**Agenda – Council – July 18, 2024**

**Report – Standing Policy Committee on Water, Waste and Environment – June 28, 2024**

**Item No. 5 Green Cart Program – Progress of Program Development**

STANDING COMMITTEE RECOMMENDATION:

On July 9, 2024, the Executive Policy Committee concurred in the recommendation of the Standing Policy Committee on Water, Waste and Environment and submitted the following to Council:

1. That a city-wide green cart program for residential properties as per By-law 110/2012 and non-residential customers who have opted in to receive cart service, based on the Residential Food Waste Collection Pilot Project design be developed within the following guiding parameters:

    A. Food waste will be collected curbside in 120 litre green carts.

    B. Curbside garbage cart collection be reviewed to transition to a bi-weekly service collection.

    C. Environmental benefits will be the primary goal of the program.

2. That the Waste Diversion User Fee be increased by $9.00 per residential and non-residential properties who have opted in to receive cart service, starting January 1, 2025, and that the resulting increase in funds be transferred annually to the Waste Diversion Reserve, to fund the purchase and management of green carts and kitchen pails for the new green cart program.

3. That a single source service contract with Compost Winnipeg be approved to accept green cart materials at all 4R Winnipeg Depots and up to 14 other community locations at an annual operating cost of $160,000 in the first year plus an annual inflationary adjustment, and that the Public Service continue to administer the contract until a city-wide green cart program is in operation.

4. That one temporary Project Manager (1.0 FTE, WAPSO X5) position within the Solid Waste Services Division to deliver the green cart program be approved.

5. That the Proper Officers of the City be authorized to do all things necessary to implement the intent of the foregoing.

**Report – Standing Policy Committee on Water, Waste and Environment – June 28, 2024**

DECISION MAKING HISTORY:

EXECUTIVE POLICY COMMITTEE RECOMMENDATION:

On July 9, 2024, the Executive Policy Committee concurred in the recommendation of the Standing Policy Committee on Water, Waste and Environment and submitted the matter to Council.

STANDING COMMITTEE RECOMMENDATION:

On June 28, 2024, the Standing Policy Committee on Water, Waste and Environment concurred in the recommendation of the Winnipeg Public Service and submitted the matter to the Executive Policy Committee and Council.

COUNCIL DECISION:

On June 27, 2024, Council concurred in the recommendation of the Standing Policy Committee on Water, Waste and Environment and adopted the following:

1. That an extension of time 30 days be granted for the Winnipeg Public Service to report back on the following:

    A. The progress of the program development, including: the results of discussions with potential service providers, opportunities for earlier implementation, results of market soundings, identification of possible interim service enhancements, program variations including collection frequency, seasonal variations or levels of service, future program level of service variants, and funding approaches for collection and processing contracts.

2. That the Proper Officers of the City be authorized to do all things necessary to implement the intent of the foregoing.

EXECUTIVE POLICY COMMITTEE RECOMMENDATION:

On June 18, 2024, the Executive Policy Committee concurred in the recommendation of the Standing Policy Committee on Water, Waste and Environment and submitted to Council that an extension of time of up to 30 days be granted for the Winnipeg Public Service to report back on the matter.

**Report – Standing Policy Committee on Water, Waste and Environment – June 28, 2024**

DECISION MAKING HISTORY (continued):

STANDING COMMITTEE RECOMMENDATION:

On May 31, 2024, the Standing Policy Committee on Water, Waste and Environment concurred in the recommendation and submitted to the Executive Policy Committee and Council that an extension of time of 30 days be granted for the Winnipeg Public Service to report back on the matter.

COUNCIL DECISION:

On October 26, 2023, Council adopted the recommendation of the Executive Policy Committee which included the following:

4. That the Public Service report back in June 2024 on the progress of the program development, including: the results of discussions with potential service providers, opportunities for earlier implementation, results of market soundings, identification of possible interim service enhancements, program variations including collection frequency, seasonal variations or levels of service, future program level of service variants, and funding approaches for collection and processing contracts.

# ADMINISTRATIVE REPORT

**Title:** Green Cart Program – Progress of Program Development

**Critical Path:** Standing Policy Committee on Water, Waste and Environment – Executive Policy Committee – Council

## AUTHORIZATION

| Author | Department Head | CFO | CAO |
|---|---|---|---|
| M. Gordichuk, CCLP, Manager, Solid Waste Services | T. W. Shanks, M. Eng., P. Eng. Director, Water and Waste | T. Graham | M. Jack |

## EXECUTIVE SUMMARY

The Public Service hired professional consulting services to conduct market soundings, analyze curbside cart collection scenarios and assist in the development of a service contract for green cart materials processing. It also reviewed options for earlier implementation and possible interim service enhancements, which included consulting with existing food waste collection service providers on potential collaborations.

The results support using a merchant model and employing a two-phase RFQ/RFP procurement process. The analysis also supports bi-weekly collection of garbage when food waste collection is launched to reduce greenhouse gas emissions and garbage collection costs.

Proposed interim service enhancements include introducing food waste as an item to be accepted at all 4R Winnipeg Depots at an operating cost of $25,000 annually, and introducing a new single source service contract in the amount of $135,000 per year plus inflation to Compost Winnipeg to provide opportunity for greater food waste diversion. The service contract would expire when the city-wide green cart program is operational but the self-haul collection at the 4R Winnipeg Depots would run parallel with the city-wide green cart program. Both of these interim options could be administered within 120 days of approval.

<u>Program Resource Requirements</u>

An increase to the Waste Diversion User Fee (WDF) of $9.00 (annual total) per residential dwelling unit starting January 1, 2025 is recommended to fund the initial deployment and management of green carts and kitchen pails. The increase in fees would be transferred to the Waste Diversion Reserve. Any additional increases would be requested through future multi-year budget processes. An equivalent increase to the Waste Diversion User Fee would be applicable per property for non-residential customers who have opted-in to receive cart service.

As per FM-004 and, under F1-011, the Asset Management – Organizational Governance Framework, and based on the marginal-to-critical risk associated with the Green Cart program,

a temporary Project Manager position within Solid Waste Services should be assigned to deliver capital projects related to this new City service/program.

As the details of the program are further developed, the Public Service will update the estimated program costs and impact on the WDF.

Summary of Interim and Future Program features:

| | |
|---|---|
| Interim program before full implementation: | • customer self haul/drop off of organics at 4R Depots and up to 14 additional community locations<br>• processing of organics by sole-source contract with Compost Winnipeg<br>• interim program can be in place 120 days from approval |
| Future full program features: | • curbside pick up in green carts<br>• continued self haul/drop off option at 4R Depots only<br>• processing of organics at contracted merchant facility<br>• separate Leaf & Yard waste stream continues<br>• transition to bi-weekly garbage collection<br>• full program will start when facility complete (estimated 2030) |
| Resources needed: | • $9 increase in annual WDF starting in 2025 to fund purchase of full program green carts and pails<br>• a budget increase of $25,000 (plus annual inflation) for 4R Depot service change<br>• a budget increase of $135,000 (plus annual inflation) during the interim program for Compost Winnipeg service at up to 14 locations<br>• one temporary WAPSO X5 FTE to deliver the program (referred to the 2025 budget process) |

**RECOMMENDATIONS**

1. That a city-wide green cart program for residential properties as per By-law 110/2012 and non-residential customers who have opted in to receive cart service, based on the Residential Food Waste Collection Pilot Project design be developed within the following guiding parameters:
    A. Food waste will be collected curbside in 120 litre green carts.

    B. Curbside garbage cart collection be reviewed to transition to a bi-weekly service collection.

    C. Environmental benefits will be the primary goal of the program.

2. That the Waste Diversion User Fee be increased by $9.00 per residential and non-residential properties who have opted in to receive cart service, starting January 1, 2025, and that the resulting increase in funds be transferred annually to the Waste Diversion Reserve, to fund the purchase and management of green carts and kitchen pails for the new green cart program.

3. That a single source service contract with Compost Winnipeg be approved to accept green cart materials at all 4R Winnipeg Depots and up to 14 other community locations at an annual operating cost of $160,000 in the first year plus an annual inflationary adjustment, and that the Public Service continue to administer the contract until a city-wide green cart program is in operation

4. That one temporary Project Manager (1.0 FTE, WAPSO X5) position within the Solid Waste Services Division to deliver the green cart program be approved

5. That the Proper Officers of the City be authorized to do all things necessary to implement the intent of the foregoing.

## REASON FOR THE REPORT

On October 26, 2023, Council adopted the following:

1. That the concept and development of a city-wide green cart program for single-family residential dwelling units, where residential food waste is processed at a merchant facility, be approved.

2. That $500,000 be approved for Professional Consulting Services - Organics as a 2024 capital project, outside of the regular budget process, to assist in the development of the green cart program and complete a market sounding, to be funded from the Waste Diversion Reserve.

3. That the Public Service, as part of market soundings and industry engagement, seek options from potential service providers on how they would begin processing approximately 26,000 tonnes of food waste as soon as Q2 2026, if the City can begin implementation of service delivery by that time.

4. That the Public Service report back in June 2024 on the progress of the program development, including: the results of discussions with potential service providers, opportunities for earlier implementation, results of market soundings, identification of possible interim service enhancements, program variations including collection frequency, seasonal variations or levels of service, future program level of service variants, and funding approaches for collection and processing contracts.

5. That the Public Service seek out all opportunities for external funding available to assist operations and implementation of the program.

6. That the Public Service continue to administer the Financial Incentives for Compost Grant until a city-wide green cart program is operational.

7. That the appropriate labour representatives for the staff at Brady Road be consulted to discuss what impacts any food waste composting program would have on the current yard waste composting program.

8. That the Proper Officers of the City be authorized to do all things necessary to implement the intent of the forgoing.

## IMPLICATIONS OF THE RECOMMENDATIONS

There will be a requirement increase the operating budget Solid Waste Disposal Fund – Administration - Waste Diversion User Fee 445 451500 201901 999 and Solid Waste Disposal Fund – Contribution to Capital - Transfer to the Waste Diversion Reserve 445 584265 201901 999 of:

| Year | Amount |
|---|---|
| 2025 | $ 1,942,000 |
| 2026 | $ 1,969,000 |
| 2027 | $ 1,997,000 |
| 2028 | $ 2,025,000 |
| 2029 | $ 2,053,000 |

This figure is estimated based on housing projections by the City economist and actual revenues and transfers will be reflective of actual billable dwelling units and properties.

An additional requirement for budgetary increase of $25,000 plus an annual inflationary increase to Solid Waste Disposal – 4R Winnipeg Depots - Non-Professional Services 445 521020 201910 999, annually.

A budget referral to the 2025 budget working group for the addition of one temporary WAPSO X5 FTE to Green Cart Program - Organics Collection and Processing Service Development Capital project 445-18100-200753-2XXXXXXXX.

Any additional financial implications regarding potential changes to City resources will be considered as part of a future report or the annual budget process.

## HISTORY/DISCUSSION

On October 19, 2011, Council approved the Comprehensive Integrated Waste Management Strategy (CIWMS), which included a waste diversion target of 50 percent. CIWMS was developed through an extensive public engagement process, where more than 2,500 people participated over a six-month period.

On March 22, 2017, Council directed the Public Service to complete a review of CIWMS which included finding new ways to reduce the amount of waste going into the landfill.

On September 20, 2018, Council adopted Winnipeg's Climate Action Plan, which further supports the importance of diverting organic waste from landfill in order to achieve Winnipeg's sustainability goals.

On June 20, 2019, the review of CIWMS was received by Council and it was identified that the waste diversion rate target of 50 percent could not be achieved without an RFW collection program and other investments in Winnipeg's waste management system. At this meeting, the 50 percent waste diversion target was deferred by Council until recommendations could be

brought forward through the completion of an Residential Food Waste (RFW) Collection Pilot Project and a 10-year financial plan for the solid waste utility.

On December 12, 2019, Council directed the Public Service to develop an RFW Collection Pilot Project and report back to Council by 2023 with recommendations regarding a city-wide green cart program.

On May 30, 2023, Council adopted the Strategic Priorities Action Plan (SPAP) as its four-year strategic plan. Action 4.8 of SPAP is to "Develop and implement a city-wide residential food waste collection (green cart) and processing program" with the goal of increasing Winnipeg's waste diversion.

On October 26, 2023, Council approved the concept and development of a city-wide green cart program for single-family residential dwelling units, where residential food waste is processed at a merchant facility.

The original recommendation from CIWMS states that an RFW collection program is necessary to significantly increase waste diversion in Winnipeg. Implementing a city-wide green cart program will assist the City in meeting the waste diversion and GHG reduction targets (i.e. net zero emissions by 2050) identified in OurWinnipeg 2045 and the Community Energy Investment Roadmap (CEIR). In addition, new landfill methane recovery and destruction regulations are being established by the Federal government, which will provide a regulatory requirement to manage landfill gases.

Market Sounding Results

The Public Service hired professional consulting services to complete market soundings. The market soundings included interviews with 14 potential service providers, many of them with established organic waste processing facilities servicing major Canadian cities.

The service providers contributed information towards realistic organic waste processing service options based on the City's proposed program. They indicated that the following features would support a competitive bidding process:

1. Clear indication of program goals, i.e. lowest cost solution, or production of 'green' energy and credits, which will dictate the appropriate processing technology, e.g. compost (low cost) or anaerobic digestion/AD ('green' energy and credits).

2. Availability of City-owned land.

3. A strong public education program to encourage participation and minimize contamination, along with a willingness to share risk in the service agreement (e.g. green cart material tonnage and contamination).

4. Separate food waste and LYW streams to maximize waste processing technology flexibility and finished product quality.

5. Minimum 10 to 20-year contract, depending on capital investment required for the selected technology

The City's priorities with respect to program costs and emission reductions must be clear to service providers. With the existence of a federal carbon offset program and voluntary carbon trading markets, these items are not mutually exclusive. The Public Service will work with other departments to define the role that the green cart program plays in the City's OurWinnipeg2045 goal of net zero by 2050, as well as the financial accounting of emissions when determining project/program costs. This information will ensure organic waste service providers will be able to design a processing solution that supports the City's goals.

A major concern and risk identified through market soundings relates to siting an organic waste processing facility. Many service providers indicated an interest in developing a facility at the Brady Road Resource Management Facility (BRRMF), even with the understanding that water and sewer service is not currently available at the site.

The Public Service is investigating the potential to make land available (purchase or lease) at the BRRMF for an organic waste processing service provider. City planning, permitting, and consultations towards these efforts need to be factored into the project and green cart program delivery schedule.

Organic waste processing service contracts rely heavily on the quantity (tonnes) and quality (degree of contamination) of the green cart materials, and this is typically reflected in the negotiated processing cost. A strong public education program designed to encourage participation and minimize contamination will help the City manage processing costs.

Separate food waste and LYW streams, especially with Winnipeg's seasonal climates, provides more flexibility for processing technologies, and better control over the finished product quality. In addition, there is evidence from other Canadian municipal programs that maintaining separate food waste and LYW streams results in lower contamination rates. The cart collection analysis suggests that collection costs would be lower if food waste and LYW were collected in the same green cart. However, it is anticipated that processing costs will be higher at the new organic processing facility than the City's current LYW composting facility, and given that the City already has an efficient and cost-effective system, it is recommended to maintain separate seasonal LYW collection to allow the City to control feedstock quality and processing at the onset of a green cart program.

Market soundings indicated that a minimum 10 to 20-year term should be offered for organic waste processing services, as a significant capital investment (by the service provider) is required in advance of providing processing services. Depending on the technology and finished processing product that the City requires, a longer or shorter term may be acceptable.

The service providers responding to questions related to Council's item #3 (i.e. processing by Q2 2026) indicated that design and construction of an organic waste processing system will take approximately two to four years if City-owned land is made available for the project. An additional 24-months is required for land procurement, zoning and permitting. Therefore, it is unlikely that a system could be operational by Q2 of 2026. In general, a requirement to secure land in advance of a signed contract adds significant risk that may dissuade some service providers from bidding on our project.

The complete Market Sounding report is included as Appendix A.

<u>Curbside Cart Collection Analysis Results</u>

The Public Service hired professional consulting services to assist in a Curbside Cart Collection Analysis to evaluate potential operational efficiencies and cost savings. The work included integrating the future green cart collection service with the existing collection operations by modeling existing and potential cart collection options. Three collection scenarios and four variations were analyzed, including collection frequency and seasonal variations. Results indicated that reducing curbside garbage cart collection frequency to bi-weekly would reduce GHG emissions and program costs.

Seasonal collection of green carts (i.e. weekly throughout the year except bi-weekly in winter months) would result in additional reduction of GHG emissions and costs, and is suggested as a phased-in approach, adapting the schedule as weather and circumstances permit.

Co-mingled collection of leaf and yard waste with food waste will provide some cost savings from a collections perspective, but may have significant processing cost implications. It is currently recommended to maintain separate seasonal LYW collection to allow the City to control feedstock quality and processing at the onset of a green cart program.

The analysis showed that the selection of collection equipment (e.g. diesel, electric, compressed natural gas) involves a balanced decision between GHG emission reductions and up-front costs. Specific analysis towards the value and impact of environmental attributes (i.e. carbon tax vs. carbon credit revenue) must be considered. The Public Service is undertaking this work and will use this to inform this decision, which will be required for the next curbside cart collection contract (currently scheduled for 2027).

The complete Curbside Cart Collection Analysis report is included as Appendix B.

Earlier Implementation of Green Cart Services

The Public Service assessed a series of opportunities for earlier implementation of a green cart program and possible interim service enhancements. This work included jurisdictional scans, as well as consulting with existing service providers, and internal operational and financial staff. A short-list of options were developed, which considered interests and opportunities presented during Council discussions, delegations, and motions, community engagement and the Public Service's internal subject matter expertise. These options were evaluated based on cohesiveness with a planned city-wide green cart program, and affordability to residents, while also considering waste diversion and greenhouse gas (GHG) reduction potentials.

Self-Haul of Food Waste to 4R Winnipeg Depots was identified as the most advantageous opportunity for earlier diversion of residential food waste. Dedicated containers would be made available at all 4R Winnipeg Depots for residents to drop off food waste. This option assumes contracting service to Compost Winnipeg as it resulted in the strongest business case with the lowest cost to the City at an estimated cost of $25,000 annually. Annual inflationary increases have been assumed and an increase to the Waste Diversion Fee will be considered as part of the 2025 operating budget submission. The food waste would be collected by Compost Winnipeg on an as-required basis and composted at the Prairie Green compost facility until such time that the city-wide green cart program is operational. At that time, collection of the 4R Winnipeg Depots would transfer as part the city-wide green cart program.

Expanding the Compost Support Payment grant was also identified as a feasible interim residential food waste diversion initiative. This option includes a sole source service contract with Compost Winnipeg to service additional self-haul compost locations throughout the city, to

further enhance accessibility to residents. It is recommended that this option be considered as a supplementary interim green cart service.

Compost Winnipeg has quoted $25,000 annually for self-haul of food waste (i.e. green cart materials) to 4R Depots and $135,000 for self-haul of green cart materials to up to 14 additional locations across the City, for a total of $160,000 for the recommended interim program. This is in addition to the Financial Incentives Compost Grant that Compost Winnipeg has received annually.

**Interim Service Enhancement Schedule**
It is anticipated that this interim organic waste diversion service can be implemented within 120 days of Council approval, including budgetary approval.

Organic Waste Processing Services Contract Development

Through RFP 895-2023, the Public Service hired professional consulting services to assist in the development of a service contract for green cart materials processing, and continues to work towards securing organic waste processing services to support a city-wide green cart program.

As per FM-004 and, under F1-011, the Asset Management – Organizational Governance Framework, and based on the marginal-to-critical risk associated with the Green Cart program, a Project Manager within Solid Waste Services should be assigned to deliver capital projects related to this new City service/program.

Green Cart Program Implementation Schedule

An organic waste processing facility must be constructed and commissioned before a city-wide green cart program can be operational. All other components (e.g. green cart delivery to all residences, curbside collection) can be completed within the time required for the construction of a facility.

Appendix C presents an estimated green cart program implementation schedule for planning purposes. This schedule considers City protocol/procedures in developing multi-year contracts for City services for the provision of organic waste processing at a merchant facility. Market sounding results support this schedule, with numerous potential service providers confirming estimated timelines for the development of an organic waste processing service contract, site permitting, and subsequent facility construction.

## Requested Changes

At a Reports Briefing on June 11, 2024, an earlier draft of this administrative report was reviewed by members of the Executive Policy Committee and the following revisions were requested:

- Include reference to this report's alignment to the Strategic Priorities Action Plan (Action 4.8).

**FINANCIAL IMPACT**

## Financial Impact Statement

**Date:**

**Project Name:**

**First Year of Program** **2024**

GREEN CART PROGRAM – PROGRESS OF PROGRAM DEVELOPMENT

| | 2024 | 2025 | 2026 | 2027 | 2028 |
|---|---|---|---|---|---|
| **Capital** | | | | | |
| Capital Expenditures Required | | $ - | $ - | $ - | $ - |
| Less: Existing Budgeted Costs | - | - | - | - | - |
| Additional Capital Budget Required | $ - | $ - | $ - | $ - | $ - |
| **Funding Sources:** | | | | | |
| Debt - Internal | $ - | $ - | $ - | $ - | $ - |
| Debt - External | - | - | - | - | - |
| Grants (Enter Description Here) | - | - | - | - | - |
| Reserves, Equity, Surplus | | - | - | - | - |
| Other - Enter Description Here | - | - | - | - | - |
| Total Funding | $ - | $ - | $ - | $ - | $ - |
| Total Additional Capital Budget Required | $ - | | | | |
| Total Additional Debt Required | $ - | | | | |
| **Current Expenditures/Revenues** | | | | | |
| Direct Costs | $ 13,333 | $ 2,102,267 | $ 2,132,472 | $ 2,163,741 | $ 2,195,076 |
| Less: Incremental Revenue/Recovery | - | 1,942,000 | 1,969,000 | 1,997,000 | 2,025,000 |
| Net Cost/(Benefit) | $ 13,333 | $ 160,267 | $ 163,472 | $ 166,741 | $ 170,076 |
| Less: Existing Budget Amounts | - | - | - | - | - |
| Net Budget Adjustment Required | $ 13,333 | $ 160,267 | $ 163,472 | $ 166,741 | $ 170,076 |

**Additional Comments:** *Direct costs assume the implementation of interim programs effective December 1, 2024 and include a budgetary amendment to Solid Waste Disposal Fund - 4R Winnipeg Depots - Non Professional Services of $25,000 plus annual inflationary adjustments of 2% and a budgetary amendment to Solid Waste Disposal Fund -Diversion - Non Professional Services of $135,000 plus annual inflationary adjustments of 2%. The increase to the waste diversion user fee of $9.00 will result in estimated additional revenue of$1,942,000 in 2025 plus inflation and growth for future years. The additional revenue will be transferred to the Waste Diversion Reserve to fund the acquisition of carts and kitchen pails. The actual transfers will be based on achieved revenues and may vary based on changes to economic growth and inflationary adjustments.*

Lucy Szkwarek, CPA, CGA
Manager of Finance and Administration

## CONSULTATION

This Report has been prepared in consultation with:

N/A

## OURWINNIPEG POLICY ALIGNMENT

This report is in accordance with the OurWinnipeg policies through
OurWinnipeg Goal: Environmental Resilience

Objectives:

- Prioritize the transition to a resilient, low-carbon future through demonstrated organizational and community leadership, and collaborative actions that mitigate and adapt to a changing climate.
- Minimize and divert waste from landfill.

Policies:

2.1 Climate Action Targets

- Achieve an overall greenhouse gas emissions reduction target of 20 percent by 2030 and 80 percent by 2050, relative to 2011, through partnerships with the community, businesses, governments and Indigenous leadership.

2.15 Circular Economy

- Advance Winnipeg's circular economy to support waste reduction.

2.16 Waste Minimization

- Improve and sustain performance of the waste reduction and diversion system.

OurWinnipeg Goal: Social Equity

Objectives:

- Build social cohesion through community development solutions, coordinated, effective partnerships, and responsive service delivery. Learn from community knowledge and leadership, work to be responsive to community needs, and align government processes, resources and services accordingly

Policies:

5.1 Equitable Service Access

Provide municipal services through a lens that promotes equitable access for all, with a focus on the youngest, oldest, and systemically disadvantaged members of the community.

5.6 Equitable Service Access

Welcome and support newcomers, and those who migrate from rural communities and reserves, through strategic collaboration and action that expedites service access and sense of belonging for residents.

## WINNIPEG CLIMATE ACTION PLAN ALIGNMENT

This report is in accordance with Winnipeg's Climate Action Plan through Strategic Opportunity #6 Waste Reduction and Diversion, and supports the following key directions:

- 6.1 Reduce Consumption and Increase Waste Diversion from Residential, Commercial and Industry (Primary Responsibility: Water and Waste Department).
- 6.2 Advance Winnipeg's Circular Economy to Support Waste Reduction (Primary Responsibility: Water and Waste Department)
- 6.4 Support Integrated Resource Recovery Opportunities (Primary Responsibility: Water and Waste Department)

Community Energy Investment Roadmap

This report aligns with the Community Energy Investment Roadmap recommendations for reducing greenhouse gas emissions associated with the waste management sector, and supports the following priorities and programs:

Section 4: Journey to a Net-Zero Winnipeg

The Big Moves:

Water and Waste: Overall waste generation is reduced and waste diversion to recycling and composting facilities is improved. (p.26)

Section 6: How to Achieve Our Goals:

Waste Management:

l. Organic matter in landfills decays over time, and can continue to release GHGs long after it is deposited in the landfilled. The most effective strategy in reducing these emissions is to reduce the amount of waste entering them. This can be achieved through a combination of waste reduction and waste diversion to composting and recycling facilities.

Program Area #9

9.1 A Circular Economy Strategy:

The City will develop a circular economy strategy that focuses on the ideas of zero landfill waste and using waste as a resource.

## WINNIPEG POVERTY REDUCTION STRATEGY ALIGNMENT

One of the guiding principles of the Poverty Reduction Strategy is to promote and maintain the welfare of all residents. By introducing a green cart program, the City is encouraging more waste diversion, which subsequently reduces landfilled waste and harmful emissions, and therefore, supports the efforts to clean up the environment and protect the welfare of Winnipeg residents.

## SUBMITTED BY

Department: Water and Waste
Division: Solid Waste Services
Prepared by: Ash Raichura, P.Eng.
Date: May 1, 2024

File No: G-299

Attachments:

Appendix A – Market Sounding Report (GHD, May 29, 2024)
Appendix B – Curbside Cart Collections Analysis Report (Dillon Consulting Limited, April 19, 2024)
Appendix C – Green Cart Program Implementation Schedule

Appendix C: Green Cart Program Implementation Schedule

| Starting Date | Status | Action | Details | Duration (months) | Result |
|---|---|---|---|---|---|
| Oct 26, 2023 | | Council Decision | Council approved to proceed with the development of a city-wide green cart program. | | Retain consultant and report back with collections analysis and interim options |
| Q3 2023 | Complete | Solicit technical support via RFP | Engineering technical advisor is needed to help develop Key Terms for procuring an organic waste processing service contract with a merchant facility. | 10 | Identify preferred engineering technical advisor and Key Terms for procurement |
| Q1 2024 | Complete | Award RFP | Successful proponent selected | | Award RFP for engineering technical advisor |
| Q2 2024 | Underway | Initiate Environmental Benefits Analysis | Estimate environmental benefits and potential monetization pathways for three processing options | 12 | Estimate value of environmental attributes associated with organic waste processing via the City's green cart program.<br>Inform opportunities for Green Cart program contributions towards the OurWinnipeg's Climate Action targets. |
| Q2 2024 | Underway | Develop Key Terms to initiate dialog with industry service providers | Market sounding and development of organic waste processing procurement Key Terms, including level of service, performance definitions, and vendor requirements. This activity will also help inform procurement model decisions. | 10 | Refined Key Terms for expressions of interest (EOI) /requests for qualifications (RFQ) and request for proposals (RFP). |
| Q1 2025 | | Report to Council | Public Service seeking Council acceptance of recommended procurement model and Key Terms. | | Authorization to proceed with procurement according to Key Terms. |
| Q1 2025 | | Issue RFQ for Merchant Facility | RFQ will help identify interested and eligible service providers, technologies, and potential locations for a merchant facility. | 18 | Identify short list of qualified bidders, and potential technologies and locations for merchant facility. |
| Q3 2026 | | Report to Council | Inform Council of responses to RFQ | | Short-list of qualified RFP bidders and facility locations. |
| | | | | | |
| Q3 2026 | | tender RFP for merchant facility | Write a request for proposals (RFP) for qualified bidders to Issue, evaluate, and recommend award of service contract for organic waste processing. | 18 | Identify preferred merchant facility service provider, technology, and location. Site location selection will allow for collections planning. |
| Q1 2028 | | Award Report to Council | Council approval required for multi-year contracts. | | Authorization to sign contract(s) |
| Q1 2028 | | Facility Construction | Process includes finalization of detailed design, and subsequent Provincial licensing | 32 | Construction of Compost Facility |

| Starting Date | Status | Action | Details | Duration (months) | Result |
|---|---|---|---|---|---|
| Q1 2030 | | Green Cart Program Promotion | Heavy promotion and education towards the new green cart service that the City will be providing to residents starting in late Fall 2030. | 6 | Engaged and informed residents excited to start using their new green carts. |
| Q2 2030 | | Green Cart Distribution | Distribution of green cart program materials to residents | 2 | Residents will be ready to divert food waste into their green carts. |
| Q3 2030 | | Facility Commissioning | Standard operating procedures for a new facility. | 2 | Start city-wide curbside collection of Green Cart materials. |