

June 11, 2025

Infrastructure & Environment Committee
City of Toronto
100 Queen Street West
Toronto, ON M5H 2N2

Reference: Submission – Integrating Indoor Air Quality into Toronto's Net Zero Strategy

Submitted via email to: iec@toronto.ca

Dear Members of the Infrastructure & Environment Committee,

On behalf of the Ontario Society of Professional Engineers (OSPE), I am writing to encourage the City of Toronto to incorporate a stronger focus on indoor air quality (IAQ) into its Net Zero Strategy—particularly in public and shared spaces such as schools, offices, and community buildings.

While we commend the City's leadership on emissions reductions and building retrofits, the current strategy does not adequately address occupant health protections related to air quality, especially in the context of airborne disease transmission and fine particulate pollution (PM2.5). Notably, the Net Zero Strategy does not reference key standards such as ASHRAE Standard 241 for controlling infectious aerosols, ASHRAE Standard 62.1, or ASHRAE Guideline 44 for managing smoke and PM2.5 exposure, nor the recommendations of the Lancet COVID-19 Commission Task Force on safe indoor environments.

We support the use of demand control ventilation in combination with more energy-efficient air cleaning methods to ensure compliance with ASHRAE Standards 62.1 and 241. This approach can provide an optimal balance between acceptable indoor air quality and energy efficiency. However, we are concerned that the current recommendation to place CO_2 sensors in return air ducts conflicts with ASHRAE Standard 62.1 Addendum ab, Section 6.2.6.1.3.1, which requires sensors to be installed in each individual ventilation zone. Without zone-specific monitoring, under-ventilated spaces may go undetected. We recommend that any implementation of demand control ventilation in the City of Toronto be aligned with this standard to ensure effective and equitable ventilation.



To support the success of Toronto's Net Zero goals without compromising public health, we respectfully recommend that the City:

- Adopt a formal indoor air quality policy within the Net Zero Strategy;
- Align ventilation requirements with ASHRAE Standards 241 and 62.1, and Guideline 44;
- Incorporate health-focused performance metrics and monitoring protocols across all buildings.

As engineers, we are committed to advancing solutions that are technically rigorous, sustainable, and equitable. OSPE would welcome the opportunity to collaborate or provide further input as the City moves forward in integrating climate strategies with occupant health protections. Thank you for your attention to this important matter.

We look forward to working with you to further develop these recommendations. If you have any additional questions, please contact Paola Cetares, OSPE Public Affairs Director, at pcetares@ospe.on.ca or 416-223-9961 ext. 225.

Sincerely,

Sandro Perruzza Chief Executive Officer

Ontario Society of Professional Engineers