after the warranty period.

### EC 3.1 Ravine and Natural Feature Protected Areas and Natural Heritage System

- *We acknowledge the direction to plant the landscaped area within the Natural Heritage System and the Ravine Protected Area with 100% native plants, ensuring at least 50% of those come from a regionally appropriate seed source (including trees, shrubs and herbaceous plants).*
- Members have advised that nursery stock is often trucked in from all over North America. For sites near sensitive ecological areas, there is concern that seeds from non-local trees will result in future trees without the genetic resilience to endure local conditions. Nurseries will have to source trees from local seed sources to meet this requirement. This may create new challenges and costs, longer transition is requested for this direction - until this becomes a best practice.

### EC 4.1 Climate Positive Landscape Design

- *We acknowledge the direction to conduct a lifecycle assessment (LCA) for the landscape design at the Concept Design and Detailed Design stages. Demonstrate a reduction in the carbon impact of the project at Detailed Design milestone. Identify low-carbon sustainable material alternatives to the proposed landscape design.*
- Members are unclear as to how this would be submitted. It is important to note that this information is currently hard to find from suppliers, but if this becomes a requirement, then suppliers will have to provide this info.

### EC 5.1 Bird-Friendly Glazing

- *We acknowledge the direction Use a combination of the following strategies to treat a minimum of 85% all exterior glazing within the greater of first 16 m of the building above grade or the height of the mature tree canopy:*
  - *Visual markers applied to the 1st surface of glass with a maximum spacing of 50 mm x 50 mm;*
  - *Building-integrated structures to mute reflections on glass surfaces; or,*
  - *Non-reflective glass.*
- Members would like clarification as to whether this obligation changes if they do not have floor to ceiling glass.

Again, thank you for the opportunity to submit these comments and we hope that you will support our recommendation.

Sincerely,



Danielle Chin, MCIP RPP  
Director of Policy and Advocacy

CC: *Kerri Voumvakis, Director, SIPA*  
*Jane Welsh, Acting Manager, SIPA*  
*Lisa King, M.A. Senior Policy Planner, Environment, SIPA*