

# Integrating circular economy criteria in the City's Procurement Policy

Circular Procurement Summit
October 21, 2021



**City of Richmond** 

The City of Richmond implemented the Environmental Procurement Policy & the Environmental Purchasing Guide by 2000

In 2015, the City integrated sustainable criteria into the procurement policy, which has reduced environmental impacts

In 2019 City's Council approved a plan to integrate circular economy practices into the City's procurement process



## **Council referral**

- 1. Assess procurement processes in the focused areas for:
  - establishing a well-defined framework that integrates circular economy criteria specific to Richmond activities and procurements;
  - developing indicators for measuring results and impacts;
  - assessing cost implications for circular economy considerations.
- 2. Initiate an interdepartmental engagement program to identify innovative solutions and specifications based on circular economy criteria and anticipated cost considerations.

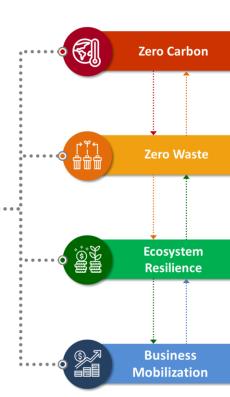
- 3. Initiate external stakeholder engagement with vendors and local businesses to:
  - inform vendors of the City's circular economy initiatives and expectations for their participation;
  - identify and explore opportunities among stakeholders along the entire supply chain for products, services and solutions that address circular economy criteria;
  - promote potential partnerships and work closer with industry that could interact and exchange with staff market knowledge and solutions providers.

February 2021 City of Richmond's Council endorsed the a set of procurement policy enhancements with circular economy criteria supported by costing information, guidelines, toolkits and indicators to implement the policy.

#### City's sustainability drivers



Circular Economy
criteria into the
Procurement Policy
can contribute to
City's sustainability
goals



- Green Fleet Action Plan
- Community Energy & Emissions Plan (CEEP)
- Waste Heat Recovery
- · Mix fuel criteria for waste collection trucks
- E3 Fleet Certification Platinum
- Electric Vehicles Fleet and Charging Station Infrastructure
- · Diversion: Solid Waste & Recycling Programs
- Recycling Depot
- · Building Demolition Bylaw
- House Moving and Salvage Program
- Integrated Resource Recovery Strategy
- Reclaimed Asphalt Pavement and Concrete Certification Project
- Organic Waste Processing Services
- · City Facilities Demotions and Construction Activities Policy
- Sustainable "High Performance" Building Policy City Owned Facilities
- Ecological Network Management Strategy
- · Corporate Hazardous Material Management Program
- · Riparian Response Strategy
- · Invasive Species Action Plan
- Pollution Prevention and Spill Response
- Smart Cities
- Resilient Economy Strategy
- Richmond Food Recovery Network
- · Circular Economy Business Program
- Sustainable Innovation

#### **External Collaboration Is Crucial**

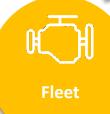






- New construction (office/facility buildings)
- Demolition
- Renovation
- Paving
- Pump stations
- Park development
- Streetscape and boulevards
- Equipment and machines
- Public lighting
- Sanitary Sewer
- Outside furniture
- Roads/Laneways
- Dikes
- Multiple Use Paths
- Replacement of mechanical systems
- Roofing
- Utility infrastructure works
- Furniture

Sector and Categories to organize circular procurement tools, guide and pilot projects



- Heavy-equipment
- Passenger vehicles
- Trucks
- Fuels
- Garage and maintenance
- Tires
- Insurances



- Consultants
- Catering
- Food
- Accommodation facilities
- Innovation
- Learning



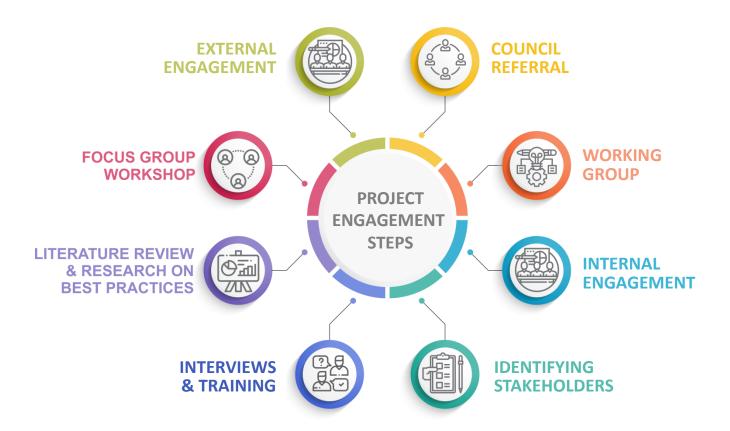
- Audio-visual equipment
- Networks infrastructure
- Telephone services
- Telephone equipment
- Data centre infrastructure
- Computers
- Software
- Print services



- Pools and arenas
- Communities centres
- Preservation works
- · Building renovation
- Renovations/ Demolition
- Office furniture
- Offices supplies
- Facilities lighting system
- Cleaning services
- Building management
- HVAC, machines and equipment
- Work-wear services/PPE
- Winter maintenance
- Cleaning public spaces
- Green spaces maintenance
- Outside furniture
- Pavement
- Traffic control system
- Public lighting
- Dikes / Pump stations
- Sewer

#### Internal and External Engagement Steps







### External Engagement Process (by Dec 2020)

Activity	Number of participants
City of Richmond Website information regarding the Circular Economy	Public
Government Staff Interviews: 14 interviews with leading, early adopter cities and organizations around the world, at different stages of maturity with respect to circular procurement	4 Cities and 10 organizations
<b>Stakeholder Workshop:</b> Canada's first vendor-focused Circular Economy Engagement Workshop hosted and facilitated by the City of Richmond. More below.	45 companies + 30 City's staff
City's Economic Advisory Committee	Committee Members
Industry Interviews: 15 one-per-one interview with vendors and other external stakeholders	15 one-per-one interviews with vendors and other external stakeholders





Higher quality products would be dealt with a longer lifespan expected warrantee

We must work together collectively to create systems that promote successfully the circular economy

To create new and innovative products together which could benefit others as well

To be good stewards of the resources we use and look at the big picture of consumption / helps think bigger

Extended business relationships

Biggest opportunities for innovation + material longevity

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Why should your company and the City work on circular economy activities?

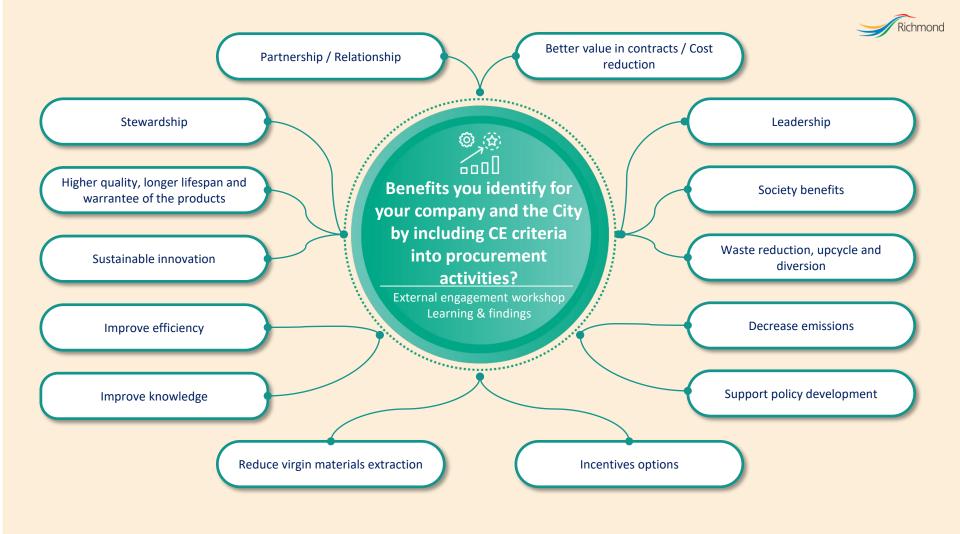
External engagement workshop Learning & findings Improved efficiency and a shared/improved understanding

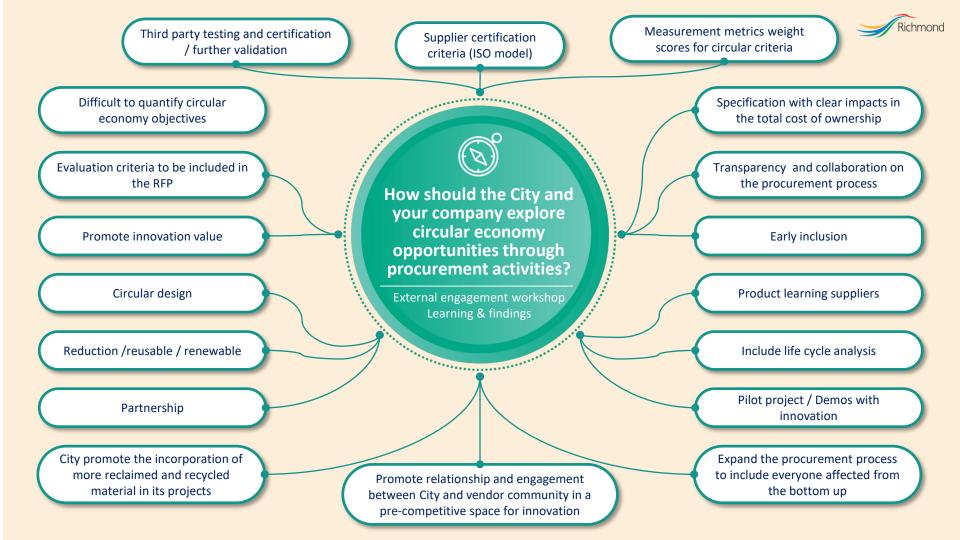
Exchange sustainable practices to maximize our resources

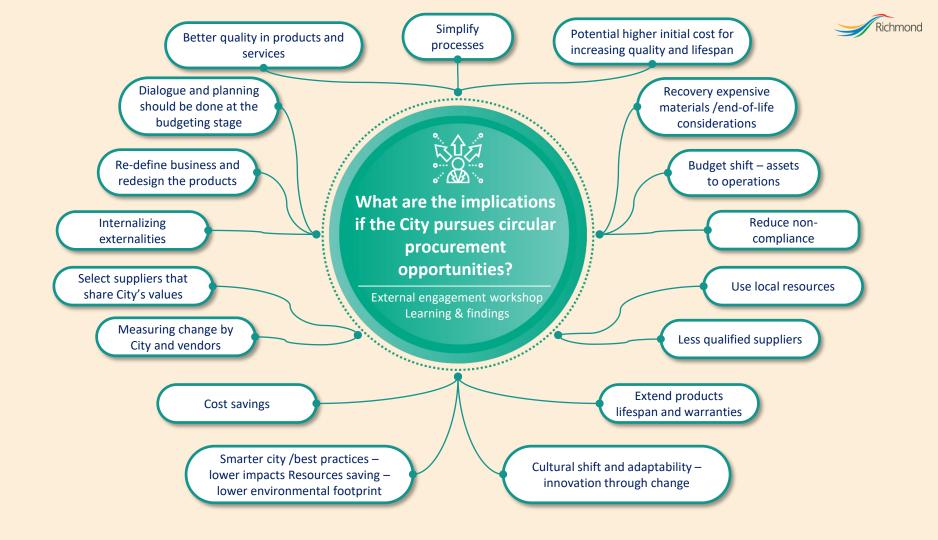
Provides sustainable methods of progression to the circular economy principles

Align objectives

Unless we look at the entire picture, the full life-span of a product, we cannot truly measure the cost (socially, environmentally, and economically) / works to help social, environmental, and ecological solutions









Roadmaps have short and long-term goals to develop and implement all cities tools and metrics to guide circular procurement

The circular economy criteria into the procurement policy is outlined by cities circular economy ambitions

Cities have a dedicated interdepartmental team to develop, implement and assess the roadmaps actions and results

All cities have adapted and developed the own circular economy concept and principles to integrate circularity across cities activities

Cities are members in a network to pre-competitive collaborations **Leading Cities** Learning & findings during the interviews

Cities shared with staff circular economy information, reports, tools and guides applied in the procurement activities. All the material is shared on City's intranet

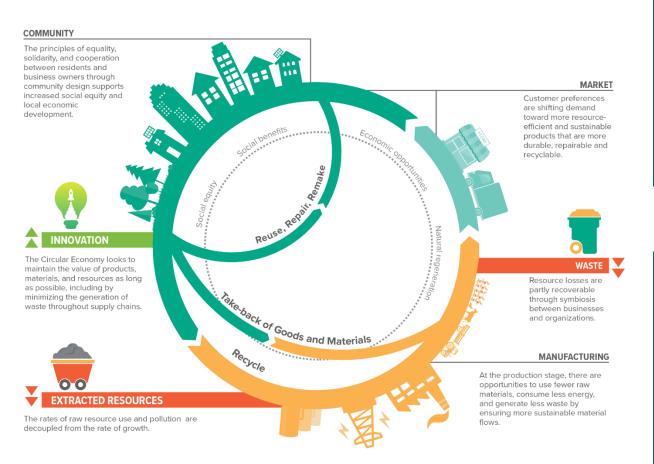
Staff continuous education and training in the circular economy is critical for cities achieve goals and results

Circular procurement tools are not standard and need to be developed by sector, areas or products

Periodical engagement with key stakeholders, vendor, suppliers and the markets need to be planned and do as part of the procurement activity

Procurement activities does not start in the procurement department. Cities engage internal client to design projects and operations using circular criteria

#### City of Richmond's vision





The City of Richmond's vision for the circular economy is to maximize the value of resources by design through responsible consumption, minimizing waste and reimagining how resources flow in a sustainable, equitable, low-carbon economy.







## A. Desig out waste & pollution by prioritizing regenerative resources

- A1. Minimize the release of toxins and pollutants and hazardous materials and waste
- **A2.** Minimize waste generated by end-of-life of products and packaging
- A3. Increase waste diversion
- A4. Increase recycle content
- **A5.** Increase energy and water efficiency
- **A6.** Prioritize renewable energy



- B. Keep products and materials in an operational use
- **B1.** Consider alternatives to product ownership
- **B2.** Maximize the useful life of materials through resource recovery
- B3. Prioritize products that are designed for maximum useful life and/or be easy to maintain, repair, upgrade, refurbish or remanufacture
- **B4.** Prioritize sharing platforms to rent, share, swap or lend to promote maximum usage
- **B5.** Require suppliers to offer longer product warrantees



- **C1.** Minimize environmental footprint and impacts
- C2. Protect habitat and functioning ecosystems that provide critical services to the environment
- **C3.** Minimize the use of raw materials
- C4. Introduce fully renewable, or recyclable materials that can be used in consecutive life-cycles
- **C5.** Reduce both operational and lifecycle GHG



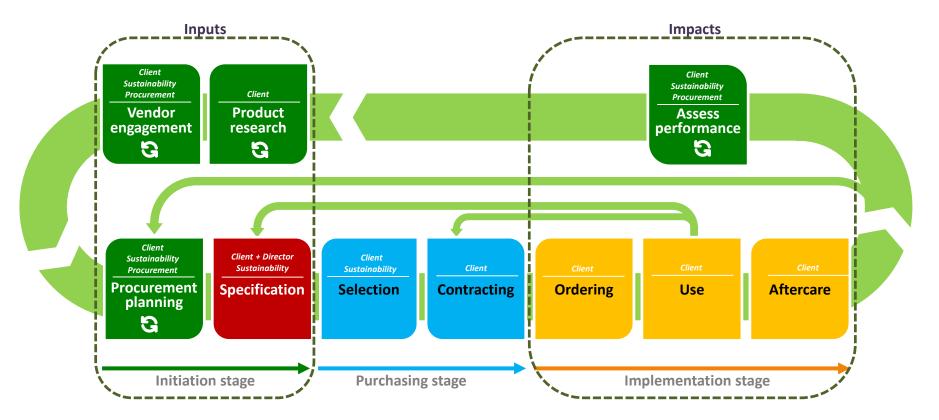
- D1. Promote innovation and proactively seek opportunities for cross-functional collaboration
- D2. Support staff training and continuing education related to the circular economy
- D3. Support staff time contributing to circular initiatives and pilot projects
- D4. Collaborate with relevant partners and sectors to help drive innovation towards more circular services, products,

#### E. Maximize economic value for money

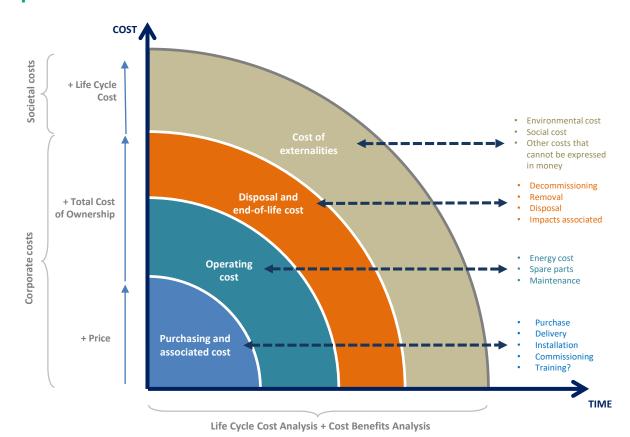
- **E1.** Reduce costs through efficiencies
- **E2.** Identify cost savings opportunities throughout product life-cycle
- E3. Think beyond purchase costs by internalizing environmental externalities and cumulative cost impacts
- E4. Consider productivity, efficiency and capacity utilization when evaluating alternative products and services
- E5. Promote green jobs

#### **Circular Economy Procurement**





## Integrating circular economy into the procurement process: The factor "TIME"



This approach recognises that procurement decisions should not be based on purchase price alone, but should consider whole-of-life costs. As part of whole-of-life costing it is important to consider that the duration of the costing model should reflect the life of the product being compared: for example, disposable items versus reusable items which are guaranteed for a longer life span. It is also essential to incorporate the likely obsolescence of rapidly changing technology into the asset life calculations.

In some situations the sustainably preferable products or services may be more expensive to purchase, but will generate savings throughout their life through reduced requirement for maintenance/repair, reduced running or energy costs, improved end-of-life value or reduced social costs.

#### **Implementation Activities**



The following activities are being undertaken to advance the implementation of circular economy principles in City's procurement activities:

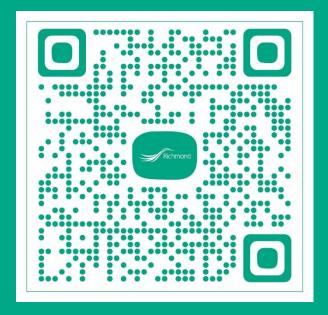
Education, Change-Management and Capacity-Building











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