

Circular Economy Procurement Implementation Plan and Framework (CE Framework)

Procurement Implementation Plan

Overview

This Circular Economy Procurement Implementation Plan and Framework (CE Framework) will be used to leverage the City of Toronto's purchasing power to drive waste reduction, economic growth, and social prosperity through a circular economy approach.

Circular Economy is an approach that is restorative and regenerative by intention and design. *Ontario's Resource Recovery and Circular Economy Act, 2016*, describes a Circular Economy as an economy in which participants strive to:

1. Minimize the use of raw materials;
2. Maximize the useful life of materials and other resources through resource recovery; and,
3. Minimize waste generated at the end-of-life of products and packaging.

The current linear "take-make-dispose" pattern – in which resources are extracted, made into products that are used for a short period of time, and then disposed – pays insufficient attention to the high social, environmental, and economic costs of waste.¹ In contrast, a circular economy system of production is based on principles of product longevity, renewability, resource use minimizations, reuse, and repair.

Resources, Roles, and Responsibilities

Solid Waste Management Services and Purchasing and Material Management Division staff will co-lead a Cross Divisional Circular Economy Working Group (Working Group). Working Group membership is based on City Council direction and includes staff from Solid Waste Management Services (Chair), Purchasing and Materials Management Division, Economic Development and Culture, City Planning, Environment and Energy, Parks, Forestry and Recreation, Transportation Services, Facilities, and Toronto Water. Other City Divisions are also welcome to join the Working Group.

Working Group leads will attend working group meetings and provide informed input and feedback and to bring forward opportunities on behalf of the Divisions they represent during the development of the City's Circular Economy Roadmap.

¹ Economic costs of waste include increased municipal waste management and collection spending, which According to World Bank data, can reach up to 50% of municipal annual budgets. This trend is projected to increase globally to approximately USD \$375 billion by 2025. Ellen Macarthur Foundation. *Cities in the Circular Economy: An Initial Exploration*. 2017.

- Pilot Divisions will launch Circular Economy pilot projects (CE Pilots), track CE Pilot circularity metrics, and summarize CE Pilot results.

Implementation Timelines

Phase	Milestone	Timeline
Policy Development	Development and Approval of Draft CE Framework	June 2018
Consultation/Engagement	Identification of Stakeholders	June - December 2018
	Stakeholder Review of Draft CE Framework	November 2018
	Consultations on Draft CE Framework	December 2018 - June 2019
Piloting	Identification of metrics	November 2018
	Identification of CE Pilot Divisions	November 2018
	2-year CE Piloting Process	December 2018 - November 2020
Monitoring/ Evaluation/ Reporting	Interim Report back to City Council	November 2019
	Update of CE Framework to reflect CE Pilot results/stakeholder feedback	November 2020
	Final reporting: Report back to City Council with City-wide implications and recommendations	June 2021

Stakeholder Identification

The Cross Divisional Working Group will identify a process for engaging with a broad range of Circular Economy stakeholders, including:

- City Pilot Divisions;
- Current and Potential Vendors/Service Providers;
- Other Governments, e.g. Ministry of Environment and Climate Change;
- Not-for-Profits and Community Groups;
- Industry and Professional Technical Associations; and,
- Additional Stakeholder Groups, as required.

Pilot Evaluation Metrics

- Prior to the piloting phase, the Working Group will establish a Monitoring, Evaluation, and Learning Framework (the Evaluation Framework). It will include baselines for current City circularity, where they exist.
- The Evaluation Framework will be used to track measures of circularity achieved in pilot projects related to resource efficiency and circular procurement. The Evaluation

Framework will be comprised of a combination of operational, capacity, process, and outcome-based indicators. Following the CE piloting phase, evaluation metrics will be refined as necessary.

The core areas of the preliminary Evaluation Framework and metrics are outlined in the Table below.

Core Area	Preliminary Measures of Circular Economy ²
Environmental	<ul style="list-style-type: none"> • Percentage of waste diversion as a result of procurement activities • CO₂ savings as a result of procurement activities • Percentage of recycled content used in materials Number of City contracts evaluated using Circular Economy principles • Raw materials avoided/displacement factor
Social	<ul style="list-style-type: none"> • Number of green jobs created and secured • Number of City staff trained on Circular Economy procurement principles • Asset utilization rates/Asset sharing activities
Economic/financial	<ul style="list-style-type: none"> • Cost savings • Waste reduction savings • Degree of productivity

Piloting

Drawing from the Long Term Waste Management Strategy, Solid Waste Management Services will be a Champion Division for CE Pilots. Solid Waste Management Services will host divisional pilots related to the procurement of office space and equipment, textiles, and/or food waste.

The Working Group will review the opportunity for two divisional pilots and a corporate-wide procurement pilot.

² Adapted from European Academies Science Advisory Council (EASAC). (2016). EU Circular Economy Indicators report. Measures developed in collaboration with Dr. Mervyn Jones, procurement specialist and Director, Sustainable Global Resources Ltd.

Prior to pilot selection, the Working Group will align itself with the City's Supply Chain Transformation in order to access an updated spend analysis.

During the pilot phase, the Working Group will assess, track, and summarize the applicability of CE Framework principles, objectives, measures of vendor circularity, resource efficiency, and effectiveness of approaches to vendor support and internal capacity building

Circular Economy Procurement Implementation Plan and Framework Pilot Testing

Principles

CE Pilot testing will be based on the following core principles to:

1. Mitigate climate change and achieve a resilient low-carbon future, considering both operational and lifecycle emissions, and advancing community resilience in alignment with TransformTO.
2. Minimize both the full lifecycle impacts and maximize the full utility of goods and services.
3. Achieve aspirational goals of zero waste, and to treat any remaining waste produced that cannot be reused or recycled as resource that has value.
4. Align with the City's Supply Chain Transformation and be strategic, transparent, and encourage innovation while adhering to all City purchasing legislation and By-laws.
5. Align with City Council approved strategies aimed at improving environmental (i.e. reduction in greenhouse gas emissions), social (i.e. community health, wellbeing, employment) and economic (i.e. fiscal sustainability) outcomes.
6. Collaborate with relevant partners and sectors, including relevant local industry associations, to help drive innovation towards more circular services, products, and mutually beneficial solutions.

Goals

The aim of CE Framework is to develop an evidence-based and measurable circular procurement policy. The CE Framework, through CE Pilots, will enable the City to achieve the following Circular Economy goals:

1. Increase the amount of goods and services that are regenerative by design, have lower lifecycle greenhouse gas emissions, are less toxic, and rely less on raw material extraction/consumption.
2. Increase the number of City contracts that are procured through a process that considers full value, lifecycle impact including greenhouse gases, resource potential, and maximum utility of goods and services.

3. Introduce the requirement for the re-examination of City contracts from a Circular Economy lens prior to issuing solicitations.

Objectives

The CE Framework will use the City's procurement processes to achieve the following objectives:

1. Application of Circular Economy principles to CE Pilot projects, which close product, material, and service supplier loops. For example, consideration of:
 - a. access to service over ownership;
 - b. reparability options;
 - c. measures of how products can be returned for repairs;
 - d. percentage of recycled content;
 - e. inclusion of details on Life cycle analysis considerations including greenhouse gases; and,
 - f. how design contributes to reducing carbon footprint.
2. Increased Circular Economy sector development by improving bidder's awareness of the CE Framework. For example:
 - a. Provision of guidance documents to vendors including assessment methodologies; and,
 - b. Invitations to vendor days.
3. Increased internal Circular Economy capacity-building, including the development of tools to enable staff to apply a circular procurement lens to City contracts, including, for example:
 - a. Circular Economy information guide for City staff and contractors;
 - b. Maintenance of lists of suppliers currently undertaking circular approaches, organized by division; and,
 - c. Updated procurement training to include Circular Economy procurement curriculum.
4. Identification, selection, and refinement of future Circular Economy procurement metrics and key performance indicators based on findings from the CE Pilots, including baseline metrics for the City of Toronto.

5. Positioning of the City of Toronto as a leader in Circular Economy and Ontario's first circular city through:
 - a. Developing an evidence-based Circular Economy procurement policy informed by extensive CE Pilots and case study creation;
 - b. Communicating, where possible, with other jurisdictions so that best practices can be shared and the CE Framework modeled in other jurisdictions;
 - c. Communicating Circular Economy principles to suppliers through market engagement;
 - d. Establishing a Circular Economy public procurement community of practice of peer municipalities/not for profit organizations from around the City and province; and,
 - e. Supporting Circular Economy capacity-building among City divisions, agencies, and corporations.