Advancing the Circular Economy Through Procurement
Circular Economy Defined

Transition from the current linear model of take-make-dispose.

Economic system aimed at minimizing waste and making the most out of the resources we use.

Regenerative approach where products and services are designed to last longer and have the ability to be reused or recycled at end-of-first-life.

Source: Deloitte. Norwegian Circular Economy Benchmark 2017
In a linear economy, sustainability is improved by focusing efficiency within the “take-make-dispose”-model i.e. maximizing economic value with a minimized environmental impact.

A circular economy is restorative and regenerative by design, and aims to keep products, components, and materials at their highest utility and value at all times.
Circular Procurement

Strategic Procurement

Green/Sustainable Procurement

Ethical Procurement

Social Procurement

Recycling Council of Ontario
Cities and Circular Economy (CE)

Insights:

• Circular economy policy is filtering down to public authorities via governments
• Cities provide the right scale for achieving circular economy benefits
• Public authorities and circular public procurement can play critical role in supporting the transition towards a circular economy and achieving the Sustainable Development Goals
• Procurement is consistently identified as a key lever for change and realising the benefits

Europe:

• London: Circular Economy Roadmap 2017
• Glasgow: Circular Glasgow 2016
• Amsterdam: Developing a Roadmap for the First Circular City, 2016
• Rotterdam: Circular economy roadmap, 2016
• Copenhagen: Circular cities: the Copenhagen model, 2017
• Helsinki: Finnish road map to a circular economy 2016-2025
Economic and Environmental Instrument

- **15%**: average percentage of a country’s GDP spent on procurement
- **$200 billion**: Canada’s spend on procurement
- **$160 billion**: local governments combined spend
- **$6 billion**: Government of Ontario spend
  - **20%**: percentage of annual provincial economic outlook
  - **$3.5 billion**: Ministries’ spend on goods and services:
    - consulting, courier services, office supplies and furniture, wireless devices.
- **$2 billion**: City of Toronto spend on goods and services
Observations and Opportunities

Procurement: multiple definitions not well understood and rarely used effectively.

Many organizations -- public and private -- have environmental procurement policies in place:

• Few have integrated them in meaningful and measurable way

• Sustainability and waste reduction functions often have limited relationship with procurement functions
Overview: Circular Procurement

Effective mechanism to shift markets with or without legislation

Can achieve several public policy objectives simultaneously economic, environmental and social

Creates demand and supply simultaneously - circularity

Opportunity to build local supply chains for domestic solutions

Substantial appetite for better understanding and implementation, lack of knowledge of how/when/who
Circular Procurement models

**System Level**
- Product Service Systems
- Public Private Partnerships
- Cooperation with other organisations on sharing and reusing
- Rent/lease
- Supplier take-back-systems incl. reuse/recycling/refurbishment/remanufactoring

**Supplier Level**
- Design to disassembly
- Reparability of standard products
- External reuse/sale of products - Buy-resell
- Internal reuse of products
- Supplier take-back-systems

**Product Level**
- Materials in the product can be identified
- Product can be disassembled after use
- Recyclable materials
- Ressourceeffeciency and Total Cost of Ownership
- Recycled material

Image from SPPRegions.eu Best Practices Report
Multiple Policy Drivers

Drivers
- Environmental
  - Carbon, conservation, waste, raw materials, emissions, energy efficiency
  - Manufacturing & consumption
    - Process efficiency, consumption patterns
- Economic
  - Cost savings, growth
- Social
  - Employment, skills, civil society
  - Health
    - Toxicity, risk, well-being, quality of life

Categories
- Textiles & clothing
- Electrical & ICT
- Furniture
- Food
- Construction
- Transport
- Packaging

Strategies
- Sustainable materials management
- Waste prevention
- Design & materials choice
- Utilisation & lifetime optimisation
- Repair, reuse & remanufacturing
- Recycling & end-of-life
- Business
  - Cost reduction
  - Servicisation
  - Value networks
  - Collaborative

Circular business models

Slide credit: Mervyn Jones
Circular clients – Vendor/Supplier Engagement

Circular procurement depends on policy translated into practice through clients and budget holders.

Circular procurement needs circular clients

Slide credit: Mervyn Jones
Rethinking our approach

Circular procurement

Waste contracts

Supplier

User

Waste manager

Products

Product as a service
Buy – sell back

Buy - resell

Resources

Waste

Slide credit: Mervyn Jones
Case Studies
Case Study: Public Health Wales

Office Equipment
Case Study: Public Health Wales

Procured office design and furniture supply to encourage:
• Reuse of existing equipment, furniture, and flooring as possible,
• Supply of remanufactured goods from other sources.

Supplier ‘open day’ communicated the key specifications

Winning consortium, which included social enterprises, supplied > 2,500 items:
• 6% new
• 94% remanufactured or refurbished
• significant share reused from existing stock.

Circular approach:
• Diverted 41 tonnes of waste from landfill
• CO2 saving of 134 tonnes
• Permanent employment for those with barriers
Case Study: Ministry of Defence

Textiles
Case Study: Dutch Ministry of Defence

Market research showed recycled textiles content viable

Reformulated tender requirements to enable bids for solutions and stimulated market to add more recycled content

**Technical specifications:**
- Towels and overalls must contain 10% recycled post-consumer cellulose fibres
- Suppliers required to demonstrate this through microscopic testing
- Fibres had to come from post-consumer textile material, as opposed to production waste or other alternative sources

**Results:**
- 100,000 towels purchased contained 36% recycled post-consumer textiles fibres
- Overalls contained 14% recycled post-consumer textiles fibres.
- Estimated savings:
  - 233,478,000 litres of water use
  - 68,880 kg CO2 emissions
  - 23,520 MJ of energy consumption
Case Study: Municipality of Rome

Food and Catering
Case Study: Municipality of Rome

144,000 meals served daily across 550 nurseries, primary, and secondary schools. 92% of the meals are prepared on site; 69% includes organic food.

Technical specifications and criteria:
- Non-food and food waste separated for collection
- Detergents and sanitizers with low environmental impact
- Single-use material (e.g. napkins) biodegradable and recyclable
- Ceramic plates and tableware, glass, stainless steel for cutlery
- Recipes and menu planning based on Rome’s seasons
- Meat served twice a week (maximum) to reduce the environmental impacts of food service

Results:
- Savings of 8,887 tonnes of CO2 equivalents annually
- Savings in water consumption associated with the reduced consumption of meat at 5,783 m3 annually.
- Switch from single-use to reusable cutlery: reduction of 1,800 tonnes of plastic annually
Case Study: City of Zürich

IT Equipment
Case Study: City of Zürich

Annual public procurement budget of over €1.6 billion

Switched from buying equipment to buying services: printing, copying, scanning

Pays per printed page and no longer invests in hardware

Criteria:

Only recycled paper in bids; double-sided and black-and-white printing default

No prints until user login to ensure prints are collected and not left behind (also improves security)

Exchange of supplies by trained specialists minimize toner-waste, ensure proper recycling of material, and avoid health hazards to employees

Printers required to conform to eco-labels and configured for energy-saving mode when not in use to reduce energy consumption

Supplier had to take over and pay at fair value all existing infrastructure at inception of the contract: significant interest to reuse newer devices and get rid of outdated devices

Reduction: avoid small and medium printers within offices with stipulation for fewer, larger printers in corridors and hallways
Case Study: City of Zürich

Results:

- At one time city owned >100 different models of printers, photocopiers, scanners, and fax machines
- Reduction from 5,500 to 3,600 units of only two brands and seven models (with immediate energy savings of 34%)
- Printed pages went from 120 million to 90 million annually
- Volume of paper lower through default double-sided
Case Study: Odense Municipality

Construction
Case Study: Odense Municipality

Requirement to construct 40 new residences for youths with disabilities.

Reconsidered tender requirements:
• Construction using fewer unwanted chemicals,
• Alternative materials such as paper wool for insulation, recycled bricks
• Energy efficient solutions, including LED lighting and solar water heating.

Result:
Construction cost 5% higher than business-as-usual
Extra investment will be repaid quickly due to lower operating costs.
Observations and Opportunities

- Significant opportunity to establish a relationship with vendors and suppliers who are working toward resource efficiencies and waste reduction outcomes
RCO Partnership with the City of Toronto
Meeting Toronto’s Environmental & Circular Economic Commitments Through Procurement

• City of Toronto has an opportunity for leadership in waste reduction by updating its Responsible Procurement Policy.

• Examine through lens of current environmental goals and develop strategy for procurement to drive waste diversion through the circular economy.

• Government Management Committee (GMC):
  • Requested City Manager, in accordance with the directive from City Council respecting a strategy on policy framework, to make the Toronto the first municipality in the province with a circular economy
  • Report to GMC June 5, 2018 with a strategy for procurement to drive waste diversion through the circular economy.
Developing Circular Procurement Framework
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• **Education, Awareness, and Collaboration**
  
  *Circular procurement begins with those who are responsible for planning, budget development, procurement policies & practices – those drafting specifications that guide procurement*

• **Pre-procurement Planning: Getting to Know Your Purchasing Department**

  *Fostering circular economy requires a high level of pre-procurement planning*

• **Understanding Buying Power**

  Understand how areas in which funds are spent is fundamental to planning & streamlining product/service focus areas, & identify high potential product groups

• **Setting Objectives and Key Priority Indicators**

  State your objectives & know how to measure your progress towards them

• **Identifying Stakeholders – Internal and External**

  Understanding key influencers will support the development & implementation of procurement strategy
Circular Procurement Summit  June 11 - 13, 2019
Advancing the Circular Economy Through Public Sector Purchasing
Planning Partners

FCM
FEDERATION OF CANADIAN MUNICIPALITIES
FÉDÉRATION CANADIENNE DES MUNICIPALITÉS

Government of the Netherlands

HP

UN environment

SUSTAINABLE GLOBAL RESOURCES Ltd.

SCMA
Supply Chain Management Association

Region of Peel
working with you

Toronto
Participants

1. Government (at all levels) stakeholders
   - Senior management and elected officials
   - Public service departments
     - Finance and Procurement
     - Legal
     - Sustainability and Environment
     - Department Heads
2. Private sector buyers of goods and services
3. Other purchasing organizations, consortiums, and agencies that work with governments
4. Organizations that received government funding / service partners
5. Vendors: focus on the top-5 spend categories within government
6. Consultants and other organizations that assist government with sustainable/green buying
Objectives

• Enhance greater awareness of the CE
• Verify the importance of procurement and its use to advance the CE
• Quantify the important role of both the public to move from price taker to market shifter
• Showcase best practice in circular procurement from around the globe
• Emphasize and quantify the global benefits of circular procurement economic, social and environmental
• Identify barriers ‘perceived or real’ to shifting to circular procurement: legal agreements, sole sources, bids, RFPs, commercial agreements and relationships
• Introduce key performance indicators and measurement strategies
• Highlight examples case studies in top 5 category spends in public sector
Objectives

- Provide resources and tools to support concepts into practice and measure results
- Demonstrate how CE integration fosters unique public and private partnerships
- Bridge knowledge and facilitate relationships between international jurisdictions and Canada
- Begin to educate vendors, suppliers, and service providers
Breakdown

Day One: Enhance your knowledge and understanding of the circular economy, circular procurement, and how to advance policy and transition into action.

Day Two: Learn about circular procurement examples from around world and key considerations to advancing a circular economy through procurement.

Day Three: Two concurrent workshops for public sector stakeholders and service providers / vendors to learn how to apply and incorporate circular procurement principles in your jurisdiction and incorporate into business models with implementation tools, resources, and strategies.
Keynotes & Speakers

Cuno Van Geet
Senior Advisor, Resource Efficiency
Government of Netherlands

Leisbeth Casier
Policy Analyst
IISD

Mary Ann Yule
President & CEO
HP Canada

Claire Theibault
Associate Programme Management Officer
UN Environment

Mervyn Jones
Director
Sustainable Global Resources
Keynotes & Speakers

Richard Corley  
Partner  
Goodmans LLP

Mark Hidson  
Deputy Regional Director  
ICLEI Europe

Annalee Sawiak, CPA CA  
CEO,  
Furniture Link Inc
RCO Objectives

Launch online Circular Action Centre post-summit:

1. General information
2. Case studies
3. Open sources resources and tools for implementation
4. Forum to provide an exchange of information between interested and affected stakeholders