

Municipality of Chatham-Kent
Infrastructure and Engineering Services
Public Works

To: Mayor and Members of Council

From: Huda Oda, P.Eng. MASc
Manager, Waste Management

Date: October 21, 2024

Subject: Organic Waste Diversion Program – Feasibility Study Update

This report for the information of Council.

Background

Chatham-Kent’s Organic Waste Diversion Program Feasibility Study was started in late 2023 to determine the best approach to achieve the targets set by the Ontario Food and Organic Waste Policy Statement¹. According to the Policy Statement, Chatham-Kent is required to reduce or recover resources from 50% of food and organic waste from urban settlements by 2025. Organic waste includes household food waste and leaf and yard waste.

The Feasibility Study focuses on three components:

1. Curbside green bin program: implementing a source-separated organics program to collect household food waste from at the curb in a manner similar to the current garbage collection service.
2. Non-curbside organic diversion: exploring non-curbside solutions for organic waste diversion to serve as a standalone program or a as a supplement to a green bin program. This would include, for example, providing backyard home composters at cost to resident.
3. Leaf and yard waste collection: reviewing the current leaf and yard waste curbside and depot collection programs to determine diversion improvement opportunities.

On February 26, 2024, a report to Council outlining the Feasibility Study’s project plan was presented², including its scope, deliverables, and timelines. The Study’s multi-phase process is summarized in **Figure 1**.

¹ Food and Organic Waste [Policy Statement](#)

² “Organic Waste Diversion Program Overview”. See RTC [here](#).

On June 24, 2024, another report to Council providing an update on changes to the leaf and yard waste collection services and the associated public engagement results was presented³. The report communicated that all municipal leaf and yard depot operations, curbside leaf and yard waste collection levels of service, and future organic waste diversion programs will be reviewed holistically and from a regulatory compliance lens.

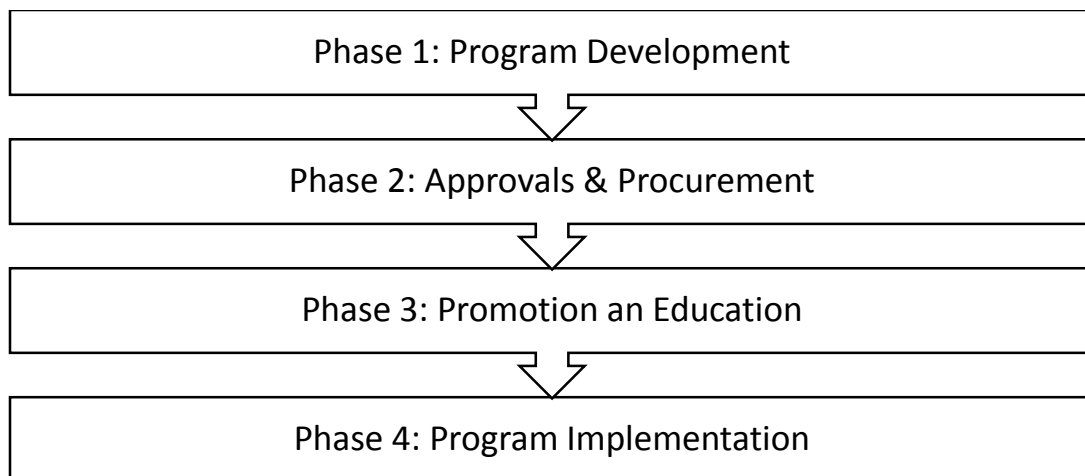


Figure 1: Organic Waste Diversion Feasibility Study Process

This report provides an update to Phase 1: Program Development of the project.

Comments

The Program Development Phase is composed of four milestones:

- 1) a review of best practices through a jurisdiction scan,
- 2) a waste composition study,
- 3) a multi-step public engagement process,
- 4) and a draft organic waste diversion program design.

This section will summarize the research and public engagement results and provide updates on the waste composition study and program design process so far.

1) Jurisdictional Scan

Administration has reviewed the household organic waste diversion practices of twenty (20) jurisdictions across Ontario that are primarily comparable to Chatham-Kent in terms of geographical location, population density, and rural vs urban composition. Some of the reviewed jurisdictions were included due to the maturity of their organic waste diversion program. Refer to **Table 1** for a list of these communities and their green bin program availability.

Fourteen of the researched municipalities currently provide a green bin program. Furthermore, the Essex-Windsor Solid Waste Authority is scheduled to commence its

³ "Update on the Proposed Changes to Leaf and Yard Waste Collection". See RTC [here](#).

green bin program in the Windsor-Essex region in 2025 and the Norfolk County is in the process of designing its curbside green bin program as well. Municipalities who currently provide this service do so on a weekly collection basis, and about half of them apply an automated collection system. Common items accepted in the green bin program are food scraps, coffee grounds, tea bags, coffee filters, bones, eggshells, and soiled paper towels or cardboard. **Appendix A** delves into the results of the jurisdictional scan in more detail.

Table 1: Municipalities included in the green bin jurisdictional scan.

Municipality	Green Bin Program	Frequency of Green Bin collection
Essex-Windsor Solid Waste Authority	Will start in 2025	Weekly
City of Sarnia	N/A	N/A
City of London	Started in 2024	Weekly
City of Greater Sudbury	Started in 2009	Weekly
Region of Peel -Mississauga	Started in 2007	Weekly
Sault Ste. Marie	N/A	N/A
Norfolk County	N/A	N/A
Oxford County	N/A	N/A
City of Guelph	Started in 2020	Weekly
County of Peterborough	Started in 2010	Weekly
City of Peterborough	Started in 2023	Weekly
Simcoe County	Started in 2021	Weekly
Waterloo Region	Started in 2007	Weekly
Halton Region	Started in 2008	Weekly
City of Toronto	Started in 2002	Weekly
City of Ottawa	Started in 2010	Weekly
City of Hamilton	Started in 2006	Weekly
City of Kingston	Started in 2009	Weekly
City of Kawartha Lakes	N/A	N/A
Durham Region	Started in 2005	Weekly

2) Waste Composition Study

This year, Chatham-Kent started its first four-season waste composition study, which is critical in planning and monitoring any waste diversion program. The composition study is comprised of two audits each season, one targeting curbside households and the other targeting non-curbside households. In each audit, garbage destined to the landfill is collected from 100 residential households, sorted, categorized, and weighed. The

data is then analyzed to provide insights into the type and magnitude of waste presently thrown in the landfill stream.

The Waste Composition Study results provide an understanding of the amount of organic waste in the landfill stream, thereby informing the potential diversion and capture rates of an organic waste diversion program. Repeating the Waste Composition Study on an annual basis will help establishing a baseline of such data and producing waste composition trends that can be used in determining the success of a diversion program and in understanding residents' behaviour.

To date, two seasons' waste audits have been completed. A detailed report on the Waste Composition Study results will be provided when the study is complete. However, it is worth noting that the estimated organic content present in Chatham-Kent's landfill stream is 43%, overall. This figure is expected to change once the fall and winter waste audits are completed. **Table 2** breaks down the organic waste content percentage according to the waste source type.

Table 2: Percentage of total organic waste in the landfill stream, which includes plant material, yard waste, grass clippings, paper food waste, unavoidable food waste, tissues and paper towels. Based on the spring and summer waste audits.

Source Type	Estimated Percentage of Organic Waste in the Landfill Stream
Overall	43%
In Curbside Garbage	50%
In Non-curbside Garbage	30%

The above results indicate a higher percentage of organics present in the garbage generated by curbside residents. This aligns with the hypothesis that rural residents are more likely to dispose of their organic waste through composting or burning.

3) Public Engagement

Given the significant community impacts of the Feasibility Study's outcomes, administration invested significant efforts in engaging with the public since its inception through a variety of methods:

- i. A Let's Talk Chatham-Kent Project Page and Forum
- ii. An Online Public Survey
- iii. Two Public Information Centres

Appendix B presents three summary reports of the public engagement activity results.

A Let's Talk Chatham-Kent project page⁴ was published in February, acting as a reference page for visitors by providing an overview of the project plan and links to reports to Council and other pertinent resources. A forum was launched at the same

⁴ Access page [here](#).

time allowing for anonymous feedback on the Feasibility Study. The page has received 3,000 visits to date, with 121 contributions from the public. The primary sentiment of the comments received through the Forum was positive.

Between June 17 and July 15, an online survey was launched via the Let's Talk Chatham-Kent project page to collect input on the three components of the Feasibility Study. The survey was open to Chatham-Kent residents and business owners. A total of 912 responses were received, the breakdown of which is summarized in **Figure 2**.

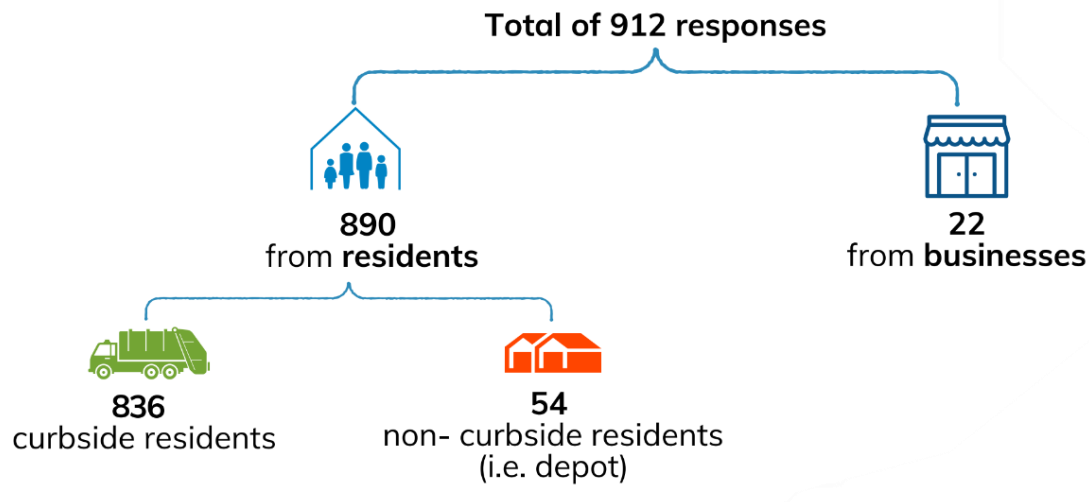


Figure 2: A breakdown of the online survey respondent types.

The survey asked respondents to comment on elements of the proposed organic waste diversion program and to share to their concerns, if any, about the Study or the potential program implementation. While two-thirds of respondents indicated their willingness to participate in a potential green bin program, a significant number of them shared concerns around increased odour and/or rodent activity. Further, while most respondents indicated their support for implementing a home composter program, only about 40% would participate in purchasing one.

In addition to the online public engagement activities, two public information centres (PICs) were held to share project updates and survey results and to solicit further feedback from the public. The first PIC was held online through Facebook Live and YouTube on August 13, 2024. A maximum of fifteen (15) attendees were tuned in during the session at any given time. The second PIC was held in-person at the John D. Bradley Convention Centre on August 27, 2024. Nine attendees participated in this session, through significant efforts were taken to promote the event.

All public engagement events were advertised on municipal social media accounts, service centres, and local libraries and were promoted through community partners. The forum and survey were also advertised in local newspapers.

4) Program Design

Since the main objective of an organic waste diversion program is to achieve the provincial Food and Organic Waste Policy Statement’s diversion target set for Chatham-Kent, current efforts are focused on developing a program that enables the diversion of 50% of food and organic waste from urban settlements. Accordingly, administration is investigating the value of implementing a green bin program and of enhancing the existing leaf and yard waste collection service.

Best estimates suggest that 26% of organic waste generated from urban households is already captured in the current municipal leaf and yard waste collection program. Hence, any solution to be implemented will aim to close the diversion rate gap and achieve a minimum of 50% diversion. Preliminary calculations indicate that expanding the curbside leaf and yard service to all urban areas may provide the highest value for increasing the diversion rate while minimizing operational costs.

Next Steps

Designing an efficient organic waste diversion program and determining the financial and environmental implications continue to be administration’s priority over the next few months. The Waste Composition Study will continue until February 2025. Before presenting its recommendations, and as a quality control measure, administration will retain an experienced consultant to review the methodologies and the calculations applied. A report to Council recommending a finalized organic waste diversion program design can be expected in February 2025.

Council Term Priorities

This report supports the following Council Term Priorities:

			
Deliver Excellent Service	Promote Safety & Well-Being	Grow Our Community	Ensure Environmental Sustainability
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Consultation

Many Ontario municipalities were consulted on their programs, which have been included in Table 1. In addition, input provided by participants in the public engagement survey was considered and summarized in this report.

Communication

Communication is proposed to be through the inclusion of this report on the Council agenda and related communications. This report will also be uploaded to the Let's Talk Chatham-Kent project page.

Diversity, Equity, Inclusion and Justice (DEIJ)

Reviewing the leaf and yard waste collection program in conjunction with the potential green bin program as a system will lead to opportunities for decreasing the discrepancy in levels of service amongst Chatham-Kent communities. This will help achieve a higher level of equity amongst Chatham-Kent residents.

Financial Implications

The 2023-2027 multi-year budget⁵ accounted for the imminent expenses of an organic waste diversion program: A \$2,000,000 expense related to a green bin program was slated for 2026 in the base budget, and a one-time amount of \$900,000 related to non-curbside organic waste collection was slated for 2025 to 2027.

Due to the project timeline, these expenses have been deferred one year in the updated 2025-2027 Budget book. In addition, a one-time amount of \$141,570 has been allocated from the WDO Recycling Reserve to fund the Project Manager, Waste Management position for another year. This position is the technical lead on the Feasibility Study project development and implementation. Refer to **Table 3**. Council will review these changes in the 2025 Budget deliberations.

Table 3: Current vs. proposed multi-year budget allocations related to the potential organic waste diversion program.

Budget Period	Impact Type	2025	2026	2027
2024-2027	Base Budget Impact	-	\$2,000,000	\$42,000
	One-Time Budget Impact	\$639,948	\$509,948	\$162,363
2025-2027	Base Budget Impact	-	-	\$2,000,000

⁵ 2024-2027 Draft Operating Budget Book can be found [here](#).

	One-Time Budget Impact	\$141,570	\$639,948	\$509,948
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Attachments: Appendix A: Jurisdictional Scan
 Appendix B: Public Engagement Reports