Planning and Housing Committee
Clerk's Office
Toronto City Hall
100 Queen St W
Toronto, ON, M5H 2N2

September 24, 2024

Re: PH15.4 - Review of Zoning Regulations for Solar Panels, Heat Pumps, and Energy Storage Devices - Preliminary Report

Dear Planning and Housing Committee Members,

The Atmospheric Fund (TAF) is a regional climate agency based in the Greater Toronto and Hamilton Area (GTHA) supporting a net-zero future. We are pleased to see the City of Toronto taking steps to address zoning barriers for various low carbon technologies, particularly heat pumps. TAF looks forward to engaging in stakeholder consultations and working closely with City staff as this report is developed. Tackling these regulatory barriers will help to accelerate climate action in Toronto and achieve TransformTO goals. However, it is important to recognize that zoning barriers impacting climate action extend beyond the low-rise residential sector. To achieve significant, citywide progress, it is essential to examine zoning challenges across the residential, commercial, and industrial zone categories.

While this report is a great first step in the right direction, there are significant zoning barriers to climate action in other zone categories. For example, solar infrastructure is prohibited in the majority of commercial parking lots, as is the removing mandatory parking minimums for existing parking spaces in commercial lots to accommodate EV charging infrastructure. These are just a few examples of regulatory barriers in the City's zoning bylaw that are impeding climate action, which we have discussed with City staff and councillors (see Appendix A for details).

In conclusion, **TAF is very supportive of the staff recommendation, and we urge you to approve it. However, we strongly recommend reviewing zoning barriers to climate action in all the other zone categories and including other climate action technologies such as EV charging and exterior insulation.** TAF is eager to continue collaborating with the City throughout this process and supporting Toronto's journey toward a sustainable, low-carbon future.

Sincerely,

Bryan Purcell
VP 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. 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.

APPENDIX A

ZONING BARRIERS FOR TRANSFORMTO

Four Priorities for the City of Toronto

August 7, 2024

The purpose of this document is to inform City of Toronto Councilors of municipal zoning reforms that would accelerate climate action and reduce the City's carbon emissions, helping to achieve TransformTO goals. Through consultation with expert stakeholders and based on our own experience, TAF has identified **four opportunities** to reduce climate-related zoning barriers. We have examined various bylaws and have provided examples of what amendments may look like in red. Through these zoning reforms we hope to clear the path for those looking to enhance their community, or their homes, with climate-friendly infrastructure and retrofits.

1. Pre-amalgamation bylaws resulting in restrictive heat pump setbacks

Context: The City's zoning bylaw for residential zones includes a clause that ground-mounted heating or air-conditioning devices (including heat pumps) may only be in the front yard if it is set back at least six metres from the lot line. The bylaw also restricts the location of heat pumps in backyards to within a maximum of two metres from the rear wall, which is the area typically occupied by a back deck or patio. These setback requirements predate amalgamation and were carried over from zoning bylaws in the former City of Etobicoke (the rest of the pre-amalgamation cities had no setback requirements). Staff confirmed to us that there is no record or knowledge of the public policy rationale for the front-yard setback.

These zoning restrictions complicate the process of converting to a heat pump and may increase retrofit costs by requiring heat pumps to be placed in suboptimal locations (e.g. with longer refrigerant and electrical line sets). It should also be noted that in many areas of the city, residents simply don't have six metres of front yard space to accommodate the setback. Considering that the TransformTO climate plan calls for retrofitting virtually all homes with heat pumps, we recommend relaxing these setback requirements.

Many municipalities have no setback requirements at all for heat pumps, while others have more reasonable requirements. For example, Vancouver's bylaw requires that units are installed within 1.22m of the home at the front of the house (see Figure 1 below) rather than stipulating distance from the front lot line. We recommend a minimum two-metre setback from the front lot line. For the rear yard we recommend allowing heat pumps to be placed up to two metres from the rear wall *or deck/patio* to remove conflicts with rear amenity spaces.

Solution: Change the clause in the zoning bylaw to **reduce the front yard setback to two metres (from six metres), and to adjust the rear yard maximum separation to two metres from the rear main wall or deck if present, as amended below**. See recommended changes below in **red**.

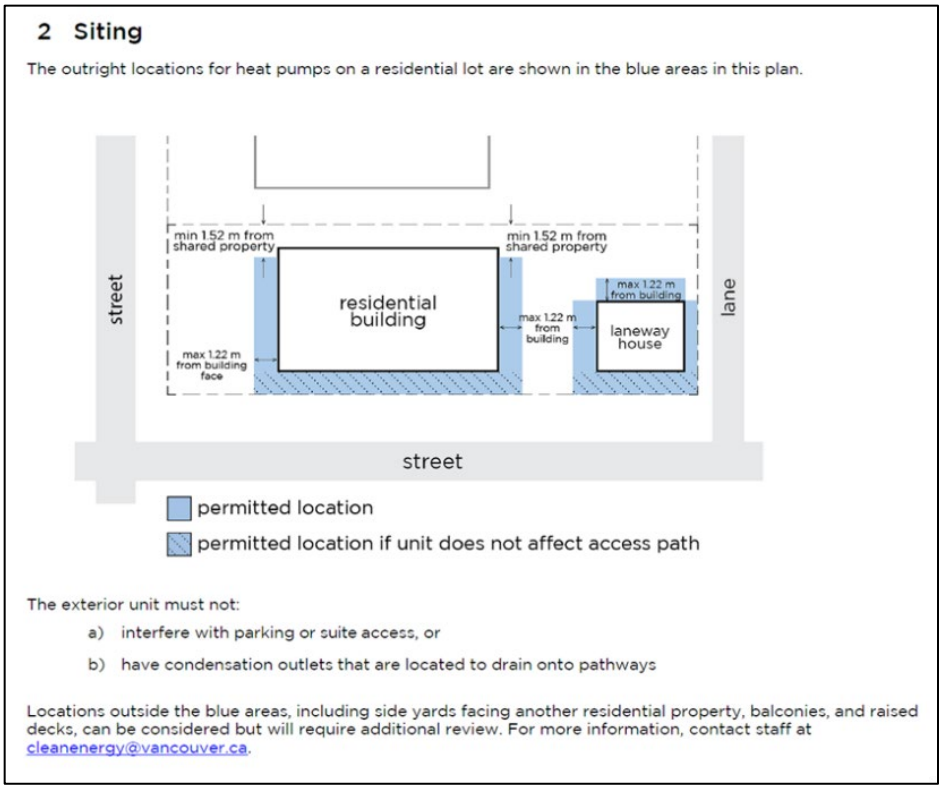
10.5.60.20 Setbacks

(10)	Ground Mounted Heating or Air-Conditioning Devices - Front Yard Setbacks and Side Yard Setbacks
	In the Residential Zone category, for a heating or air-conditioning device that is mounted on the ground: (A) despite regulation 10.5.60.10(1), the device may be located in a **front yard**, *if it is at least ~~6.0~~ 2.0 metres* from the **front lot line**;

10.5.60.30 Separation

(2)	Maximum Separation Between Residential Buildings and Ground Mounted Heating or Air-Conditioning Devices in a Rear Yard
	A heating or air-conditioning device that is mounted on the ground in the rear yard of a lot in the Residential Zone category may be no more than 2.0 metres from the rear main wall of the residential building, or no more than 2.0 metres from the rear side of a platform, such as a deck, porch, balcony or similar structure, attached to or within 0.3 metres of the rear main wall.

Figure 1 - Vancouver Example:



2. Restrictive barrier to adding exterior insulation on existing houses

Context: Currently there is an allowance for exterior insulation/cladding work to encroach up to 150mm into a required setback, but no provision for exceeding overall Floor Space Index (FSI) as a result. This means that some houses that are already built to the maximum permitted FSI are required to apply to the Committee of Adjustment just to add insulation/cladding to their homes.

Solution: Add an FSI limit exemption for exterior insulation and new cladding to section 10.5.40.41 of the zoning bylaw, as amended below in **red**:

10.5.40.41 Floor Area Exemptions

(1)	Permitted Floor Space Index for Lawfully Existing Buildings
	In the Residential Zone category, if the **lawful gross floor area** of **lawfully existing buildings** on a **lot** results in a floor space index greater than the permitted maximum floor space index, the **lawful** floor space index resulting from those **lawfully existing buildings** on that **lot** is the maximum floor space index for those **lawfully existing buildings** on that **lot**.
(2)	**Floor Space Index Allowance for Exterior Cladding and Insulation**
	In the Residential Zone Category, up to 0.15 metres of insulation and/or cladding added to the original exterior surface of the main wall of a building may be exempted from Floor Space Index calculation.

3. Location restrictions, set back requirements, and parking lot restrictions limit renewable energy generation

Context: The zoning bylaw states that in commercial zones, renewable energy devices may not be located in a front yard or a side yard if that yard abuts a street. In general, the large majority of commercial parking lots abut a street on either the front or the side. This requirement prohibits solar infrastructure (such as canopies that have solar panels and provide shade and protection from the elements) from being installed in most parking lots, other than the occasional parking lot behind a building that doesn't abut a side street.

This clause is limiting the potential for solar deployment that we see in other jurisdictions like the United States, where solar parking lots (that are often partnered with EV charging infrastructure) are being deployed. In contrast to Toronto's effective ban on solar parking lots, France recently passed a law requiring all large parking lots to have 50% of the area covered by solar canopies by 2028.

Solution: Make an exemption for solar infrastructure in commercial parking lots where they abut a street on either the front or the side. Additionally, instruct staff to enable infrastructure such as 'solar canopies' that mirror rules allowing for gas stations to install canopies for gas pumps. See recommended changes below in **red.**

30.5.75.1 General

(1)	Renewable Energy and Cogeneration Energy Device - Location Restriction
	In the Commercial Zone category, a device producing **renewable energy** or **cogeneration energy** on a **lot** may not be located in a **front yard** or a **side yard** that abuts a **street**
	Exemption: Renewable energy, such as solar panels, are exempt from this when installed on infrastructure such as canopies that overhang parking spaces.

3.1 Additional context: While pursuing the above-mentioned issues, City of Toronto staff further flagged references to the now defunct Green Energy Act which further limits infrastructure implementation. At a minimum, the below section needs to be updated to reflect current legislation and be worded in a way that enables further deployment of “renewable energy undertakings” or “projects”.

5.10.75 Energy Regulations (5.10.75.1 General)

(1)	Meaning of Distribution
	For the purpose of the Clause 5.10.75.1, the term "distribution" means the delivery of energy derived from renewable energy or cogeneration energy, to a distribution network connected to the lot.
(2)	Relation of By-law to Green Energy Act
	Despite any of the provisions of this By-law, the regulations in this By-law do not apply to: (A) any "renewable energy undertaking", as defined in the Planning Act, respecting which the Planning Act stipulates that a zoning by-law does not apply; (B) any "renewable energy project", "renewable energy source" or "renewable energy testing project", as defined in the Green Energy Act, 2009, S.O. 2009, Chapter 12 Schedule A, as amended, which is designated by regulation under the Green Energy Act and for which the Green Energy Act stipulates that restrictions established by a Municipal by-law are inoperative; and (C) any goods, services and technologies designated by regulation under the Green Energy Act, 2009, S.O. 2009, Chapter 12 Schedule A, as amended, and for which the Green Energy Act stipulates that restrictions established by a Municipal by-law are inoperative.
(3)	Distribution of Energy From Renewable Energy and Cogeneration Energy Sources
	The distribution of energy derived from renewable energy sources and cogeneration energy sources, using wires or pipes is permitted in all zones of this By-law if: (A) the distribution of the renewable energy and cogeneration energy produced complies with all Municipal, Provincial and Federal, by-laws, statutes and regulations; and (B) the distribution of renewable energy and cogeneration energy is carried out in compliance with all other regulations of this By-law.

4. Disallowing any reduction in the number of parking stalls, blocking installation of EV charging as a result

Context: DC fast charging requires more space than Level 2 AC charging, sometimes making it necessary to remove one or two parking stalls to accommodate a substation, transformer, switchgear, and other electrical equipment. Existing parking lots often lack space within setbacks for such equipment placement. Although this is less common, some large Level-2 AC

charging installations may also require extra power and utility equipment which may require a minor reduction in the number of parking stalls.

Parking stalls that need widening to accommodate EV charging equipment or accessible EV charging stalls could lead to an overall loss of parking stalls. However, this should be permitted, provided the widening is done specifically for installing EV charging equipment.

Furthermore, an EV charging stall should be considered general purpose parking, regardless of the presence of a charging post when assessing parking stall ratios/requirements. The addition of EV charging equipment to an existing stall should not be considered as a loss of a general parking stall.

Solution: Introduce an exemption for EV charging equipment and related utility equipment to allow for the reduction of parking stalls. Clarify that stalls served by EV charging stations remain general purpose parking stalls.

Proposed language update in **Red**:

200.5.200 Parking Exemptions (200.5.200.5 Exemptions Applying to All Zones)

(1)	Electric Vehicle Infrastructure for a Lawfully Existing Building
	(A) Regulation 200.5.1.10(14) does not apply to a **lawfully existing building** that was not required to provide an **energized outlet**. [By-law: 89-2022] (B) Regulation 200.5.10.11.(1)(C) does not apply to the removal of parking stalls to facilitate the installation of transformers, switchgear or other related power infrastructure to support an EV charging station; (C) Regulation 200.5.10.11.(1)(C) does not apply to the removal of parking stalls to facilitate any widening of parking stalls to facilitate EV charging equipment whether to establish a standard or accessible EV charging stall. (D) A parking stall served by an EV charging station remains a general-purpose parking stall and does not impact stall counts or ratios.

For Further Information, Please Contact:

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