

Citizen feedback on Additional Residential Waste Diversion Programs

Recommendation

That Administration provide a report to the June 28, 2019, Utility Committee meeting on a final strategy including results of additional citizen engagement on:

1. Source Separated Organics as outlined in Figure 2.1 of Attachment 2 of the February 1, 2019, City Operations report CR_5827.
2. Additional waste diversion and reduction programs.

Previous Council/Committee Action

At the March 20, 2018, City Council meeting, the following motion was passed:

4. That Waste Services engage citizens on the implementation of potential additional waste diversion programs, report citizen feedback and input to Utility Committee in October 2018, and factor citizen feedback and input into the implementation of any additional waste diversion programs.

Executive Summary

This report focuses on the first phase on public engagement supporting the development of a new 25-year waste strategy. The report provides an overview of key input, aligned with the overall operational direction of Waste Services Organics Management strategy development (CR_6669). The report also highlight key areas where Phase 1 engagement has impacted overall program direction.

Report

In the June 2017 report CR_4483, Administration identified that the current solid waste program approach, if working optimally, could only yield a 73 percent residential diversion rate. The report further noted:

Bridging the gap between Edmonton's current waste diversion rate and its overarching goal requires a detailed and systematic review of all aspects of the integrated waste management system. A number of significant decisions will need to be made in the coming years to position Edmonton to reach the 90 percent goal.

In March 2018, City Council set up the strategy development work with the approval of the following:

1. That Administration review the scope and assumptions of the residential waste diversion metric, as outlined in the February 9, 2018, Office of the City Auditor report CR_5555 (Waste Services Audit) and return to Utility Committee by June 2018 with a recommendation on the diversion calculation methodology.
2. That Administration continue with targeted engagement and provide a report on the removal of grass, leaf and yard waste from the waste stream, the availability of alternate disposal options for leaf and yard waste, and further details on the proposed program, to Utility Committee in June 2018, and that Administration:
 - a. continue to collect grass clippings in 2018, pending results of the public engagement,
 - b. implement special collection on yard waste (eg. Christmas trees) in fall 2018.
3. That Administration proceed with initial planning for a source separated organics program for organic waste processing and collection, with planned implementation starting in fall 2020 for the units receiving curbside collection.
4. That Waste Services engage citizens on the implementation of potential additional waste diversion programs, report citizen feedback and input to Utility Committee in October 2018, and factor citizen feedback and input into the implementation of any additional waste diversion programs.

In addition, Utility Committee passed the following motions in June 2018:

- That Administration, as part of the Waste Management Strategy Update, provide an analysis of a Zero Waste target and associated calculations and strategy implications for residential, multi-family and non-residential waste and that consideration of a zero waste target be included in engagement exercises that will be done to support the waste management strategy update.
- That Administration look at current practises in other jurisdictions that have been used to reduce and/or eliminate the use of single-use plastics, including but not necessarily limited to plastic bags, cups and straws, and report back on mechanisms the City could use to make further progress on this issue.

As a result of internal reviews, and the work directed by Council, the overall strategic work was expanded to include:

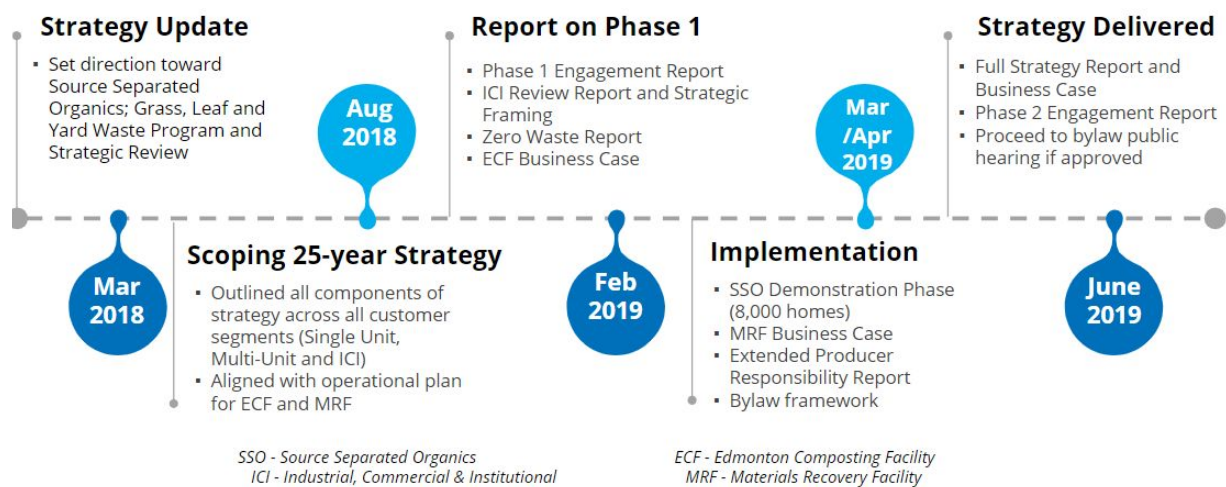
- Consideration of the City's non-regulated business line which currently includes commercial tipping, commercial collections, recycling of construction and demolition waste and aggregate recycling. Building on recent input from the City Auditor, the Program and Service Review and a Cost of Service Study, it is

recommended that an evaluation of these business lines and an overall policy review form part of the strategic work. The Industrial, Commercial and Institutional Sector Strategic Review report CR_6217 outlines the approach to the non-regulated businesses within the overall strategy.

- An overall waste reduction strategy that builds on the motions requiring consideration of restrictions for single-use plastics, a food waste reduction program and work underway on Extended Producer Responsibility.

Key milestones of the strategy development are captured below:

25-Year Strategy: Key Milestones



In August 2018, Waste Services outlined the components of a full strategic review (as outlined in Figure 1 below). In addition to residential collection changes, the Waste Services strategy project is an integrated effort that will combine engagement with operation, financial and environmental factors to revise:

- The overall objectives of the Waste Strategy including consideration of adopting the goal to become a “Zero Waste” City (as presented in City Operations report CR_6132).
- Adoption of a program to achieve source separation of waste across all sectors.
- Broadening waste diversion strategies into the multi-unit sector, including setting a targeted diversion goal for this sector and determining collection programs and associated communications and educational programs needed.
- Increasing waste diversion in the non-residential sector, including setting a targeted diversion goal for this sector, and determining the appropriate path for the City to maximize its impact.

- Implementation of additional waste prevention and reduction initiatives, including potential programs to regulate single-use plastics and reduction of food waste.
- Aligning strategic components with operational components, including development of an organics management program which ensures optimal efforts to collect and process organic waste.
- Coordinating with the Energy Transition Unit to explore opportunities to address climate change as per the Edmonton Declaration.
- Collaborating with Regional Partners.

This report provides an overview of the extensive citywide public engagement activities which advanced discussion of potential changes to the waste program as part of the Phase 1 strategy development. This initial phase of public engagement gathered input from the following sectors:

- Residents (single unit and multi-unit residents, including renters and homeowners)
- Multi-unit stakeholders (condo boards, property owners and managers, building managers, management companies and property service providers)
- Non-residential stakeholders (Industrial, Commercial and Institutional sector organizations, industry associations, waste businesses and haulers)
- Internal stakeholders (City of Edmonton employees, operationally impacted Branches and Departments, including Waste Services employees)

As outlined below, strategy work continues to be organized around key focus areas, which were brought forward as part of City Operations report CR_4483. The report highlighted challenges in the current strategy and began to suggest a revised strategic direction.

Figure 1: Scope of Strategy Development Work

25-year Strategy Development	Focus Areas (all sectors):		
	<ul style="list-style-type: none">→ Do we have the right technology / processes in place to reach 90 percent diversion?→ Are we having the right conversations with citizens?→ Are customers receiving good value for money?→ Are we working effectively with the private sector?→ Are we maximizing opportunities to recover, reduce and reuse materials from the waste stream?→ Do we have the right governance in place to effectively and transparently manage all components of the system?		
Single Unit Residential Sector	Multi-Unit Residential Sector	Industrial, Commercial and Institutional Sector	Internal Stakeholders

Assessment of opportunities for regional integration
Proposed revisions to all relevant City policies and bylaw
Revised Business Performance Measures (KPIs) / Sustainability Measures (GHGs)

What We Heard - Phase 1 Strategy Engagement

Input from Phase 1 engagement and the respective implications for strategy development and operational integration are assessed against each of the Strategic Focus Areas and the overall system goal of achieving 90 percent diversion of waste from the single unit residential sector. The engagement process received more than 20,000 points of input (survey and drop-in) to help refine the proposed process, as originally proposed in August 2018. A What We Heard report from Phase 1 engagement is included in this report as Attachment 1.

Focus Area #1: Do we have the right technology/processes in place to reach 90 percent diversion?

As outlined here and in the Organics Management report CR_6669, Phase 1 strategic work considered a new approach to organics management. New configurations of the curbside collection were considered in alignment with business plan development for new organics processing infrastructure.

Based on both streams of work, the operational recommendation is that the City decommission the existing composting facility at the Edmonton Waste Management Centre, and construct a new organics processing facility that will digest organic waste and produce renewable natural gas in the process.

Changes to curbside collection will be aligned with this operational recommendation. Public engagement feedback has shaped the go-forward recommendation on a source-separation program and a revised proposal for a grass, leaf and yard waste program. The proposed set out, including a revised grass, leaf and yard waste program is included in Attachment 2.

Pending approval by Utility Committee, the proposed set-out will be assessed through a demonstration program beginning in April 2019. In addition, results from the initial engagement activities will be further reviewed in subsequent engagement activities to form the basis of the final recommendations in a Source Separated Organics business case which will be presented in June 2019.

Focus Area #2: Are we having the right conversations with citizens?

Input from Phase 1 engagement is impacting the overall design of a new waste set out for waste collection. Input from public engagement has shaped the proposed scope of the demonstration project which Administration will advance in spring 2019, and which is outlined in Attachment 2.

Refinements to proposed set out based on public engagement

The demonstration project which will begin in Spring 2019 is not set up as a precondition for the final source separated organics business case. It will function as a demonstration site to allow residents and Waste Services to test program assumptions and make adjustments prior to citywide implementation. Key program revisions and considerations resulting from the engagement include a recommended delay to the citywide launch of the Grass, Leaf and Yard waste program to the fall of 2020 in conjunction with the launch of the full, new set out program. There were strong concerns raised during engagement about the original parameters of the program. Revised programming will be tested to inform the citywide launch. Changes include:

- Additional collection of seasonal yard waste will be scheduled during anticipated high volume periods in the spring and fall. Waste Services is proposing to run two yard waste collections during each season. Based on preliminary results, it is possible that additional collections will be considered in some areas.
- Allowing residents to “top-up” their green carts only with grass and yard waste as required. Ultimately, once fully launched and enforced, grass and yard waste will be restricted from the residual garbage collection (black bags or future black carts) and grasscycling will continue to be promoted as a preferred strategy.
- Benefits of the revised program recommendations include:
 - Alignment with both engagement data and the operational direction being advanced for organics processing.
 - Convenience to residents who expressed the need for additional seasonal pickups and their ability to “top-up” their green carts with grass and yard waste as needed. A responsive program will improve participation rates and overall waste diversion.
 - Ease of allowing the “top-up”, which supports the development of a routine at the household level to consistently participate in the program and reduce contamination levels in the residual waste stream.
 - Dedicating specific collections during the high volume periods will ensure the waste stream, which is not compatible with Anaerobic Digestion, can be segmented to allow for alternative processing.

ADDITIONAL FEEDBACK HIGHLIGHTS FROM PHASE 1 ENGAGEMENT

Multi-unit residences

In addition to scoping changes to single unit residences in Phase 1, engagement also focused on multi-unit residences. Here questions were raised about the feasibility of moving towards source separated organics within multi-unit buildings. While there was some desire to do more, multi-unit residences respondents noted key challenges including issues of contamination, infrastructure challenges, a lack of space and the lack of responsible manager on-site.

Changes to source separation for multi-unit residences are not anticipated to occur until program deployment across single unit residences are completed. This will allow for extra time for property owners to make necessary structural changes and for Administration to work with property owners in customizing an approach to support educational programs within these properties.

Industrial, Commercial and Institutional sectors:

An overview of feedback on the Industrial, Commercial and Institutional Sectors is contained in Focus Area #4 (below) and in CR_6361: Industrial, Commercial and Institutional Sector Strategic Review - Update Report.

Focus Area #3: Are customers receiving good value for money?

Residents participating in Phase 1 engagement questioned how the cost of services will go up, down or stay the same with a change in the system. The engagement team heard questions about why people producing very little waste would pay the same rate as those who produced a lot, or why having to do more work such as sorting is less service than today with no cost reduction or savings and would be impacted by an annual rate increase. These residents compared Edmonton's rates with those in other municipalities and felt Edmontonians already pay more than their counterparts in Calgary and other major centres.

In terms of additional costs, the proposed rates for 2019 to 2022 include projected costs of the new system including provision of carts to residents. Ensuring ongoing communication about costs and the value of the Edmonton system and its utility structure will be a key consideration as the strategy is implemented.

Another key challenge based on Phase 1 engagement is consideration of optionality (offering variable rates) within the new system. Approximately 50 percent of respondents agreed that residents need some incentive to participate in new programming, for example by allowing for a lower rate if a smaller cart is used, or by providing an option to pay more for an extra cart or set out allowance if required.

There was also not an overwhelming indicator of choice in terms of new cart size. While the larger number of people supported a larger (240 litre) black cart (43 percent), a significant number (approximately 27 percent) indicated a preference for a smaller black cart (110 litre). In general, people with smaller households and seniors indicated a preference for the smaller cart based on the waste they produce. In addition, seniors and those with mobility challenges indicated that they would find the smaller cart to be more easily maneuvered.

In launching the demonstration program, both carts will be assessed in a manner which is risk free to participating residents (residents will be allowed to set out additional waste that does not fit in their black carts). By testing this option, and interacting with residents, Administration can determine whether a choice between sizes will be desired as part of the citywide program, or whether, there is a clearer indication in favour of one cart size. Waste Services will also simultaneously conduct a rate study to determine the best options for supporting optionality within a rate-based system. A recommendation will be brought forward as part of the overall strategy proposed in June 2019.

Focus Area #4: Are we working effectively with the private sector?

As outlined in the August 2018 report to Utility Committee, there are concerns about the most effective way for the City to impact diversion and waste reduction in the non-regulated sectors (industrial, commercial and institutional). During Phase 1, consultation with members of the Industrial, Commercial and Institutional (ICI) sectors, along with preliminary input from industry representatives and members of the non-profit community who operate waste reduction programs, helped provide an external lens into the effectiveness of current efforts in this sector.

While there is generally positive support for having the sectors play a larger role in waste diversion and reduction, to date, the City's impact here has been minimal. There is a strong desire for the City to play a much larger role in education, advocacy and regulation of waste management across the sector.

In addition, ICI respondents indicated moderate to strong support for activities consistent with waste reduction, reuse and prevention. A more detailed overview of ICI input is provided in report CR_6361.

Focus Area #5: Are we maximizing opportunities to recover, reduce and reuse materials from the waste stream?

As a result of targeted motions on single-use plastics, food waste reduction, Zero Waste targets (report CR_6132) and Extended Producer Responsibility, Waste Services is gaining a growing understanding of public perceptions around the potential for a broader waste reduction strategy that will come forward as part of the overall Waste Strategy in June 2019 (as outlined in Figure 1).

As Phase 2 engagement proceeds, consideration of initiatives such as food waste reduction or single-use plastic regulations will be captured under a broader umbrella as part of an overall Waste Reduction Strategy which will form part of the overall strategy document. Targeted goals for waste reduction initiatives have been set at seven to 10 percent of the overall diversion goal.

Advancing a Waste Reduction Strategy

Some highlights from the public engagement include:

- A majority (66 percent of general respondents, 77 percent of Edmonton Insight respondents) agreed that they would be “willing to support restrictions or elimination of single-use plastic items in Edmonton.” Similarly, 67 percent of ICI respondents to an online survey and 65 percent of ICI respondents to a telephone survey would support restrictions.
- Approximately 50 percent of residential sector respondents and 65 percent of ICI sector respondents are interested in participating in a food waste prevention or recovery program if programs are available.
- Approximately 60 percent of residents are interested in participating in a clothing and household fabrics recycling program.
- More than 50 percent of ICI sector respondents are interested in seeing the City advocate for, or regulate if possible, Extended Producer Responsibility.

Supporting Research

Public input is considered in conjunction with ongoing consideration of best practice research conducted internally and through stakeholders.

Single-Use Plastics

Waste Services has conducted a jurisdictional scan and reviewed jurisdictional research from Waste Free Edmonton (see Attachment 3) which makes it clear that cities who have advanced restrictions, bans or fees associated with materials such as straws, plastic bags, styrofoam or disposable cups are achieving significant results from these initiatives.

While policy/regulatory moves by Canadian cities are emerging, there is a growing body of research that shows strong results from cities across the United States and Europe that are seeing positive impacts on waste reduction, reduced litter and sustained public support for waste reduction efforts including the following:

- Fees attached for those requesting the materials
- Restrictions or bans on specific items or materials

- Educational initiatives (generally launched along with a primary fee or material restriction/ban)

Food Waste

The Commission for Environmental Cooperation released a report in March 2018 stating that Canada is one of the biggest wasters of food on the planet. The agency found that from farm to table, 396 kilograms of food annually per capita is wasted (food fit for human consumption that is discarded due to intentional behaviors) or lost (spilled or spoiled before it reaches its final destination). The *Characterization and Management of Food Loss and Waste in North America White Paper* documents adverse socio-economic and environmental impacts of food loss and waste. The Commission's report also provides a closer examination of the primary causes and potential solutions to reduce problems related to overproduction, product damage, lack of standardized date labeling practices, lack of cold chain infrastructure, rigid food grading specifications and varying customer demand and market fluctuations.

The Commission's recommendations focus on the middle part of the food chain where Canada's groceries are collected, processed, distributed and prepared demonstrating that distributors, retailers, food-rescue organizations and food service providers have a critical role to play in realizing solutions.

Across the globe, countries and communities are developing innovative solutions to address food loss and waste. For example, in 2016, France became the first country in the world to ban supermarkets from throwing away or destroying unsold food, forcing them instead to donate to charities and food banks. In August 2017, Ontario approved a Community Food Program Donation Tax Credit for Farmers, which enables the Ontario Association of Food Banks to work with farmers and food companies to rescue good, surplus food from being wasted and ensure it gets to their 125 member food banks and 1,100 affiliate hunger-relief agencies across the province.

Finally, some municipalities (Vancouver in 2003 and Toronto in 2010) have developed comprehensive and integrated Food Strategies to enable each city's leadership to move toward a healthier and more sustainable food system.

During Phase 2 public engagement (February 10 to April 15, 2019) more detailed consideration of potential steps will be considered by residential and non-residential sectors about which single-use items/materials might be included as part of a regulatory approach for Edmonton, which policy direction should support the regulations and what criteria should be used to decide item or business exemptions.

Based on best practice research, the scope of materials considered for restriction will include: plastic straws, plastic bags, styrofoam and disposable cups. Further review of the *Municipal Government Act*, R.S.A. 2000, c. M-26 and the *City of Edmonton Charter, 2018 Regulation*, Alta Reg 39/2018 will be necessary to evaluate the scope of the City's power to regulate plastic waste. If the City does have authority to regulate plastic waste, Waste Services may proceed to consider appropriate regulatory frameworks with enforcement mechanisms.

In terms of food waste, Waste Services will also build on engagement programs from the ICI and not-for-profit sectors to propose potential program directions.

In Phase 2 this work will begin to explore the potential for building, strengthening and facilitate new partnerships. In addition, as Waste Services begins to prepare for program changes, more must be done to engage industry and community partners to ensure that implementation planning goes smoothly across all areas.

Focus Area #6: Do we have the right governance in place to effectively and transparently manage all components of the system?

The City has established a governance process to ensure proper oversight and management of the waste strategy. This includes additional levels of oversight by the Executive Leadership Team as well as a cross-departmental governance committee.

In addition, the City plans to be an early adopter of the source separated organics program as the lead ICI representative. Work is underway to scope out the parameters of this program to ensure the City is ready to lead the implementation in addition to being a program provider. Administration is also engaging with the Energy Transition Advisory Committee in areas of the waste strategy that have significant greenhouse gas emissions impacts, such as the anaerobic digestion process.

The What We Heard Report highlights engagement conducted with a broad range of City staff. Staff from Waste Services and various branches are helping to refine programming. In Phase 2 engagement and the launch of a demonstration phase, change management committees and internal staff focus groups will be established to support citywide program deployment and will ensure ongoing communication and input into program changes.

System governance will also consider potential regional implications of the waste strategy including expanding upon current participation with the Edmonton Metropolitan Regional Board to advance waste components of a regional servicing plan. More direct consultation will be incorporated in Phase 2 efforts as program

directions take shape.

Next Steps: Phase 2 Public Engagement:

Public engagement planning for Phase 2 began in mid-December 2018. Topics for engagement will include waste sorting, set out, and disposal options, waste reduction and reuse programs, food waste prevention, and single-use plastics. Engagement tools and tactics will include one or more online surveys, public drop-in sessions, and targeted stakeholder workshops. Comprehensive communications and advertising tactics will be used to promote the public-facing engagement activities.

An extensive public engagement program will continue to gather input from the following sectors:

- Residents (single unit and multi-unit properties)
- Multi-unit stakeholders (condo owners, property and building managers, management companies, condo boards, property service providers)
- Non-residential stakeholders (Industrial, Commercial and Institutional sector organizations, waste haulers and business and industry associations)
- Internal stakeholders (all City staff, including Waste Services employees)

Based on results from Phase 1 public engagement (October 1 to November 30, 2018), Administration will be employing a more intensive, targeted approach to gather input from groups who were under-represented, specifically multi-unit stakeholders, multicultural organizations and accessibility organizations.

Outcomes from Phase 2 will also include the establishment of an advisory committee, comprised of stakeholder representatives across multiple sectors, who will assist in providing Waste Services with input into future program and service changes across all sectors.

Corporate Outcomes and Performance Management

Corporate Outcome(s): Edmonton is an environmentally sustainable and resilient city			
Outcome(s)	Measure(s)	Result(s)	Target(s)
Edmonton is an environmentally sustainable and resilient city	Single Unit Residential Diversion Rate	2017 - 39%	2019 - 50%
Edmontonians are connected to the city in which they live, work and play	Increased engagement with multi-unit and non-residential stakeholders - Increase amount and intensity of Multi-Unit Non-Residential Phase 2 Participation	Multi-Unit: 120 (building owners and managers) Non-Residential: 673 organizations	Multi-Unit: 250 (property residents and building managers) Non-Residential: 750 organizations

Risk Assessment

Risk Element	Risk Description	Likelihood	Impact	Risk Score (with current mitigations)	Current Mitigations	Potential Future Mitigations
Project Management	SSO demonstration (demo) phase. Issues occurring in the demo phase cause questions about the overall strategic direction.	3 - possible	2 - moderate	6 - low	Participants in the demo phase will be provided with extensive information to help facilitate participation. Extra waste will be collected during demo phase and participation will not be enforced (thus low risk for participants)	Based on feedback during demo phase, program adjustments can be made and will be communicated to participants.
Public Perception	Information gathered in engagement is not seen as reflected in program outcomes/or representative of input	1 - rare	3 - major	3 - low	Information from engagement is being provided in an transparent manner in Phase 1 and will be so for Phase 2. Programs adjustments have been made in a transparent manner.	It is possible that further program adjustments will need to be made based upon Phase 2 input. This will be fully disclosed.
Public Perception	Clear preferences stated in engagement are not included in final strategy	3 - possible	3 - major	9 - medium	Engagement is fulsome and transparent. Waste Services is clear about the information received and how it has impacted the strategic direction and why decisions have been made.	Ongoing communication to highlight the engagement, use engagement results to shape program decisions and communication to be clear as to the path followed in decision-making.

Attachments

1. Time to Talk Future of Waste - What We Did and What We Heard - Summary Report
2. Source Separated Organics Scoping - Demonstration Phase
3. Single-Use Plastics Laws Jurisdictional Scan

Others Reviewing this Report

- T. Burge, Chief Financial Officer and Deputy City Manager, Financial and Corporate Services
- C. Owen, Deputy City Manager, Communications and Engagement
- A. Laughlin, Deputy City Manager, Integrated Infrastructure Services
- P. Ross, Acting Deputy City Manager, Urban Form and Corporate Strategic Development
- R. Smyth, Deputy City Manager, Citizen Services