



September 15, 2020

Infrastructure and Environment Committee  
c/o Matthew Green  
10th floor, West Tower, City Hall  
100 Queen Street West  
Toronto, ON M5H 2N2

email: [iec@toronto.ca](mailto:iec@toronto.ca)

## **RE: Item IE15.8 - Request to Study the Environmental Impact of Two-Stroke Engine Garden Equipment**

Creating Healthy and Sustainable Environments (CHASE) would like to support the motion asking the City Manager, in consultation with the Medical Officer of Health, to report back in the first quarter of 2021 on the environmental and associated health impacts of gasoline-powered two-stroke engine leaf blowers and other similarly operated garden equipment, including the feasibility of a year-round ban or a ban from May to September.

Gasoline-powered lawn and garden emit various pollutants: carbon dioxide (CO<sub>2</sub>), carbon monoxide (CO), nitrogen oxides (NO<sub>x</sub>), fine particulate matter (PM) and volatile organic compounds (VOC), which include toxic substances such as formaldehyde, 1,3 butadiene, acetaldehyde, acrolein and benzene. These pollutants impact local air quality and contribute to climate change.

The California Air Resources Board (CARB) estimates that during one hour of use the best-selling leaf blower emits as much smog-forming pollution as driving a 2017 Toyota Camry about 1750 km.<sup>1</sup> Similarly, in one hour of use, the most popular lawn mower emits the same amount of smog-forming pollution as driving a Camry about 500 km. It also notes that total smog-forming emissions from small engines are projected to exceed those from passenger cars because passenger car emissions will continue to decrease; if no action is taken, by 2031 small engine emissions could be more than twice those from passenger cars. To meet California's goal of reducing smog-forming pollutant emissions from mobile sources by 80 percent in 2031, CARB is proposing to set zero-emissions standards for small engines by 2025.

On October 2, 2019, City Council voted unanimously to declare a climate emergency and accelerate efforts to mitigate and adapt to climate change and noted that this will require transformational changes in how we live, work, build and commute.

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<sup>1</sup> California Air Resources Board. <https://ww2.arb.ca.gov/our-work/topics/lawn-garden-landscape-equipment> (Accessed 2020-09-14)

Addressing emissions from two-stroke engine garden equipment will contribute to meeting Toronto's climate goals and improve air quality. Given that electric garden equipment is less noisy than gas-powered equipment, it will also reduce exposure to noise.<sup>2</sup>

CHASE is a Canadian non-profit organization that works to incubate changes needed to transform our society. We work with public health units, municipalities, government agencies, non-governmental organizations and the private sector to research, develop, analyze and promote policies, programs, projects and practices that help to create healthier and/or more sustainable communities.

We encourage the Infrastructure and Environment Committee to adopt the motion to explore the feasibility of banning the use of gasoline-powered garden equipment in Toronto. For more information you can contact Ronald Macfarlane at [ronaldm@mail2world.com](mailto:ronaldm@mail2world.com).

Yours truly,



Kim Perrotta  
Executive Director

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<sup>2</sup> City of Toronto (2017) Evaluation of potential additions to TransformTO Report #1 Strategies.  
<https://www.toronto.ca/wp-content/uploads/2017/10/9234-TransformTO-Evaluation-of-Potential-Additions-to-TransformTO-Report-1-Strategies.pdf>