

Monday December 13, 2021

His Worship Mayor John Tory and members of City Council
City Hall
100 Queen Street West
Toronto, ON M5H 2N2

Submitted electronically to councilmeeting@toronto.ca

RE: IE26.16 TransformTO - Critical Steps for Net Zero by 2040

Dear Mayor Tory and members of City Council,

We are appreciative of City Council's long track record of supporting a sustainable future for Toronto and the steps Council is taking to address the current climate emergency. Like City Council, Tridel has a long track record of supporting a sustainable future for Toronto. We have more than 85 years of homebuilding experience in the City, with 87,000 homes built and we are BILD's 12-time recipient of the Green Builder of the Year Award. We also have over 15 million square feet of LEED[®] Silver, Gold or Platinum certified and candidate buildings. Our homes are built with a commitment to sustainable building practices. Tridel is committed to further developing these sustainable building practices through innovation and leveraging new building materials to ensure we are on a path to Net-Zero Carbon.

We understand that the TransformTO Net Zero Strategy was recently adopted with amendments by the Infrastructure and Environment Committee (IEC) on December 2. We also understand this same strategy will be considered by Toronto City Council at the December 15/16 session and are writing to you to express our concerns with the accelerated climate actions that have been proposed in the TransformTO Net Zero Strategy. Tridel fully supports the strategy's goal of reaching net zero GHG emissions community-wide; however, we believe City Council's decision to accelerate new residential building requirements as part of this strategy should be delayed until City Council has all the information necessary to make an informed decision. We believe key information on embodied carbon, renewable energy, utility infrastructure and operational costs are missing.

Embodied carbon in construction is addressed in a small section of the TransformTO Net Zero Strategy. The following is noted in this section, "Studies indicate that embodied carbon emissions in construction materials can account for up to 80 per cent of a large building's total emissions from extraction to decommissioning." Based on this statement, the experts who developed this strategy understand new construction embodied carbon emissions are an even greater contributor to GHG emissions than operational emissions. The strategy also notes that the City is undertaking several benchmarking studies on embodied carbon funded by The Atmospheric Fund. Tridel is participating in one of these benchmarking studies and a key takeaway is how embodied carbon and operational carbon decisions should not be made in isolation. By accelerating the minimum building requirements of Toronto Green Standard (TGS) version 3 Tier 4 from 2030 to 2027, we are concerned that without further evaluation, too much focus will be made on decisions that benefit operational carbon (i.e., thicker exterior walls). This could result in more harm to the environment due to increased building material usage, ultimately driving up embodied carbon emissions. The increased embodied carbon emissions may not be offset by the operational emission improvements over the life of the development.

The TransformTO Net Zero Strategy provides a plan for renewable energy resources such as renewable natural gas (RNG) from wastewater and biogas, district energy, wind energy, battery storage, solar PV, geothermal, waste heat recovery, and hydrogen gas to be implemented and readily available by 2050. Many of these solutions exist today; however, they are still in their infancy with a lack of vendors and qualified contractors to support widespread implementation. The vendors that do exist are at a stage where they are proving their solutions viability and business case. Having these resources available for 2050 does not align with the target of accelerating the minimum building requirements of TGS version 3 Tier 4 from 2030 to 2027, where near net zero carbon emissions will be required.

In the absence of renewables, developers will have no choice but to rely heavily on electrification of heating through the electrical grid. We understand that Toronto's aging electrical grid will require extensive investment and expansion to support this, as well as the increased deployment of electric vehicle charging infrastructure. The TransformTO Net Zero Strategy also notes that if we are to achieve the net zero target, Ontario's electrical grid needs to be decarbonized. Currently, there are no commitments to ensure that the electrical grid in Ontario will become zero emissions by 2030. If this were to be accomplished, IESO identifies that a minimum investment of \$27 billion is required along with increasing residential electricity bills by 60%. On the other hand, the TransformTO Net Zero Strategy identifies a 32% savings to end users by leveraging fuel switching from gas to electricity, when combined with the \$170/tCO₂e carbon tax and improved equipment efficiency. However, it does not consider residential electricity bills increasing by 60%.

Given the above, we ask Council to consider not accelerating new residential building requirements as part of the TransformTO Net Zero Strategy. In particular, the minimum residential building requirements of Toronto Green Standard (TGS) version 3 Tier 4 should not be moved from 2030 to 2027. We are concerned that if the current TGS schedule is not maintained, developments will be heavily reliant on carbon offsets to meet the targets and end users will be left with higher operating costs.

In closing, we are confident that we will reach our goal of Net Zero Carbon development and will continue to make reaching this goal a priority. We hope you have found the above information valuable. Tridel is always willing to help, listen and learn.

For further discussions please contact:

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