

BUSINESS PERFORMANCE AND ENVIRONMENTAL SUSTAINABILITY MEMORANDUM

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TO: MAYOR, J. LEHMAN AND MEMBERS OF COUNCIL

FROM: S. BRUNET, B.SC., ASSOCIATE DIRECTOR, BUSINESS PERFORMANCE AND

ENVIRONMENTAL SUSTAINABILITY

R. WHITE, SENIOR BUSINESS PERFORMANCE SPECIALIST

NOTED: B. ARANIYASUNDARAN, GENERAL MANAGER OF INFRASTRUCTURE AND

GROWTH MANAGEMENT

M. PROWSE, CHIEF ADMINISTRATIVE OFFICER

RE: UPDATE – CIRCULAR ECONOMY PROGRAMS

DATE: MARCH 28TH, 2022

The purpose of this Memorandum is to provide members of Council with an update on the City of Barrie's (City) Circular Economy strategy and associated initiatives.

The City's 4 pillared strategic framework, established and approved by Council in 2021, is intended to support the elimination of waste and pollution, the circulation of products and materials, and the regeneration of nature. The effectiveness of this approach will be demonstrated through the tracking of the annual amount of waste being generated. In 2021, total waste generation rate (all streams) was 665.74 kg/household (down from 666.89 kg in 2020) and 243.20 kg/capita (down from 244.39 kg/capita in 2020).

Although the COVID-19 pandemic may have altered specific action plans for 2021, staff were successful in achieving various outcomes within a 'lead by example' context.

2021 Outcomes

1. To establish a waste generation baseline, single-family residential sector and public space bin waste audits were conducted. The results indicated that:

Within the single-family residential waste sector:

- Approximately 40% of waste disposed in the garbage stream is divertible using one or more of the City's current waste collection services (30% Organics and 10% Recycling);
- Over 50% of Barrie households are not participating on the organics collection service; and
- Approximately 40% of the food waste is avoidable.

These results directed a focus on reducing avoidable organic waste and increasing bin participation for unavoidable organic waste for the 2022 workplan.

Within the public space bin sector:

- Pairing bins (placing recycling and garbage bins side-by-side) had minimal effect on the disposal of waste in either respective stream;
- The recyclables stream contained highly contaminated containers that would be considered waste (garbage);
- Approximately half of all waste disposed of in the garbage stream was pet waste; and
- The remaining waste disposed of in the garbage stream consisted mainly of recyclable containers and potential divertible materials (paper fibres, containers & organics).



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These results show significant growth potential for diversion at public spaces; however, the level of contamination in current recyclables is beyond acceptable levels and would be considered garbage. Additionally, the 4 public areas that were audited showed vastly different results, meaning a tailored approach may be required for specific public spaces.

- 2. A Corporate internal stakeholder working group was struck and achieved its first milestone; the development of an Internal 'lead by example' Roadmap. This allows for the progression to the potential development of implementation plans for Q3 2022, subject to any limitations related to COVID.
- 3. This first year of a City wide Textiles Collection Program saw an increase in the participation rate and an average of 6.52 kg/household (the equivalent to 42 large, adult t-shirts/household) diversion from the Landfill. Additionally, the contamination rate dropped to zero percent from 2019, indicating an increased understanding of what is acceptable in the program and no material going to any Landfills.
- 4. Driven by the policy to support the reduction and phasing out of single-use plastic items, staff developed a Single Use Plastic Reduction Program to promote a Circular Economy Approach to the management of single use plastic waste. Enabling actions were identified to influence behavioral change that contribute to the reduction in the use of single use plastics which should also reduce the amount of single use plastics going to Landfill. The proposed program is focused on consumer education and the identification of alternatives including:
 - An 'Ask First' Program/Initiative choice is left to the consumer;
 - Pledge Program with the Commercial sector;
 - Identification of alternatives:
 - Waste management system improvements; and
 - Community wide education and awareness.

Pilot programs in 2022-2023 at City Facilities will provide data to effectively launch a full-scale program. Voluntary bans at Permitted Special Events will be reviewed once COVID limitations are removed.

- 5. Strengthening the Community Sharing Economy is centered around identifying events and on-line platforms for swap, share and repair events, promoting innovation and experimentation with circular initiatives. Online workshops were provided in 2021 that sought to teach residents how to repair items, rather than disposing of them.
- 6. Education and awareness initiatives included:
 - Waste Reduction Week, where approximately 2000 residents participated in various education
 events, including an online learning event, textile recycling information, e-waste information, single
 use plastic reduction, reducing food waste, a sharing economy and "swap and repair";
 - The external webpage was updated with the intent to introduce residents to the Circular Economy approach; and
 - The 2022 Calendar included general information on the Circular Economy, building upon the information provided in the 2021 calendar and the Rethink Waste Webpage.
- 7. Transitioning to the provincial Individual Producer Responsibility Model is well underway. Both Electronic Waste and Hazardous Waste have been transitioned. The Blue Box Transition for Barrie is legislatively scheduled for May 1st, 2024. With this target date staff are working with a consultant in the development of Barrie's Transition Plan, tentatively scheduled to be completed in Q2, 2022.



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NEXT STEPS

Through 2022, staff are undertaking several initiatives that will further the Circular Economy Approach including:

- 1. More data collection through additional waste audits targeting the multi-residential sector, the Landfill Depot, the ICI sector and tentatively City Facilities.
- 2. Actions to achieve compliance with the Provincial Organics Policy Statement.
- 3. Planning and implementing initiatives focused on increasing green bin participation rate. A long-term outcome of a 100% participation rate curbside would divert approximately 21% (an estimated 5000 tonnes) of organic waste from the Landfill annually.
- 4. Implementing actions that would support the reduction in the amount of avoidable food waste curbside. Avoidable food waste is the edible food that ends up in the compost or in the green bin. This is the result of buying too much, cook too much, or improper storage. A reduction from the measured 40% creates the potential to reduce approximately 4400 tonnes of food waste being generated.
- 5. Launching the 'ASK FIRST' Program as a pilot at identified City Facilities, launch the Commercial Pledge Program, and develop a Public Awareness Campaign.
- 6. The development and partial implementation of a Blue Box Transition Plan for Barrie, including a transition strategy and draft RFP for waste collection post transition.
- 7. Actioning a proactive approach to ensuring new development is based on circular economy outcomes through the addition of design and on-boarding guidelines to the Waste Management By-law.
- 8. The implementation of internal initiatives based on the roadmap developed by internal stakeholders.
- 9. External engagements through the Sustainable Waste Management Strategy update under a Circular Economy umbrella.
- 10. Education and Outreach programs that will be revised to focus on a circular economy.