What We Heard Report

Industrial, Commercial and Institutional (ICI) Waste Roadmap

Phase One Engagement

September 2025

SHARE YOUR VOICE
SHAPE OUR CITY

Edmonton

Executive Summary

The City of Edmonton is advancing the development of a four-year **Industrial, Commercial and Institutional (ICI) Waste Roadmap (2027–2030, inclusive)** as part of its 25-year Waste Strategy and broader commitment to a circular economy. Given the ICI sector's substantial contribution to Edmonton's overall waste generation, this Roadmap focuses on two priority streams: construction and demolition (C&D) and food and organics (F&O). The aim is to identify and implement practical and co-created actions that support systemic waste reduction and diversion.

Recognizing that the City's role in the ICI sector is not as a direct service provider but as a facilitator and potential regulator, the Roadmap initiative emphasizes collaboration with private sector organizations, industry associations and institutions.

The engagement process was designed to foster shared responsibility, generate actionable insights and build trust and relationships with interest-holders while aligning with City policies and sustainability goals.

What We Heard

Through the first phase of engagement, participants across the C&D and F&O waste streams shared clear, candid and constructive feedback. Interest-holders expressed a strong willingness to collaborate but emphasized the need for meaningful support, phased implementation and practical tools tailored to the diverse capacities of consulted groups and organizations within the ICI sector. Their feedback uncovered both immediate barriers to and long-term opportunities for transformation within Edmonton's ICI waste system.

Participants also helped develop and categorize options on an impact-effort matrix, identifying both high-priority "big projects" as well as more accessible "quick wins". All these insights, along with findings from our literature review and jurisdictional scan now form the foundation for the next phase of engagement for Roadmap development.

For more information, refer to the corresponding **Section 3.0 (What We Heard)**.

Key themes across waste streams:

- Consistent support for financial incentives while also acknowledging that regulator action would ultimately be necessary.
- The need for education, behaviour change tools and messaging to normalize reuse, reduction and waste diversion.
- Strong support for City leadership in setting clear expectations and coordinating cross-sector collaboration between the City, businesses, non-profits, haulers and others in the ICI sector.
- Phased, flexible implementation that supports organizations of all sizes.
- The need for robust data collection and transparent reporting across and between waste generators, haulers, processors and the City to allow for informed and collaborative decision making and drive future policy decisions.

For a glossary of terms used in this document, refer to **Appendix A**.

Construction and demolition stream

C&D participants suggested limited space on site to sort and a lack of demand for salvaged materials, limited understanding or training in deconstruction and increased costs associated with project timelines or labour were the biggest barriers to reducing or diverting construction and demolition waste.

The following opportunities or ideas were well supported through the first phase:

- The City could take a leadership role to support market scale up and transformation, including leading by example through procurement for new construction or City-led demolition projects.
- Incentives for deconstruction or construction waste diversion projects, including reduced permit fees, property tax rebates, or grants to offset the cost of deconstruction over traditional demolition.
- Grants to support secondary market capacity development and strengthen reuse markets.

For more information about this stream's feedback and prototypes, refer to **Section 3.1 (What We Heard — Construction and Demolition)**.

Food and organics stream

F&O participants identified the cost for collection and additional labour to sort materials, potential contamination due to improper sorting by employees or customers and limited space for infrastructure like collection bins as sorting their organic waste. Best-before dates and concerns around liability for donating food were identified as barriers to improving food rescue.

The following opportunities or ideas were well supported through the first phase:

- Toolkits, signage and an online directory of service providers made public to help businesses make informed decisions.
- Financial support for infrastructure (collection bins) or service provision (collection/processing) could help businesses start source separation.
- Grants for food rescue organizations' day-to-day operations to strengthen Edmonton's food rescue network.
- Source separation bylaw requiring businesses to separate their organic waste.
- Transparency across haulers through reporting requirements or business licensing.

For more information about this stream's feedback and prototypes, refer to **Section 3.2 (What We Heard — Food and Organics)**.

How We Engaged

From February 26 to May 19, 2025, the City delivered the first phase of engagement at the "Create" level of the City of Edmonton's Public Engagement Spectrum. This is the second-highest level of participation, where interest-holders contribute directly to the design of prototype concepts. This level of engagement reflects the City's commitment to ensuring that the Roadmap is both practical and grounded in the lived realities of those who work within Edmonton's ICI waste systems. The below table summarizes the engagement methods and total participation in the phase.

For more information, refer to the corresponding **Section 2.1 (How We Engaged)**.

Table. Participation by engagement method.

Engagement Method	Dates	Participation
Experience Mapping Interviews (x14)	February 26 – March 31, 2025	14
External ("Data Walk") Workshops (x4)	March 3 – 12, 2025	60
Internal (Staff) Workshops (x2)	April 22 – 24, 2025	35
Online Questionnaire	April 17 – May 19, 2025 (inclusive)	57
Prototyping Workshops (x2)	May 8 – 9, 2025	41
	Total participation across methods	**207**

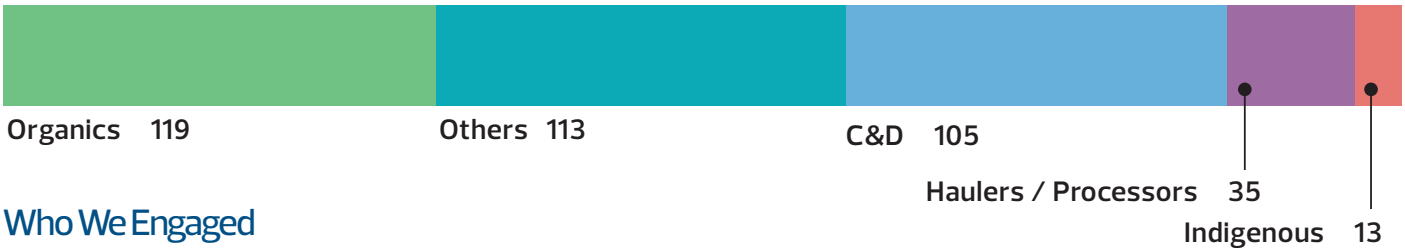

Figure ES1.
Composition of phase one engagement external outreach.

Who We Engaged

The City reached out to 434 interest-holders, 385 of who were external to the City of Edmonton (**Figure ES1**). 186 unique participants were engaged through interviews, workshops and an online questionnaire. External participants included representatives from businesses, industry associations, Indigenous organizations, nonprofits and food systems actors. Internal participants came from a range of City departments, with significant involvement from the City Operations and Waste Services teams.

The City used a Gender-based Analysis Plus (GBA+) approach to reach out and include various equity deserving groups. While participation from these groups was limited in the first phase, more tailored outreach strategies are being explored to hear from these groups for the second phase of engagement.

For more information, refer to the corresponding **Section 2.2 (Who We Engaged)**

What's Next

Using the ideas and prototypes created by participants in the first phase, the project team will now review the options and determine how realistic each one is to put into action. Select actions will be refined and brought forward for further input during the second phase of engagement, tentatively scheduled to begin in Q4 2025 and continue into Q1 2026.

This next phase will operate at the "Refine" level of the City's engagement spectrum and will involve both returning and new participants in the process.

Following the second phase, the Roadmap will be finalized and presented to Edmonton City Council, with the goal of approval and implementation beginning in 2027.

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Acknowledgment

Land Acknowledgment

The City of Edmonton acknowledges the traditional land on which we reside, is in Treaty Six Territory. We would like to thank the diverse Indigenous Peoples whose ancestors' footsteps have marked this territory for centuries, such as nêhiyaw/ Cree, Dene, Anishinaabe/Saulteaux, Nakota Isga/Nakota Sioux and Niitsitapi/ Blackfoot peoples. We also acknowledge this as the Métis' homeland and the home of one of the largest communities of Inuit south of the 60th parallel.

It is a welcoming place for all peoples who come from around the world to share Edmonton as a home. Together we call upon all of our collective, honoured traditions and spirits to work in building a great city for today and future generations.

Participant Acknowledgment

The development of the **Industrial, Commercial and Institutional (ICI) Waste Roadmap** is guided by the City of Edmonton's Zero Waste Framework, which aims to transition Edmonton toward a zero waste future by building shared responsibility across sectors. The insights shared by interest-holders in the ICI sector are essential to understanding current challenges and identifying practical and innovative solutions for waste reduction, diversion and circularity in Edmonton.

We would like to sincerely thank all participants who contributed their time, expertise and perspectives throughout phase one of the engagement process. Their input will inform the direction of the Roadmap and will help shape actions to reduce or divert waste from the non-residential sector, specifically construction and demolition and food and organic waste.

1.0
INTRODUCTION

1.0 Introduction

1.1 Purpose

The **Industrial, Commercial and Institutional (ICI) Waste Roadmap Engagement** is a vital step in moving forward the City of Edmonton's 25-year Waste Strategy. Recognizing the growing community expectations for sustainable waste management practices, this initiative specifically targets the ICI sector, which generates a significant portion of the city's overall waste. By focusing on this sector, the City of Edmonton ("the City") is co-creating a four-year ICI Waste Roadmap ("the Roadmap") for 2027 to 2030, inclusive.

The Roadmap will align with existing municipal policies, programs and engagement outcomes, while building on the successes that have been achieved in residential waste management. This document captures and discusses the feedback shared by interest-holders who participated in the first phase of the Roadmap's engagement process, which ran from **February 26 to May 19, 2025**. A second phase of engagement, which will explore the options emerging from this phase, is projected to begin in Q4 2025.

The Roadmap engagement process is guided by a set of objectives designed to ensure the resulting direction is practical and strategic. The objectives of the engagement are to:

- Validate the City's current understanding of sector-specific practices and challenges.
- Identify gaps and opportunities for improvement.
- Gather feedback to determine fit with the City's waste reduction and diversion goals.
- Build collaborative relationships that foster trust, shared responsibility and regulatory confidence among industry.
- Raise awareness and enhance knowledge-sharing about waste management within Edmonton to ensure the sector is better equipped to innovate towards systemic change.

Together, these objectives create a foundation for a coordinated approach guided by the ICI sector that will help accelerate Edmonton's transition towards a zero waste future. Through the engagement, the City aims to create a strong pathway to a future where the ICI sector actively contributes towards a more resilient, sustainable and circular economy for all Edmontonians.

1.2 Background

In 2019, the City adopted its **Zero Waste Framework** (**Figure 1**), where products are designed and managed to reduce and ultimately eliminate waste and conserve or otherwise recover resources. The Zero Waste Framework lists different ways to manage waste in order of most to least preferred:

- Rethink/redesign, reduce and reuse focus on preventing waste from being created. These create the most environmental, economic and social benefits.
- Recycle/compost and recovery focus on keeping waste out of landfill. These actions aim to turn waste materials into new products or energy.
- Residuals management focuses on waste that cannot be recycled, composted or recovered. This includes landfilling.

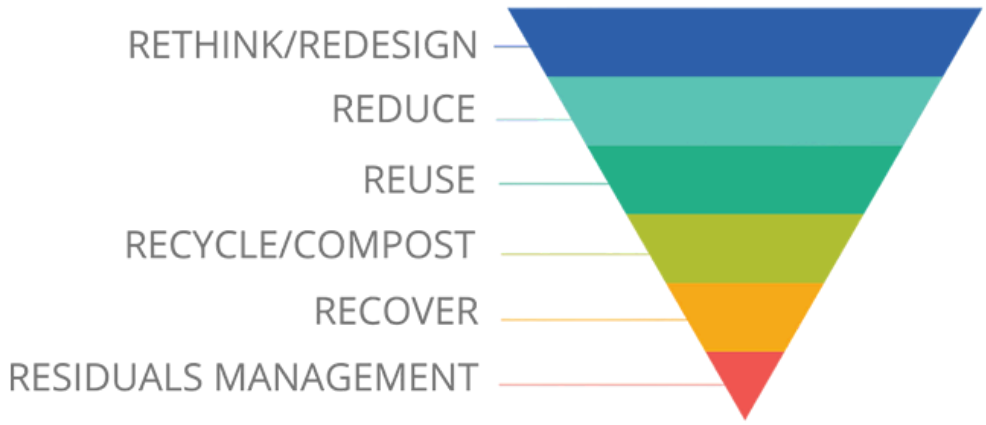

Figure 1. *The City of Edmonton's Zero Waste Framework.*

Unlike residential waste collection, the City does not directly provide waste services to the ICI sector. Instead, it acts as a facilitator and a potential regulator. This means the City must work closely with private companies, industry groups and institutions. Building these partnerships is key to understanding the sector's challenges and opportunities and to taking action together to reduce waste. The Roadmap will encourage innovation by working with and drawing upon the strengths of current and future partners in Edmonton and the region.

The engagement process collected feedback from interest-holders to guide the design of the four-year plan. It focused on two main waste streams: construction and demolition (C&D) and food and organics (F&O). These are priority areas with a strong potential to help meet the waste diversion and reduction goals set in the City's 25-year Waste Management Strategy.

Within City administration, internal coordination has helped to identify solutions to fill policy gaps and realize practical actions that align with broader municipal goals. Externally, engaging the business community, industry associations and institutions in the region was vital to gain support, address specific barriers and continue to build sustainable waste management practices for the ICI sector.

2.0
ENGAGEMENT APPROACH

2.0 Engagement Approach

Interest-holding groups were invited to contribute feedback towards a new Roadmap document in the first phase of the engagement process, held from February 26 to May 19, 2025.

This first phase was delivered at the Create Level of the **City of Edmonton's Public Engagement Spectrum (Figure 2)**, with participants first identifying barriers and opportunities to improve their own waste reduction and diversion and then delivering co-created prototypes to support the Roadmap development. The planned second phase of engagement will be delivered at the Refine level, where these options and prototypes will be further refined to align with both organizational priorities and practical feedback from participants.

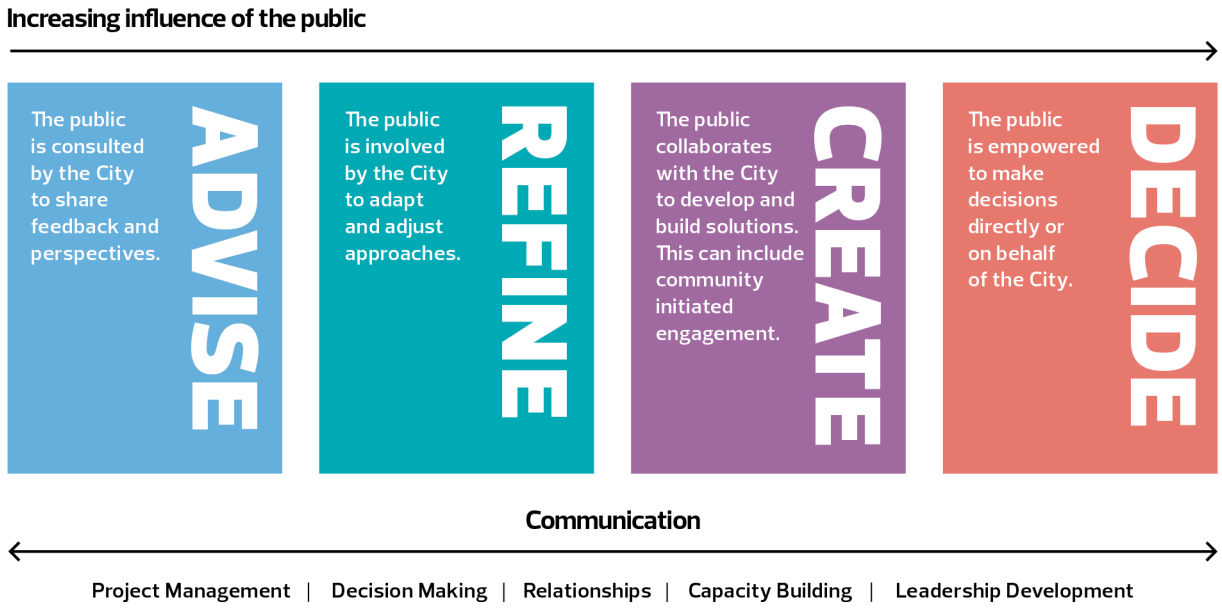

Figure 2. *The City of Edmonton's Public Engagement Spectrum.*

2.1 How We Engaged

2.1.1 Approach

The first phase of engagement explored interest-holder perspectives on the ICI waste sector in Edmonton and the surrounding region to understand barriers and opportunities to improve waste management. It was supplemented with a **policy spectrum (Figure 3)** of actions ranging from voluntary to mandatory tools that the City could use in support of the Zero Waste Framework. The policy spectrum explores education, partnership and community development, economic tools and regulation.

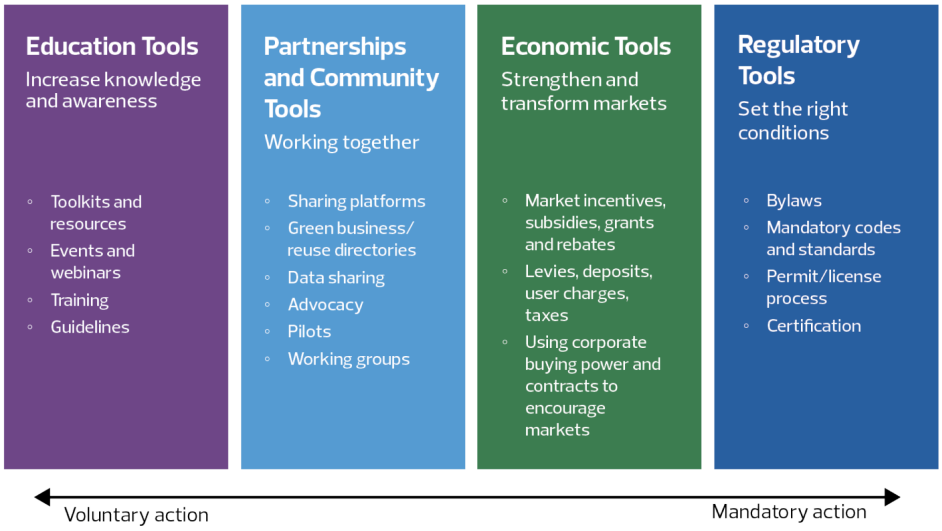

Figure 3. *The policy spectrum used to scope possible municipal action during the first phase of engagement.*

The engagement process was deliberately structured using the **"double diamond" design process model (Figure 4)**. Popularized by the British Design Council in 2005, the model shows how good ideas are developed by first exploring a wide range of perspectives to understand the problem, then narrowing in on the key issues. From there, new ideas are generated to address those issues and the best ones are refined and tested to find what works.

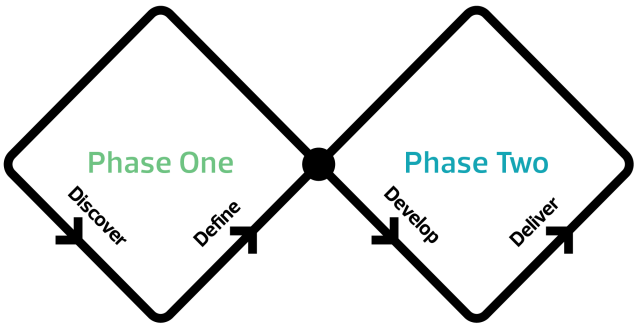

Figure 4. *The "double diamond" design process.*

2.1.2 Methods

Interest-holders participated though a number of complementary engagement methods. The feedback generated for each of C&D and F&O streams is discussed further under **Section 3.0**. 186 unique participants, drawn from City administration, industry, institutions and non-governmental organizations, provided their perspectives into the engagement process. With 207 total participants across all methods, there was some **duplicate participation** in the process. For example, an interviewee may have also completed the provided questionnaire. Engagement opportunities, date ranges and corresponding participation rates are captured below **(Table 1)** and are then described in the order in which they appear in the table.

Engagement Opportunity	Dates	Participation
Experience mapping interviews (x14)	February 26 - March 31, 2025	14
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Table 1. *Phase one participation by engagement opportunity.*

2.1.2(a) Experience mapping interviews

A series of experience mapping interviews were conducted to explore and understand the barriers and opportunities encountered by those working in the C&D and F&O sectors on an individual level. Interviewee questions focused on their lived experience with day-to-day operations and the experiences of interacting with the municipal waste system.

14 interviews were conducted across both thematic areas, including **four** haulers and processors (two C&D, one F&O, one both), **nine** F&O waste generators or food rescue organizations and **one** C&D waste generator.

2.1.2(b) External (data walk) workshops

External interest-holders were invited to attend one of a series of data-driven workshops (“data walks”) in March 2025. Each workshop displayed waste data graphs to help develop a shared understanding of barriers and opportunities to improve waste management in Edmonton. Participants first shared comments and questions about the data in small groups. They then came together as a large group to discuss the data and explore how the indicators work together or conflict with each other.

29 participants attended the C&D data walks, held on March 4 and 11, 2025 and **31** participants attended the F&O data walks, held on March 3 and 12, 2025.

2.1.2(c) Internal workshop

The project team brought together representatives from City administration in April 2025 over two workshops to discuss their own perspectives on both internal and external-focused strengths, weaknesses, opportunities and threats. This included discussion of a **spectrum of possible actions (Figure 3)** as a precursor to the prototyping sessions held at the conclusion of the first phase of engagement.

23 participants from City administration attended the C&D-focused workshop on April 24, 2025, while **12** participants attended the F&O-focused workshop on April 22, 2025.

2.1.2(d) Online questionnaire

Active from April 17 to May 19, 2025, the online questionnaire provided interest-holders an opportunity to share their insights on the current state of both C&D and F&O waste generation and reduction. The questionnaire presented a list of potential policy actions, informed by research and prior engagement sessions, the City could take and asked respondents to indicate how these actions would a) influence their organization's waste generation and b) impact their organization's day-to-day operations. The questionnaire was positioned as a low-barrier complement to the in-person and virtual opportunities that otherwise defined the first phase of engagement. 57 participants completed the questionnaire. The majority of respondents (approximately three of every four) work in the F&O space, with one in five operating in the C&D space.

2.1.2(e) Prototyping workshop

The engagement phase concluded with two in-person prototyping workshops (one for each focus area) in early May. These workshops invited participants to collaborate with each other on the design of prototypes drawn from a list of potential solutions across **the spectrum of policy tools (Figure 3)** and crafted in response to the barriers and opportunities raised through preceding engagement sessions.

Participants were asked to evaluate the proposed options using an **impact–effort matrix (Figure 5)**. This tool helped categorize each idea based on its perceived level of impact and the effort required for implementation. Options were grouped into one of four categories, reflected in the graphic below.

1. **Incremental moves (low impact, low effort):** These are low-priority actions that can be addressed when time or capacity allows. While not transformative, they can still add incremental value with minimal effort.
2. **Quick wins (high impact, low effort):** These are actions that deliver strong results with relatively low investment of time or resources. They are often prioritized early because they are efficient and build momentum.
3. **Thankless tasks (low impact, high effort):** These actions require considerable effort but result in limited benefit. They are often de-prioritized or avoided unless absolutely necessary.
4. **Big projects (high impact, high effort):** These actions can create significant positive outcomes but require substantial time, coordination, or resources to implement. They are worth pursuing but may need careful planning and/or long-term commitment.

Figure 5. *The impact-effort matrix structure used in the prototyping exercises.*

The C&D prototyping workshop was delivered on May 9, 2025 with **19** participants and the F&O workshop was delivered on May 8, 2025 with **22** participants.

2.2 Who We Engaged

2.2.1 Interest-holders

2.2.1(a) External Interest-holders

Participants were made aware of engagement opportunities through direct outreach from the City project team. The team made efforts to connect with 434 interest-holders, 385 of which were external to the City of Edmonton. Of those contacted, **186 unique participants provided feedback** into the engagement process. A complete list of organizations that participated in the first phase can be found in **Appendix B**.

The project team intentionally sought out participants with various perspectives and insights across the two material streams. Participant categories were:

- **Early adopters:** Those who are ahead of the curve and are already voluntarily working towards waste reduction or diversion (e.g., an event venue actively source separating their organic waste, a deconstruction business).
- **Change champions:** Active community members and business owners who vocally advocate for a change to the status quo (e.g., food rescue organizations, consultants with expertise in sustainable construction).
- **Enabling actors and advisory groups:** Subject matter experts or groups who represent a large number of interest-holders (e.g., Infill Development in Edmonton Association).
- **Waste generators:** Organizations involved in the F&O (e.g., grocers, institutions, restaurants, quick-service restaurants) and C&D (e.g., developers, property managers, demolition companies) waste streams.
- **Waste haulers & processors:** Those involved in the hauling or processing of both C&D (e.g., scrap metal, clean wood, commingled construction waste) and F&O waste (e.g., organizations represented composters or waste-to-biofuel operations).
- **Indigenous groups and organizations** (note: no Indigenous groups responded to our request to participate in the first phase).

2.2.1(b) Internal Interest-holders

A total of **49 internal interest-holders** from the City of Edmonton were identified and considered for engagement; their areas of focus are broad, ranging from strategic alignment with long-term municipal goals and day-to-day operational efficiency to environmental responsibility and sector-specific expertise. These invited participants were drawn from across the organization, with representation including individuals from Community Services, Development Services, Environment and Climate Resilience, Procurement, District Energy and Waste Services. The first phase of engagement generated insights from diverse voices and experiences. These insights, along with findings from the City's literature review and jurisdictional scan, will be carried forward and expanded upon in the forthcoming second phase.

2.2.2 Gender-Based Analysis Plus (GBA+)

Reflective of the City's commitment to Gender-Based Analysis Plus (GBA+), the engagement strategy for phase one was intentionally designed to be inclusive and equitable. The project team prioritized outreach to groups that often face systemic barriers to participation, including BIPOC communities, 2SLGBTQIA+ individuals, First Nations and related organizations, women-led businesses and a mix of locally owned and corporate food-related enterprises.

To support this effort, the team compiled contact lists using publicly available data from Alberta Health Services and the Government of Alberta, identifying NGOs working in food rescue and redistribution and local Indigenous organizations and communities, respectively. Invitations to participate were extended early in the process, reflecting a deliberate effort to ensure that engagement would represent the diversity of the city.

Despite this intentional outreach, participation from equity-deserving groups in phase one was limited. Building on the foundation established in phase one, the next phase will involve more tailored strategies to lower barriers and better align with the preferences and capacities of under-represented groups, while maintaining a strong commitment to inclusive, responsive and equity-informed engagement practices.

3.0
WHAT WE HEARD

3.0 What We Heard

The following section describes what was heard throughout the first phase of the engagement, broken down into the C&D and F&O focus areas. Each sub-section is organized by input method: external-facing conversations, internal-facing conversations, online questionnaire and prototyping session.

3.1 Construction and Demolition

3.1.1 External Conversations

Conducted through a series of online “data walk” workshops and experience mapping interviews, the conversations with external interest-holders raised a number of challenges that shape waste management practices within the C&D sector. In Edmonton’s C&D sector, the economics often work against waste diversion. Landfilling is cheap and convenient, whereas sorting, storing and/or reusing materials is more expensive, space intensive and difficult to coordinate, especially under tight project timelines and budgets. Participants described an environment of limited financial incentive to change, no regulatory push to encourage reuse and logistical barriers that make material recovery challenging. The barriers described by external interest holders include:

- **Cost concerns:** High costs associated with deconstruction, including material sorting and on- or off-site storage, especially when landfilling is inexpensive and accessible across Alberta.
- **Limited direction:** A lack of municipal and provincial regulatory levers to encourage reuse or recycling in price-sensitive projects.
- **Disincentives to change:** Limited financial incentives and competitive landfill and transfer station pricing that undermines the business case for more sustainable waste practices.
- **Barriers to material recovery:** Logistical constraints, including limited space, compressed schedules and inadequate off-site storage options, that complicate material sorting and recovery.

- **Absence of centralized resources:** A lack of centralized reuse systems or material exchange platforms, which adds friction to the redistribution of salvageable materials.
- **Material qualities:** Material-specific challenges, such as hazardous materials risks (e.g., asbestos, lead) and the difficulty of sorting complex materials increase the cost and complexity of recovery.
- **Data and transparency:** Weak data collection and low transparency across the sector, limiting the ability to benchmark progress or demonstrate the value of diversion as a client-facing benefit.
- **Common preferences:** Prevailing cultural and industry norms of "new and now" that reinforce demolition, disposal and virgin material use as the default option over deconstruction or choosing reclaimed materials.
- **Limited understanding of options:** Low awareness of existing programs, service providers and collaborative opportunities due to the absence of centralized directories or industry networks.

While these challenges represent significant barriers to more effective C&D waste management, participants also identified a range of opportunities to support meaningful progress. These opportunities emerged as potential pathways to reduce waste, encourage reuse and shift industry norms.

> **"Reclaimed wood is very popular for hobby projects, but for building, there are so many regulations and standards that need to be met."**
>
> – A C&D participant in an experience mapping interview

These included:

- **Financial incentives**, such as refundable deposits, time and cost incentives for permits and differential tipping fees, could make sustainable waste management practices more accessible and attractive.
- Improved **data collection and transparency** across the sector to support benchmarking and help position waste diversion as a value-added service for clients.

- **Cross-sector partnerships** and community-based models (e.g., makerspaces, hobbyists, salvage businesses) that can strengthen reuse networks and shift cultural perceptions.
- Investment in **supportive infrastructure**, including centralized material hubs and off-site sorting facilities for high-potential materials such as metal, clean wood and concrete.
- **Early integration** of deconstruction and reuse considerations into project planning, supported by design-for-deconstruction policies and clearer guidance on reuse-friendly construction practices.
- **Practical and phased municipal approaches** that combine regulatory tools with financial incentives, pilot programs and educational opportunities to support manageable and equitable implementation.
- A focus on **early wins** through the diversion of easily recoverable materials (such as metals, concrete, asphalt and salvageable building components) that already have active reuse or recycling markets.
- **Builder education and storytelling** to highlight successful projects, build confidence in reused materials and encourage wider adoption of new practices across the sector.

3.1.2 Internal Conversations

Building on early conversations with industry participants and an understanding of existing City operations, a focused internal workshop was held with City of Edmonton staff who regularly interact with the C&D waste system (**Appendix B.1**).

> **"Huge sustainability and climate resilience focus at the City – [this] needs to be embedded in this work and under this umbrella"**
>
> – A City staff member
> In the internal workshop

The session aimed to validate what was being heard externally, refine the City's approach and identify areas where internal levers could be used to drive progress. Staff shared insights based on their operational experience, program knowledge and interdepartmental coordination.

City staff explored ways that they could lead by example, including prioritizing the use of reclaimed materials in City-led projects, promoting circular business practices through procurement, integrating waste diversion requirements into development permits and building on existing policies such as the City's Climate Resilience Policy.

The key highlights from the workshop included:

- **Incentives for waste reduction and reuse**: Various types of incentives including property tax rebates, expedited permit approvals and public recognition/awards were suggested as ideas to support waste reduction initiatives.
- **Permitting:** Staff discussed the potential for development permits to include waste diversion and reporting requirements. However, they cautioned that additional conditions could create delays and conflict with broader efforts to streamline permitting.
- **Regulatory tools**: Deconstruction or material salvage and recycling bylaws and waste diversion plans were discussed to stimulate supply of salvaged materials. City staff shared ideas related to improving access to off-site sorting facilities and road permit solutions for sorting bins.
- **Lead by example:** The City's procurement menu is currently being updated and could look to specifically call out circular business practices in new construction or demolition projects.
- **Education:** City staff emphasized the importance of education and training to improve the industry's understanding of environmental concepts like embodied or operational emissions and waste reduction, diversion and reuse opportunities.

3.1.3 Questionnaire

To better understand which ideas were both practical and impactful for the sector, the project team developed an online questionnaire targeted at individuals and organizations working within the C&D waste industry. Participants were presented with a set of questions related to deconstruction and diversion. The questionnaire asked how effective each solution would be at reducing or diverting waste and how each solution would impact the respondents' daily operations.

In general, feedback regarding deconstruction and diversion revealed similar concerns. Participants identified three primary challenges that would need to be addressed for widespread adoption of deconstruction and construction waste diversion: (1) labour and cost, (2) logistical challenges and (3) project timelines Participants were asked which of the potential strategies on the **policy tool spectrum (Figure 3)** have the greatest potential to help their organization to reduce and divert waste through deconstruction, salvage and reuse:

- When asked about **reducing waste**, the majority of respondents felt that all of the options presented would be **somewhat or very effective** including educational tools such as certified deconstructor training, online sharing platforms or physical space to sort and store materials and certifying deconstruction contractors.
- For both **waste reduction and diversion**, more than half of respondents indicated that (a) expedited permit approvals for developments that commit to and execute deconstruction, (b) offering grants or rebates to offset additional costs and (c) using city-owned space to store and sort materials off-site would be **somewhat or very effective** When asked about **diverting** waste, at least four in 10 participants indicated the remainder of the options presented would **not be effective**. These options included: (a) diversion toolkits, (b) reuse and recycling directories or digital sharing platforms, (c) a deposit system for development permits and (d) regulatory tools (such as a bylaw mandating deconstruction, minimum diversion rates or mandatory reporting requirements).

Participants were then presented with the same suite of strategies and policy tools and asked how these options would impact their operations.

It was found that:

- At least half of respondents stated that **expedited permitting**, a **deposit system** and **grants or subsidies, using city-owned space** for storing and sorting materials off-site and **mandatory reporting** or a bylaw would have *significant impact* on their operations.

- More than four in 10 respondents suggested that **online sharing platforms, directories, toolkits** and **certified deconstructor training** would have a *low impact* on their operations.

Respondents were given an opportunity to provide more information about the above answers. Nearly all commentary provided suggested that having somewhere to sort and store materials off-site would significantly benefit organizations. Other respondents suggested that the demolition process is already onerous and expensive and adding reuse requirements could have significant negative impact on a business' operations.

In addition to the primary challenges noted at the beginning of this section, participants raised secondary concerns about illegal dumping, cross-contamination of loads and the limited space available on-site to separate waste streams effectively. Haulers and processors noted that the most significant issue to be addressed was poor sorting on site and the risk of illegal dumping or contamination.

> **"There needs to be an approach of rewarding the good builders and not penalizing / fining. All these costs add up to making housing less affordable."**
>
> - A C&D questionnaire respondent on regulatory tools

Participants were also asked **whether they would support additional regulatory action through a bylaw (Figure 6)**. Overall, there was more agreement than opposition. However, several participants emphasized the importance of balancing regulation with incentives and showed preference for rewarding positive behaviour rather than penalizing non-compliance. Concerns were also raised about the cumulative impact of existing regulations on project costs.

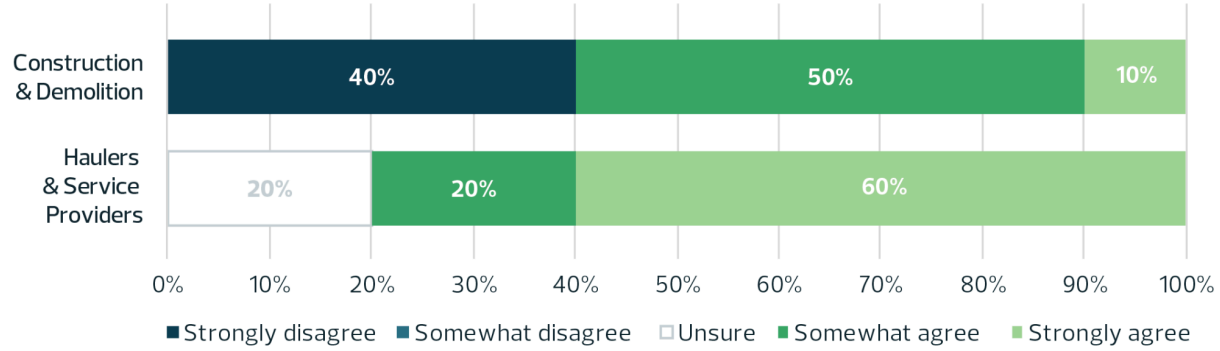

Figure 6. *Participant rate of agreement to regulatory action question, C&D.*

Note: Haulers and service providers may work across both C&D and F&O streams so the values shown above for haulers and service providers are not specific to C&D and also apply to the F&O stream.

3.1.4 Prototyping

Insights drawn from the other engagement methods helped shape the final activity of the first phase: a prototype development workshop. This session brought together both internal and external interest-holders to test and refine a set of prototypes. These represented a range of tools on the **policy tool spectrum (Figure 3)** and were based on topics that arose frequently during previous engagement activities such as the questionnaire.

The **following graphic (Figure 7)** reflects how participants mapped the options based on their discussions during the workshop. For a detailed description of the four quadrants, see **Figure 5**.

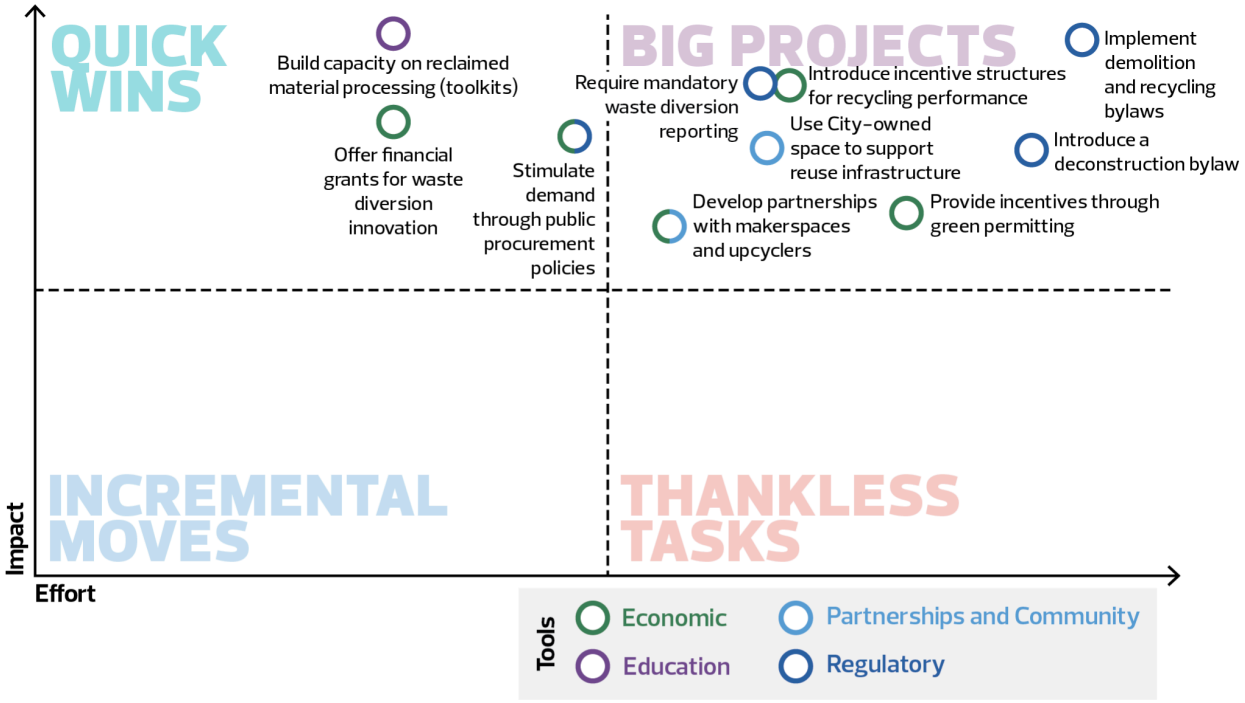

Figure 7. *Prototype mapping by impact-effort for C&D stream.*

Note: This graphic reflects the average placement of proposed options on the impact–effort matrix across three separate group discussions. While there were slight variations between how each group positioned the options, the matrix represents a consolidated view based on the average placement.

Following a discussion of the prototyping options, participants engaged in a voting process to identify which options they would like to explore in greater detail in small groups. Each of the three groups selected options to prototype, focusing on how implementation could work in practice. Groups were free to draw from the full set of options to inform their prototyping process. The outcome of this activity were three distinct prototype concepts drawn from the original list of proposed options.

The prototypes included (1) offering financial grants to seed innovative waste diversion projects, (2) stimulating demand for reclaimed materials through the City's procurement policies and (3) incentivizing deconstruction through reduced permit fees or tax breaks. For a more detailed summary of each of the prototypes, please see **Appendix C.1**.

3.2 Food and Organics

3.2.1 External Conversations

> **"A [financial] loss is okay when the service provided is an essential service [...] organic removal should be thought in that way as well."**
>
> – A participant from the F&O sector in an experience mapping interview

Conversations with external interest-holders followed the same approach to the C&D sector engagement. The project team conducted a series of online "data walk" workshops and experience mapping interviews to gain insight into challenges shaping waste management practices within the F&O stream. For F&O businesses, the barriers to food recovery and waste diversion are rooted in practicality and business culture. Inconsistent rules across jurisdictions and unclear guidelines for food donation create hesitation to participate. With limited space to store bins onsite and perceived safety risks of donating food items, businesses are uncertain about the feasibility of meaningful food rescue and diversion for their organizations.

The **key barriers** included:

- **Misalignment and uncertainty:** Inconsistent policies across jurisdictions, lack of clarity and confusion around what is permitted for donation or diversion create hesitation among businesses and haulers.
- **High costs and operational burdens:** Labour-intensive sorting requirements, risks of spoilage, staff limitations and high transportation or infrastructure costs make donation less feasible for many organizations.
- **Limited space and infrastructure:** Many buildings, particularly older or retrofitted sites, lack designated space for organic waste or donation bins, raising both practical storage and safety concerns.
- **Service gaps and provider limitations:** Infrequent or unreliable pickups, namely a lack of weekend or late night service due to food rescue organizations operating primarily through volunteers.
- **Inefficient sorting and handling systems:** Customer sorting behaviours, cross-contamination, unclear signage and limited staff training contribute to poor source separation.

- **Lack of financial incentives:** Lack of financial incentives to offset costs such as infrastructure upgrades, coupled with low landfilling costs limits business motivation to divert organic waste.
- **Cultural stigma and public misperceptions:** Concerns about food safety, liability and quality limit food donation, while concerns of pests, odours and contamination create resistance to sorting organic waste.
- **Vendor coordination gaps:** Waste generators and haulers often operate without shared diversion goals or accountability mechanisms.
- **Weak data collection and transparency:** Without consistent metrics or reporting systems within the sector, it is difficult to benchmark progress, demonstrate impact, or make the case for further investment in F&O diversion.

While these challenges represent significant barriers to more effective food and organic waste management, participants also identified a range of opportunities to support meaningful progress. These included:

- **Mandating food recovery and landfill diversion:** Introducing stronger regulations, such as diversion or donation related bylaws, to drive broader compliance and accountability.
- **Expanding food rescue through innovation and education:** Creating new products from surplus ingredients, integrating food recovery practices into culinary and hospitality training and using digital platforms to better connect donors with recipients.
- **Providing financial incentives to encourage participation:** Offering financial incentives such as grants and tax credits to help offset the costs of infrastructure, staffing and program implementation.
- **Investing in infrastructure:** Supporting the development of co-located bins (i.e., multiple businesses in a strip mall sharing collection bins) to improve recovery rates and minimize space requirements.
- **Developing sector-specific guidance and phased rollouts:** Creating tailored implementation strategies to accommodate the operational realities of different industries (e.g., a health care facility with 900+ beds will have different needs than a quick-service restaurant) and ensure equitable, manageable adoption.

- **Improving public awareness and cultural perceptions:** Running education campaigns to address food waste stigma, clarify the meaning of best-before dates and celebrate the environmental and social value of food rescue. Providing consistent guidance on donation laws and food safety requirements to reduce confusion and legal risk.

3.2.2 Internal Conversations

A focused internal workshop was held with City of Edmonton staff who regularly interact with the organic waste system (**Appendix B.1**). This built on early conversations with industry participants and an understanding of existing City operations.

> **"Money talks - businesses are sensitive to increases in their costs. Need to tie this into how businesses can benefit from this, and how businesses can implement things very easily."**
>
> – An internal workshop participant, on education and awareness

The session aimed to validate what was being heard externally, refine the City's approach and identify areas where internal levers could be used to drive progress. Staff shared insights based on their operational experience, program knowledge and inter-departmental coordination. They echoed the need for collaboration, linking business, non-profits and social agencies to strengthen food rescue systems and align with broader goals such as food security and public health.

The **key highlights** from the workshop included:

- **Strengthening partnerships and cross-sector collaboration:** Engaging businesses, non-profits and social agencies to co-develop options, redirect surplus food and align waste initiatives with broader community goals such as food security and public health.
- **Launching targeted education and awareness campaigns:** Reframing food waste as surplus food, emphasizing the business case for action and using storytelling and tailored messaging to engage both the public and internal City teams.
- **Using economic tools and incentives to shift behaviour:** Applying strategies such as differential tipping fees, waste tracking, procurement policies and targeted financial support for startups and redistribution efforts.
- **Implementing phased regulatory approaches:** Introducing clear, equitable policies through a staged approach that begins with education and voluntary action, followed by regulation supported with funding and infrastructure development.
- **Investing in innovation and applied research:** Exploring alternative uses for organic materials (e.g., animal feed, bioplastics), advancing processing technologies and creating platforms to crowdsource and test community-driven solutions.

3.2.3 Questionnaire

To better understand which ideas were both actionable and impactful for the sector, the project team developed an online questionnaire targeted at individuals and organizations working within the organic waste stream. Participants were presented with a set of questions related to food rescue and food waste diversion The questionnaire asked participants how effective each solution would be at reducing or diverting waste and how each solution would impact the respondents' day-to-day operations.

Participants identified four primary challenges that would need to be addressed for widespread adoption of F&O diversion and reduction strategies: (1) space limitations, (2) financial constraints and cost implications (3) limited or fragmented infrastructure and logistics and (4) customer sorting compliance.

> "If I'm not comfortable serving something in a restaurant for safety concerns I would feel just as uncomfortable giving it away."
>
> - An F&O questionnaire respondent, on food rescue and safety

Participants were asked which of the potential strategies on the **policy tool spectrum (Figure 3)** have the greatest potential to help their organization to reduce and divert food and organic waste:

- When asked about food waste reduction, more than half of respondents indicated that educational toolkits, online directories for food rescue organizations, financial assistance like grants, subsidies or incentives and a food recovery bylaw would be **somewhat or very effective.**
- More than half of the respondents indicated that regulatory tools like a source separation bylaw or mandatory food rescue would be very effective at diverting and reducing waste, respectively. Similarly, financial assistance was also seen as very effective for waste reduction and diversion by more than half the respondents.

The same strategies were presented again and this time participants were asked how these tools or strategies would **impact their organization's day-to-day operations:**

- **Financial assistance** and **mandatory food rescue** or **mandatory source separation** were thought to have the most impact on day-to-day operations, with about half of respondents suggesting these would have *significant impacts* on waste diversion and reduction, respectively.
- **Toolkits** and submission of **mandatory waste diversion plans independent of a bylaw** were seen as having less of an impact on

operations, with nearly half of respondents indicating both of these would have *moderate or low impact* to operations.

When given an option to explain their answers, the general sentiment by participants was that financial incentives would be an effective way to gain buy-in from businesses, while a bylaw would require additional time and labour, which negatively impacts an organization's bottom line. It should also be noted that a few respondents indicated they were unsure what the questionnaire meant by "impact."

Participants were also asked whether they would support **exploring additional regulatory action through tools such as a bylaw requiring separate organic waste collection (Figure 8)**. Several participants noted that additional regulation could improve outcomes and in some cases, may be the only way to truly ensure compliance.

However, concerns were also raised that a bylaw could be perceived within the sector as too heavy-handed and that smaller organizations would require financial or operational support to successfully implement the required changes to ensure compliance. Haulers and processors noted that bylaws could lead to successful implementation, but may have a significant impact on their current operations.

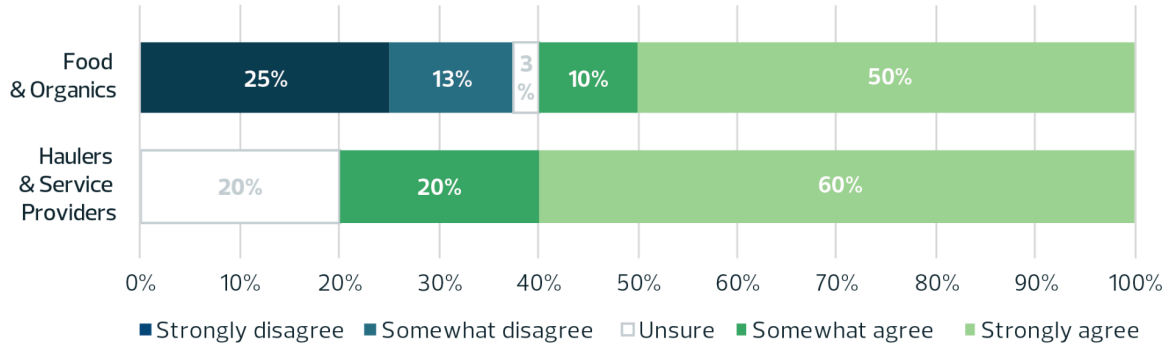

Figure 8. *Participant rate of agreement to regulatory action question, F&O.*

Note: Haulers and service providers may work across both C&D and F&O streams. The values shown above for haulers and service providers are not specific to F&O and also apply to the C&D stream.

3.2.4 Prototyping

The phase concluded with a prototyping workshop that brought together internal and external interest-holders to discuss and develop a set of prototypes for the F&O stream. Participants were presented with a series of options filtered and refined based on feedback from the phase questionnaire.

Through small group discussions, participants placed the proposed options on an **impact–effort matrix (Figure 9)** and categorized them based on their perceived scale and feasibility. While there was variation in how each group positioned the options, the matrix represents a consolidated view based on average placement. There was a relatively even distribution of prototypes across the "big projects," "incremental moves" and "thankless tasks"; only one prototype was considered purely as a quick win.

For a detailed description of the four impact-effort quadrants, see **Figure 5**.

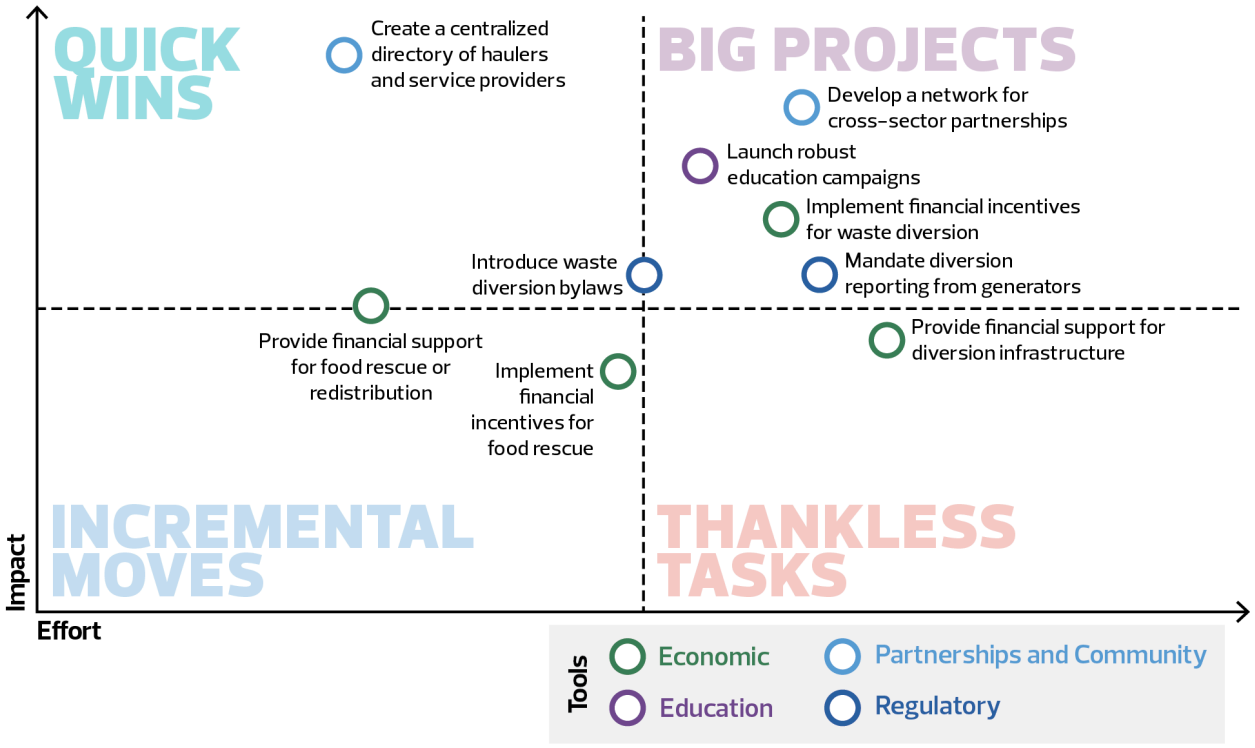

Figure 9. *Prototype mapping by impact-effort for F&O stream.*

Note: During the session, four distinct groups participated in the activity; however, due to a documentation error, only three of the groups are represented in the graphic.

The process for creating prototypes is the same as described in **Section 3.1.4**. Prototyped ideas included (1) introducing waste diversion bylaws, (2) implementing financial incentives for waste diversion, (3) providing financial support for food rescue and (4) providing recognition to early adopters to encourage waste reporting. For a more detailed summary of each of the prototypes, please see **Appendix C.2**.

4.0
NEXT STEPS

4.0 Next Steps

Using the ideas and prototypes created by participants in the first phase, the project team will now review the options and determine how realistic each one is to put into action. Selected actions will be refined and brought back to interest-holders (both those who did and did not participate in the first phase) to gather further input in the second phase of engagement, tentatively scheduled to begin in Q4 2025 and continue into Q1 2026.

Following the second phase of engagement, the project team will finalize the Roadmap to present to Edmonton City Council, with the goal of approval and implementation beginning in 2027. To stay informed about the process and learn more about the project, visit the Industrial, Commercial and Institutional Waste webpage on edmonton.ca.

Thank you to everyone who participated in this phase of engagement. Your time, insights and commitment are deeply appreciated and play a vital role in shaping the future of ICI waste management in Edmonton.

Appendix A
GLOSSARY OF TERMS

Appendix A: Glossary of Terms

Circular economy: Based on the principles of designing out waste and pollution, the circular economy keeps products and materials in circulation by maintaining, reusing, refurbishing, remanufacturing, recycling and composting.

Deconstruction: The process of carefully dismantling building components to preserve materials for reuse, resale, recycling, or waste management–often described as “construction in reverse.”

Diversion: Closely related to waste reduction, diversion refers to the process of redirecting waste away from conventional disposal methods–such as landfilling or incineration–by applying circular economy principles and waste reduction strategies. This can include recycling, composting, reuse and other practices that extend the life of materials and reduce environmental impact.

Food rescue, also known as food recovery, refers to the collection and donation of surplus edible food–otherwise at risk of being discarded–from sources such as restaurants, grocery stores and produce markets. This food is redistributed to charitable and not-for-profit organizations, often via food banks or rescue networks, to help address food insecurity and reduce waste.

Waste reduction: The reduction of waste through rethinking and redesigning products and systems, through reduction of the quantity of material under management by waste systems and through the reuse of existing products.

Appendix B
PARTICIPATING ORGANIZATIONS

Appendix B: Participating Organizations

B.1 Internal

- Affordable Housing & Homelessness
- Environment & Climate Resilience
- Legal Services
- Procurement
- Renewable Energy Systems
- Strategy & Emerging Economy
- Urban Strategies (Heritage Conservation)
- Development Approvals & Inspections
- Facility Planning & Design
- Neighbourhood Planning & Design
- Regional Development
- Safety Codes, Permits & Inspections
- Sustainable Waste Processing

B.2 External

- Alberta Health Services
- Architectural Deconstruction
- BILD Edmonton
- Cameron Communities
- Collective Waste Solutions
- Costco
- Edmonton Meals on Wheels
- Explore Edmonton
- Aramark
- Backroads Reclamation
- Biofuels Inc
- Careit
- Convertus
- Covenant Health
- Edmonton Public School Board
- Famoso
- Architectural Clearinghouse
- Beljan Development
- Bissell Centre
- Circular Innovation Council
- Core Recycling
- Edmonton Food Bank
- Evolution BDM
- Freson Bros.

- GFL
- Gordon Food Services
- Habitat for Humanity
- IDEA
- Integrity Waste Solutions
- Kor Alta
- Leduc District Waste Management Facility
- Leftovers Foundation
- Lighthouse
- Lot F Enterprises
- McDonalds
- Melcor
- NAIT
- No Frills
- North Central Coop
- Oilers Entertainment Group
- Qualico
- R3 Demolition
- Restaurex o/a Subway
- Rohit Group
- Roots on Whyte
- Roseridge Waste Management Commission
- Second Harvest
- Sherlock Holmes Hospitality Group
- Sobeys
- Sterling Homes
- Tables des Chefs
- The Connected Kitchen Project
- Too Good to Go
- University of Alberta
- Waste Logic Inc
- Yarrow Environmental

Appendix C
PROTOTYPES

Appendix C. Prototypes

C.1 Construction and Demolition

CD1. Offer financial grants for waste diversion innovation

This prototype proposed the creation of a financial grant program to support novel waste diversion projects led by business and non-profit organizations. This would seed early-stage innovative waste diversion projects that reduce waste at the source and support the circular economy development and GHG reductions across Edmonton's C&D sector. The grants would help cover up-front costs associated with the purchase of equipment, the use of new technologies and the development of circular economy models. Under such a program, the City would manage the funding process and work with other levels of government to scale the initiative through intergovernmental collaboration.

The end state is envisioned as a self-sustaining funding program that accelerates Edmonton's circular economy through a competitive and transparent request for proposal process.

CD2. Stimulate demand through public procurement policies and a robust education campaign

This prototype envisioned a combined strategy to increase demand for salvaged materials through public procurement policies and a multi-phase education and training campaign. The approach would encourage behaviour change and build awareness across the C&D sector by embedding material reuse into City-led projects and through education and storytelling. The initiative is intended as a phased approach, beginning with adoption through City-led projects and training and then later expanding to include homeowners and private sector actors. The City would lead program development, facilitate material reuse and redistribution, manage procurement policy and deliver educational and storytelling campaigns.

The end state is envisioned as a functional and scalable reuse hub supported by procurement policies that make salvaged materials cost-competitive with conventional disposal.

CD3. Build capacity on reclaimed material processing

This prototype focused on strengthening the sector's ability to process and reuse reclaimed construction materials by aligning municipal permitting structures, development incentives and processor supports. Under this approach, the City would develop educational resources and reform permitting systems to incentivize deconstruction practices. In tandem, the development industry would be incentivized through tools such as reduced permit fees and temporary tax breaks for projects that adhere to deconstruction best practices. Conversely, full demolition projects would face increased permitting costs to discourage waste and drive diversion. The City would design and manage the program, while reuse facilities and contractors would receive, sort and process reclaimed materials for reuse.

The end state sees an increased number of C&D projects diverting materials through certified reuse pathways, with landfill tonnage and GHG emissions reduced.

C.2 Food and Organics

FO1. Introduce waste diversion bylaws

This prototype proposed the development of a waste diversion bylaw that would require businesses generating organic waste to separate and divert it from landfill. While recognized as a significant effort, participants viewed this as a critical step to clarify and confirm expectations, establish accountability and support the transformation of the waste system in Edmonton towards greater emphasis on circularity and environmental responsibility. The City would lead the development and implementation of the bylaw, including drafting the legal framework, engaging interest-holders and coordinating with Council for approval. Under this bylaw, businesses would be responsible for sorting food and organic waste, educating staff, purchasing appropriate bins and submitting reporting as a condition of licence renewals. Similarly, haulers would submit annual diversion reports, relay data back to clients and participate in certification processes.

The envisioned end state is a city-wide culture where F&O sorting is normalized and supported by a clear diversion bylaw and associated reporting system.

FO2. Implement financial incentives for waste diversion

This prototype put forward a financial incentive and granting program to support those organizations making measurable progress in diverting food and organic waste from landfill. The program would help to cover costs associated with sorting infrastructure, equipment, storage and operational needs. Funding would be available for both new and existing initiatives, with priority given to organizations able to demonstrate meaningful results. The program would launch ahead of a future diversion bylaw to serve as a proactive mechanism to build capacity across the ICI sector.

The City would fund the program and monitor progress through tracking, evaluation and reporting, while participating organizations would report on progress towards diversion targets through the submission of annual plans outlining actions and outcomes. The envisioned end state is one where the incentive program is well-known and broadly supported, with a high participation

rate from large waste generators and consistent engagement from haulers and other partners. Organizations across the ICI sector are making progress and the City has a robust monitoring framework in place to guide future policy development.

FO3. Provide financial support for food rescue or redistribution

The prototype envisioned the creation of a "Future Food Fund": a low-barrier operational granting or loan program aimed at the sustainable expansion of Edmonton's food rescue and redistribution network. Unlike infrastructure-focused funding, this program would provide flexible, day-to-day operational support by redirecting existing financial and in-kind City resources to high-impact diversion initiatives. This would be done to improve access to operational funding for food rescue organizations and in doing so increase diversion of edible food and strengthen the food recovery ecosystem.

The anticipated end state is a coordinated and visible network of food rescue organizations supported by an efficient funding program with clear performance measures in place.

FO4. Encourage early adopters and reporting

The prototype proposed a mandatory diversion reporting system for businesses to regularly submit data on waste generation and diversion, including volumes sent to food rescue, animal feed, recycling and landfill. Beginning with a voluntary phase, businesses would use a standardized City-managed platform, with data verified by haulers or recipient organizations. Early adopters could be recognized through a public rating system and potential financial incentives. The goal is to build a transparent, citywide picture of organic waste flows.

The intended end state is a centralized and trusted reporting system with broad participation, verified diversion data and public recognition for leaders. This will position Edmonton as a model for circular economy leadership and transparency.