
Organics Opportunities

Recommendation

That the Standing Policy Committee on Environment, Utilities and Corporate Services recommend to City Council:

That Administration continue research and program development on an organics program for the Residential, Industrial, Commercial, and Institutional sectors.

Topic and Purpose

The purpose of this report is to highlight the opportunities to increase diversion of organics from landfilling. If City Council is interested in proceeding with expanded organics programs or policy, this report highlights where additional research would be required and provides an opportunity for City Council to identify where the scope of this research should be adjusted.

Report Highlights

1. 32% of Saskatoon's total landfilled waste is organics (food and yard waste); this includes 36,600 tonnes from residential sources and 41,700 tonnes from Industrial, Institutional, or Commercial Sources.
2. 58% of material collected in black carts at the curbside in Saskatoon is organic, presenting an excellent diversion opportunity.
3. Organics programs exist in most cities across Canada. Saskatoon is one of only two cities with no city-wide Curbside Collection Program for yard waste and one of only five without a Food Waste Collection Program (out of 30 Canadian cities with populations greater than 150,000).
4. To achieve 70% diversion of waste in Saskatoon by 2023, substantive policy and program changes are needed in order to divert the majority of organic materials from being landfilled. There are a number of considerations affecting program design; including options for collection and processing, role of disposal bans, whether to implement a pilot, and impact on home composting.
5. The current programs provide options for organics diversion and the Green Cart Program has grown with subscribers now constituting 11% of single-family households. However, this program as currently designed is unlikely to divert more than 5,000 tonnes annually over the next 10 years.
6. According to the Waste and Recycling survey completed by Inshtrix in July 2017, 79% of residents somewhat or strongly support city-wide food and yard waste collection for all households.

Strategic Goals

This report supports the Strategic Goal of Environmental Leadership including the four-year priority to promote and facilitate city-wide composting and recycling. It also supports the long-term strategies to eliminate the need for a new landfill and to reduce greenhouse gas (GHG) emissions tied to City operations. In addition, it supports the Waste Diversion Performance Target to divert 70% of waste by 2023.

Background

On May 23, 2017, City Council received a report outlining Waste Diversion Opportunities. Organics represents a significant portion of the waste stream and was outlined as one of the first steps toward meeting Waste Diversion Performance Targets.

Report

Why Expand Organics Programs and Policy

Diversion of organics was identified within the Waste Diversion Opportunities report. Organic material not only fills up the landfill, it produces methane when it decomposes, which is a potent greenhouse gas. In 2016, 2cg completed a characterization of the waste stream in Saskatoon. The study found that organics (leaves, grass, and food waste) represent 32% (over 78,000 tonnes) of landfilled waste in Saskatoon, the single biggest opportunity for diversion.

The table below identifies the amount of organic waste generated from residential and Industrial, Commercial, and Institutional (ICI) sources.

Single-family Residential	Multi-unit Residential	Self-haul	Industrial, Commercial, Institutional	Total
29,900	3,700	3,000	41,700	78,400

Table 1: Tonnes of Organic Waste by Sector sent to Landfills in Saskatoon

Developing new organics programs and policy in Saskatoon aligns with the values for waste management adopted by City Council earlier this year. This alignment is outlined in Attachment 1.

Starting With a Curbside Organics Collection Program

While a larger volume of organic waste is generated by ICI sources, Administration recommends that organics programming focus first on the curbside residential sector for the following reasons:

- 58% of material collected in black carts at the curbside in Saskatoon is organic, presenting an excellent diversion opportunity.
- Residential waste management is considered an essential service that the City delivers: this is not the case for the ICI sector.
- Waste diversion can cost less than garbage disposal (as well as deliver other public image benefits) and therefore the majority of businesses in Saskatoon already recycle without any specific legal requirements or City-run programs in place. It is likely the ICI sector would also implement organics if appropriate facilities were in place.

It is possible that multi-unit residential collections could be implemented along with a curbside program (similar to recycling and garbage) or that collections could be encouraged through a bylaw.

Organics Opportunities

The implications of establishing multi-unit residential and ICI collections and/or bylaws will be addressed in a report that the Administration is preparing for Committee on ICI Waste Management Opportunities. This report will be presented in October.

Organics Programs in other Cities

Most cities across Canada have programs and policies that require residents and/or businesses to divert organics. Attachment 2 shows all Canadian cities having populations greater than 150,000 along with the type of organics programs offered in each. Saskatoon and Regina are the only cities not currently offering city-wide curbside collection of yard waste; London, Winnipeg, and Quebec City do not have curbside food waste collection. Saskatoon is the only city with a subscription program for organics.

Organics Disposal Bans

Organics disposal bans are a policy tool that may be used to increase diversion and have been implemented in a number of centres across Canada. Bans can apply to residents and/or businesses and are designed to encourage increased use of existing programs (offered either by the private or public sectors). Bans have been found to be most effective when used to encourage businesses to use organics facilities that already exist within a community.

Additional information about this policy tool is provided in Attachment 3.

Limitations of Current Programs

The current subscription-based Green Cart Program is limited in its ability to achieve meaningful organics diversion from the residential sector compared to a city-wide program for the following reasons:

- It is voluntary. With 11% of single family households currently subscribing, 2,100 tonnes were diverted through this program in 2016.
- The current operational model is under-funded.
- It is inefficient compared to a city-wide program.

The current Highway 7 composting facility can only accept a limited amount of food waste as it generates increased leachate and odours.

Processing and Collections Considerations

There are numerous options for collections and processing of organics in Saskatoon. Attachment 4 provides a high level overview of research completed to date. If City Council is interested in proceeding with expanded organics programs or policy, additional research on implications, costs, and benefits would be required.

Potential Pilot Program

Many municipalities proceed with a pilot in advance of implementing a city-wide Curbside Organics Program. For instance, Calgary, Red Deer, and the Region of Waterloo are three recent programs that conducted pilots in advance of a city-wide program. Attachment 5 provides a discussion of the considerations for a pilot project in Saskatoon.

Home Composting

According to preliminary results from the Waste and Recycling Survey completed by Inshgtrix in July 2017, 21% of people say they compost their yard waste and 24% say they compost their food waste at home.

Backyard composting is a cost-effective method of reducing waste. Most communities promote home composting, while also providing curbside services to achieve efficient and larger-scale waste diversion. Saskatoon provides home composting support for residents which includes \$20 rebates for compost bins as well as the Compost Coach training and education program which includes workshops, education at trade shows and events, home visits, a compost hotline, online information, videos, and marketing to promote composting. In the event City Council chose to proceed with planning for a city-wide collection program, a review of the impact on home composters and education programs would be required.

Public and/or Stakeholder Involvement

Organics is one component of a larger plan for achieving the Performance Target to divert 70% by 2023. Many of the topics within the Waste Diversion Plan being developed to achieve this objective will require community conversations and engagement. As a result, the Administration is developing a Waste Diversion Engagement Strategy and Framework to guide implementation and to ensure interactions with the community are meaningful, consistent, relevant, and effective. A report outlining details of the proposed Strategy and Framework (including organics) will be presented to the Standing Policy Committee on Environment, Utilities and Corporate Services in September.

The City periodically measures attitudes and awareness related to waste and recycling as part of its contractual obligations to the contracted recycling service providers. According to preliminary results from the Waste and Recycling survey completed by Inshgtrix in July 2017, 79% of residents somewhat or strongly support a city-wide food and yard waste collection for all households.

Communication Plan

A detailed communications plan would be developed to help the community learn about the options and benefits of a potential organics program. Building on existing communications materials from the subscription Green Cart and Home Composting programs, tactics could include developing a web page; social media content and outreach; videos and other advertising opportunities.

In the meantime, Administration is implementing a Waste Diversion Communications Campaign that includes social and traditional media campaigns and a waste challenge to provide the community with information on the importance of waste diversion in Saskatoon. This Waste Diversion Communications campaign will coincide with and support the Waste Diversion Engagement Strategy and Framework. Information about the campaign will also be presented to Committee in September.

Financial Implications

A few of the financial implications have been presented throughout this report. Complete and specific financial implications will be further explored if City Council directs Administration to continue research and program development.

Administration also notes that decisions related to organics opportunities will have an impact on waste utility rate setting should City Council choose to proceed with expanding the Waste Services Utility.

Environmental Implications

Diverting organic waste from the landfill offers several environmental benefits in terms of land, air, and water quality. Through the use of compost as a soil amendment in gardens or landscapes, nutrients that would normally be locked up in a landfill are recycled into the ecosystem where they are available to plants. Compost added to soils also improves moisture retention properties so rainfall run-off is reduced.

Organic material that is buried in a landfill environment will produce methane which is often released into the atmosphere. Methane is a significant contributor to climate change as it is 25 times more potent than carbon dioxide as a greenhouse gas. Diverting 78,000 tonnes of food and yard waste from landfills is estimated to reduce between 85,000 and 120,600 tonnes of carbon dioxide equivalents (the equivalent of removing between 16,000 and 23,000 vehicles from our roadways each year).

Other Considerations/Implications

There are no policy, privacy, or CPTED implications or considerations at this time.

Due Date for Follow-up and/or Project Completion

If directed by City Council to continue research and program development, a follow up report will be completed in the spring of 2018.

Public Notice

Public Notice pursuant to Section 3 of Policy No. C01-021, Public Notice Policy, is not required.

Attachments

1. Alignment with Organics Opportunities with City Values
2. Organics Programs in other Cities
3. Disposal Ban on Organics
4. Collections and Processing Considerations
5. Green Cart Pilot

Report Approval

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