

Community Support Options for Zero-Emissions Landscape Equipment

Date: November 15, 2023

To: Infrastructure and Environment Committee

From: Executive Director, Environment and Climate Division

Wards: All

SUMMARY

City Council has expressed its support for a ban on the use of two-stroke small engine equipment in Toronto. City Council has requested staff to report back in 2023 on opportunities for support programs, such as a low-emission equipment lending library, and opportunities for partnerships to incent a transition to low-emission equipment.

This report provides an overview of equipment lending libraries within Toronto and other communities, while also outlining key considerations for implementing such services. It is important to note that Toronto Public Library (TPL) staff have indicated that a zero-emission equipment lending library is not a suitable fit for TPL branches or services. However, the Toronto Tool Library, which currently operates a single downtown location, has expressed interest in engaging in further discussions regarding this concept.

Additionally, the report outlines partnership programs to incent residents to align with the City's goals, facilitating a transition towards more environmentally friendly practices.

As directed by City Council if adequate resources are allocated in the 2024 budget, staff will initiate the work for City Council to enact a by-law that imposes a ban on the use of two-stroke engine equipment. This will involve reporting to the Infrastructure and Environment Committee in 2024. Furthermore, this undertaking will include a more comprehensive examination of clean transition support programs and potential partnerships aimed at promoting compliance.

RECOMMENDATIONS

The Executive Director, Environment and Climate Division recommends that:

1. The Infrastructure and Environment Committee request the Executive Director, Environment and Climate Division to further explore ways to support the public's shift to low-emissions equipment, as part of the broader effort to develop a by-law banning the use of two-stroke equipment, and acknowledge that undertaking this work is conditional on allocating the required resources in the 2024 Budget, once it has been deemed adopted.

FINANCIAL IMPACT

There are no immediate financial implications resulting from this report.

Funding of \$305,000 is included in the 2024 Operating Budget submission for the Environment and Climate Division to initiate the work to enact a by-law imposing a ban on the use of two-stroke equipment.

The Chief Financial Officer and Treasurer has reviewed this report and agrees with the financial impact information.

DECISION HISTORY

On July 19, 2023, City Council expressed its support for a ban on the use of two-stroke small engine equipment in Toronto as a precaution against any adverse impacts to human health and climate (2023.IE5.1). In its decision Part 2b, City Council directed the Executive Director, Environment and Climate, the Executive Director, Municipal Licensing and Standards, the Medical Officer of Health, and the City Solicitor, in consultation with Divisions that operate two-stroke engine equipment, to, if adequate resources are funded in the 2024 budget, initiate the work for City Council to enact a by-law imposing a ban on use of two-stroke equipment.

In its decision Part 4, City Council also directed the Executive Director, Environment and Climate and the Executive Director, Municipal Licensing and Standards, in cooperation with relevant Divisions and Agencies, to report back to the Infrastructure and Environment Committee by December 31, 2023 on:

- a. opportunities for clean transition support programs, such as a low-emission equipment lending library; and
- b. opportunities for partnerships that encourage and incent a transition to low-emission equipment, with community organizations, service providers, equipment manufacturers and/or retailers.

This report responds to City Council's decision Part 4.

(<https://secure.toronto.ca/council/agenda-item.do?item=2023.IE5.1>)

On January 30, 2023, in its decision on Net Zero Actions Update (2023.IE1.11), Infrastructure and Environment Committee directed the City Manager to report back with a plan to implement a ban on use of two-stroke engine leaf blowers, lawnmowers and other small engine equipment because of their adverse impact on air quality and

human health, separately from the noise bylaw review referred to in Recommendation 20 of Item IE26.16.

(<https://secure.toronto.ca/council/agenda-item.do?item=2023.IE1.11>).

COMMENTS

1.0 Background

City Council has considered issues related to small engine lawn and yard equipment, including leaf blowers, on numerous occasions. City Council has expressed its support for a ban on the use of two-stroke small engine equipment in Toronto (2021.IE26.16, decision Part 20), including as a precaution against any adverse impacts to human health and climate (2023.IE5.1, decision Part 1). Two-stroke engines can be found in a wide variety of equipment, such as leaf blowers, string trimmers, small mowers, chain saws and generators.

The work required for City Council to enact a by-law imposing a ban on use of two-stroke engine equipment will be substantially initiated if adequate resources are funded in the 2024 budget.

This report summarizes preliminary research that has been undertaken on potential support programs and partnerships, such as lending libraries and consumer take back programs, which would aid residents in the transition away from the personal use of two stroke engine equipment.

2.0 Opportunities for clean transition support programs

Staff has identified and explored examples of cities that operate libraries of objects or "things" in addition to books. For instance, staff spoke with the Toronto Public Library (TPL) about the Sun Life Musical Instrument Lending Library and Wi-Fi hotspot lending program. Staff also spoke with the Executive Director of the Toronto Tool Library, a non-profit organization dedicated to tool-sharing.

Staff has found that many cities around the world operate a library of "things". Most of them focus on loaning items for recreation and socializing, such as educational games, musical instruments, sports equipment, binoculars, party decorations and memory care kits. Some libraries loan electronic devices such as Wi-Fi hotspots and tablets. A minority of the libraries of things that were reviewed include yard and garden equipment. Most of the libraries of things that staff reviewed have a small inventory and operate out of one location. For instance, those with an electric leaf blower or string trimmer often have only one device available.

City Libraries - Toronto Public Library

The Toronto Public Library (TPL) currently lends out traditional library materials and some non-traditional items such as Wi-Fi hotspots, carbon dioxide monitors and musical instruments. 1,000 Wi-Fi hotspots are loaned at Neighbourhood Improvement Area

branches and through some community agencies for a six-month period. Operating funding for this program is approximately \$580,000 per year. During the COVID-19 pandemic, TPL received 50 carbon dioxide monitors from a corporate donation to the TPL Foundation. TPL circulates the devices from their Digital Innovation Hub locations for one-week loans. Musical instruments are available for three-week loans at three library branches. Establishment of the musical instrument lending collections was funded through donations to the TPL Foundation covering the cost of the necessary branch renovations, instrument purchases, maintenance and repairs, and the dedicated staff to support the service in each location.

Library staff noted that TPL is frequently asked to loan other types of resources and equipment. They consider every request against factors such as: mandate fit for the type of equipment requested, additional financial and staffing resources required to support the care and maintenance of the equipment, availability of suitable storage and service access space for the type of equipment, and other factors. TPL staff indicated that a zero-emission equipment lending library would not be a fit for TPL branches or services because it does not meet the criteria outlined above.

Community Non-Profit Libraries - Toronto Tool Library

The Toronto Tool Library (TTL; torontotoollibrary.com) is a non-profit organization whose mission is to discover and share information on how communities can participate in the sharing economy. It lends a wide variety of tools for gardening, lawn care, renovations and repairs. The Executive Director of the TTL indicated that the TTL's collection of outdoor lawn and garden equipment focuses exclusively on electric or battery-powered equipment rather than gas. This is motivated by electric equipment's ease of use, storage, maintenance needs, and because lighter-weight electric and manual equipment can be more easily transported by borrowers on public transit. Demand for yard tools varies seasonally with power washers popular in the spring, followed by grass and leaf equipment such as string trimmers.

The TTL would be interested in talking further with the City about potential collaboration related to loaning zero-emission yard and garden equipment. Most of TTL's equipment is received through donations; the TTL also purchases some refurbished equipment from service centres. The TTL is currently operating one downtown location, and members pay an annual fee which includes borrowing an unlimited number of items.

Key Considerations for City-Managed Lending Libraries

Based on the jurisdictional scan and interviews, the following considerations have emerged if the City intends to establish a City-managed lending library for zero-emission equipment:

- Storage space - availability of suitable storage space in busy season and off-season; potential alternate uses for the space; need for renovations; security; experience of borrowers accessing and returning equipment;
- Staffing - to manage and market the lending library including checkouts and inspections; hours when borrowers can access the equipment; staff presence at

location(s); contract or relationship for equipment maintenance, cleaning, repair and assessment;

- Seasonality - demand for yard and garden tools, need for space, and demand for staff will fluctuate with the seasons and days of the week;
- Geographic factors - demand for equipment varies geographically due to neighbourhood-level variation in prevalence of lawns and gardens, income level, and other factors affecting the need for shared yard and garden equipment; number of locations of a lending library; location(s); a suggestion was made to survey potential users in advance to determine which equipment is in demand;
- Service delivery model - costs and benefits of providing access to the equipment through an existing service or establishing infrastructure for a new service;
- Inventory selection - portability of equipment for transport on public transit; provision of carrying case or bins; equipment types that do not touch vegetation nor require cleaning (e.g., leaf blowers) and those that do (e.g., mowers, string trimmers); any safety limitations (e.g., sharp blades); noise (decibel) level; which brands can be serviced locally; standardization of batteries across offered tools; preference to own or borrow frequently used equipment;
- Legal - liability waiver for borrowers; insurance considerations;
- Policies - whether users can place a "hold" on equipment; whether users can reserve equipment for a particular date, and if a system is in place to facilitate this; procedure if equipment is returned dirty or damaged;
- Safety - whether safety equipment (e.g., safety goggles and hearing protection) should be provided along with low-emission equipment loans.

3.0 Opportunities for partnerships that encourage and incent a transition to low-emission equipment

Many options exist for City partnerships to incent a transition to low-emission equipment. The source of funds for any incentive program, and the willingness of potential partners to champion this issue, are critical factors in determining partners. The City has partnered with organizations in the past to encourage and incent compliance with a policy or to accelerate progress toward a policy goal. For instance, in 2009 and 2010 the City initiated the "Cut it Out Toronto" program that delivered public education on the emissions released by older, inefficient gas powered equipment and promoted responsible disposal of older, unwanted equipment by offering free drop-off sites throughout Toronto. The program was offered in partnership with Canadian Tire, and the drop-off days were selected in coordination with City Councillors' Community Environment Days. The program also offered incentives in the form of a discount toward the purchase of new, less polluting lawn and garden equipment. In 2009 a total of 283 small engine pieces were dropped off. In 2010 this number grew to 387.

Other partnership examples include:

The City partnered with retailers Home Depot, Rona and Canadian Tire, to support compliance with Toronto's Pesticide Bylaw (Municipal Code 612) which came into effect in 2004, and to help residents transition to safer alternatives. In the late 2000s, the City ran a low-flow toilet incentive program which offered sales incentives (rebates) at major retailers in Toronto. The program included a separate stream for residents, multi-unit residential buildings and corporations. Other past partnerships with retailers include a

trade-in program incenting the transition from incandescent light bulbs to compact fluorescent light bulbs, and a similar program for front-load washing machines. In 2013, Toronto Police Services partnered with Henry's Camera, the Ministry of Community Safety and Correctional Services, and the City of Toronto in the "Pixels for Pistols" program to incent residents to surrender firearms and ammunition in return for a camera and gift card.

Effective marketing and promotions are critical to compelling residents to take action. Messages on how to reduce emissions and other negative impacts from two-stroke engine equipment would be an important part of a partnership to incent a transition away from such equipment. A potential key message is that people can eliminate their use of both fossil fueled and electric lawn and yard care equipment where possible, by taking up alternative yard care practices, such as "leaving the leaves", and by planting alternatives to lawns, such as native perennial and pollinator gardens. Relative to traditional lawns, these approaches can provide additional benefits including reduced water consumption and protection of habitat for beneficial species. Another key message that could be reiterated, and which is already reflected in the City's communications, is that those who have to use a leaf blower (e.g., landscapers) should consider using green technologies, take steps to reduce noise and other impacts¹, and be aware of the rules for using leaf blowers and similar equipment in Toronto (<https://www.toronto.ca/city-government/public-notices-bylaws/bylaw-enforcement/noise/using-a-leaf-blower/>).

If funded in 2024, staff could further explore the potential benefits, costs and approaches to partnerships to encourage a transition away from the use of two-stroke engines.

4.0 Conclusion and next steps

As directed by City Council, if adequate resources are funded in the 2024 budget, staff will substantially initiate the work for City Council to enact a by-law imposing a ban on the use of two-stroke engine equipment, and report to the Infrastructure and Environment Committee in 2024. This work will include further consideration of clean transition support programs and potential partnerships to encourage compliance with a potential by-law.

CONTACT

Cecilia Fernandez, Acting Manager, Policy and Research, Environment and Climate Division, 416-338-5469, Cecilia.Fernandez@toronto.ca

¹ In the May 2022 Report on Outstanding Noise Directives (2022.EC31.4), submitted to the Economic and Community Development Committee by Municipal Licensing and Standards, staff reported that the average electric or battery-powered leaf blower produces noise at about 65 decibels (dB) and that two-stroke equipment blowers can produce up to 90 dB. Every three-decibel increase results in a doubling of sound. The report also notes that new equipment tends to be quieter, with electric models being quieter than gas-powered models. The market also now includes "low noise" gas-powered leaf blowers, which are rated at 65 dB. Comparatively, typical speech is about 60 dB and a washing machine is 75 dB.

SIGNATURE

James Nowlan
Executive Director, Environment and Climate