

# Opportunities for Circularity in Apparel Textiles in Canada

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Workshop Report



Environment and  
Climate Change Canada

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Changement climatique Canada

Canada 

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# 1. BACKGROUND

Currently, the Canadian textile recycling landscape is very limited, with most end-of-life (EoL) textiles being landfilled, sent to charities and thrift stores, or exported. Research done by Cheminfo Inc. in 2022 estimated that 1.3 million tonnes of apparel was available for Canadian consumption in 2021, and of that, almost 1.1 million tonnes were disposed in landfill, with the remainder being reused and a small portion being recycled into rags<sup>1</sup>.

Textile waste also represents an economic loss because of foregone potential revenue for charities from resale. Textiles represent a priority sector in the development of circular economy solutions with opportunities to divert more textiles from Canadian landfills through improved collection, triaging, and processing practices. To effectively achieve these solutions, collaboration and communication among various stakeholders is required.

The federal government can support efforts to reduce apparel residential textile waste through various levers, for example:

- Funding projects, pilots, innovation-applied R&D, and infrastructure
- Conducting research studies to address information gaps
- Convening stakeholders through workshops or working groups
- Participating in standards development efforts to inform policy and other initiatives

Environment and Climate Change Canada's Waste Reduction and Management Division (ECCC-WRMD) contracted ERM to facilitate a workshop that brought together key stakeholders from across Canada to gather insights on the current systems to collect, sort, and process textiles in Canada and build on efforts to improve circularity of post-consumer textiles, with a specific focus on residential apparel textiles.

## 1.1 ABOUT THIS REPORT

This report summarizes the key findings of the workshop on *Opportunities for Circularity in Apparel Textiles in Canada* and synthesizes recommendations on the federal role to support enhanced circularity.

# 2. ABOUT THE WORKSHOP

The full-day workshop took place on September 25<sup>th</sup>, 2023 in Ottawa, Ontario. It was facilitated by ERM and led by ECCC-WRMD. Through this workshop, ECCC-WRMD wanted to foster diversion and circularity of residential apparel textile waste in Canada. The objectives were to:

- Find out how to reduce domestic apparel textiles waste and export volumes (and thereby reduce associated environmental impacts – e.g., microplastics, GHG emissions), through collection, triaging and processing stages
- Better understand factors hindering or enabling circularity and how they may be addressed through actions at each stage.
- Identify possible federal roles to support enhanced circularity at each stage

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<sup>1</sup> Cheminfo Services Inc. "Characterizing Reuse, Recycling and Disposal of Textiles in Canada", 2022.

Involving stakeholders across Canada, including municipalities, charities, non-profits, and associations (See Appendix A for attendee list), the session consisted of three panel discussions with experts in the fields of waste management, circularity, and/or textiles that shared their knowledge on the challenges and opportunities for diverting residential textile waste. In between presentations, both small group and plenary discussions were facilitated to exchange ideas and find solutions for residential textile waste diversion. Discussions aimed to identify where the Federal government may play a role (See Appendix B for agenda).

### 3. KEY FINDINGS

#### 3.1 CURRENT INITIATIVES & DRIVERS TO IMPROVE RESIDENTIAL APPAREL TEXTILE CIRCULARITY IN CANADA

The workshop featured a number of initiatives led by circular economy leaders across Canada to improve textiles recovery and circularity in their communities and nationally. The session focused on residential apparel textiles. These initiatives are summarized below and organized by stakeholder group (See Appendix C for detailed initiatives).

##### 3.1.1 FEDERAL GOVERNMENT

Environment and Climate Change Canada (ECCC) is engaging in activities such as funding research and development projects through the National Research Council (NRC) to develop industrial processes that could enable additional market pathways for textiles (i.e., finding innovative ways to incorporate textile fibres into various materials for manufacturing). ECCC is also conducting research to improve awareness and understanding of textiles waste streams, including material flows (see Appendix D) and barriers/opportunities for collection, triaging, processing, and recycling. In addition, they are convening and consulting stakeholders to enable knowledge sharing and identify where the federal government may support.

##### 3.1.2 MULTI-STAKEHOLDER GROUPS AND ASSOCIATIONS

The **Canadian Circular Textiles Consortium**, **Circular Economy Leadership Canada**, the **National Association for Charitable Textile Recycling**, and the **Circular Opportunity Innovation Launchpad** participated in the workshop and shared their circular economy and textile recovery initiatives.

The **Canadian Circular Textiles Consortium (CCTC)** is a national platform with 100 stakeholders who collectively are working toward the transition to a circular economy for textiles. Using various approaches to achieve their vision of an integrated, circular system that eliminates global textile waste and advances the transition to a regenerative economy, working groups are engaged in a number of priority activities that include EPR for textiles, labeling, a national consumer education campaign, youth education programming, data collection and analysis, systems mapping and end of use pathways.

**Circular Economy Leadership Canada (CELC)** builds capacity and empowers collaboration, working to create the knowledge, networks, and opportunities that accelerate circular innovation across Canada's economy. CELC acted as the incubator that launched its sister organization, the Canada Plastics Pact (CPP). The CPP convenes stakeholders to advance a circular plastics economy for Canada. Key learnings from the CPP's collaborative model include the importance of effective governance, and engaging committees and working groups that create an environment for non-competitive collaboration for knowledge sharing. Outcomes

include the development of roadmaps, guidance documents, common definitions and standards, shared research, and pilot and demonstration projects.

The **National Association for Charitable Textile Recycling (NACTR)** is an association comprised of charities who collect textiles and household goods to support their mission and fundraising efforts. Their focus is on supporting members and increasing their donations to continue to grow their social impact in communities across Canada. In 2022, NACTR members collected over 94,500 tonnes of textiles which is equivalent to emissions savings of 460,000 cars being removed from roads. They are also directly helping over 8.6 million people with social services. They highlighted at the workshop that municipal programs currently represent only 1% of textile collection, indicating a potential area for growth. Should NACTR members increase their collection numbers by just 10%, 860,000 more people could benefit from their social services, further reducing governmental needs in this sector. They are currently working with Markham, Guelph, Peel Region, and other municipalities with textile programs for textiles and household waste reduction. NACTR is also engaged in the following initiatives:

- Recently led a research study (funded by ECCC) to examine the post-consumer textile waste management system in Canada, and opportunities to grow economic, environmental, and societal impacts of textile reuse;
- Developed a textile waste audit resource that explains how to categorize textile waste, sources, etc.;
- Created a national donation site locator to identify drop off locations;
- Conducting a study of reuse initiatives that looks at large community collection events for textiles that draw community member participation to assess their effectiveness;
- Conducting a study to explore tax credits as incentives for donations; and,
- Expanding resources for municipalities through sharing best municipal programs and practices on NACTR website (expected in early 2024).

The **Circular Opportunity Innovation Launchpad (COIL)** is an innovation platform and activation network aimed at creating, proving, and scaling transformative solutions that will move Canada toward a more sustainable, circular economy. They work with over 40 communities and receive funding contributions from the federal government, banks, and companies. They identified textiles as one of their five priority areas and talked about different initiatives, including their Circular Economy Living Laboratory. The Lab acts as an urban-rural testing hub for pilots and facilitates the following:

- Convening industry stakeholders to create a shared circular economy vision;
- Working with public and private stakeholders to test new business models in Guelph-Wellington's urban-rural circular economy testbed;
- Using data and outreach to understand how and why waste is generated;
- Identifying optimal points in the supply chain for strategic interventions that can reduce waste volumes and/or emissions; and,
- Sharing learnings with other cities and regions to accelerate circular change across Canada.

### 3.1.3 MUNICIPALITIES

The cities of **Markham**, **Guelph**, and **Montreal** participated in the workshop and provided an overview of initiatives implemented in their jurisdictions to address residential textile waste.

**The City of Markham** addresses textile waste through a bin licensing program, obliging charitable organizations to obtain a license for public textile donation bins. To receive a license, organizations must meet several requirements and demonstrate that revenues generated from textiles are used to support charitable purposes. Prior to establishing the program, Markham

conducted focus groups to gauge public perceptions and needs, utilizing the insights garnered to shape both the design of the bin licensing initiative and an educational series aimed at informing the public about textile donation. Markham also leverages technology such as sensors in bins to improve efficiency of servicing bins and bans on residential curbside pickup of discarded textiles.

**The City of Guelph** operates a similar bin licensing program to Markham. The program requires licensees to provide contact information and timely servicing of their bins. To encourage textile reuse and donation, Guelph created a donation map that includes locations of donation bins and consignment stores across the city. They also introduced the Guelph Tool Library pilot program, which promotes circularity with community members through repair cafes, a circular fashion show, clothing swaps, and recycling options like Terracycle for shoes.

**The City of Montreal** established an approach to residential textile waste that centers on three key pillars:

- Generate less waste by advocating for second-hand clothing, repair services, and citizen communication;
- Recover more through improved collection systems and advocating for regulations promoting textile circularity (such as EPR); and,
- Enhance value by promoting automated sorting, supporting recycling solutions, and stimulating demand for recycled products through municipal procurement, actively involving citizens in sustainable practices.

Key initiatives to support Montreal's strategy include citizen engagement and behavior change initiatives to encourage proper disposal of textiles and address rebound effect by prolonging the lifespan of clothing, focusing on textiles in their procurement strategies, increasing calls for proposals fostering textile diversion solutions, and launching pilot projects that support textile waste reduction.

### 3.1.4 CHARITIES

Goodwill Industries of Alberta is an award-winning non-profit, social enterprise, and registered charity that operates based on the triple-bottom-line goals of supporting people, doing right by the planet, and achieving prosperity to support its charitable purpose. Through its mission, Goodwill provides individuals with disabilities and barriers to employment the opportunity to enhance their lives through career development, training, and job placement all while diverting millions of items from disposal in landfills or energy recovery.

Goodwill has launched several initiatives to address textile waste, including a pilot program with the City of Calgary, Leduc & District Waste Management Facility, and the Spyhill Landfill that provides designated space at the public landfill to target textile diversion at landfills. To encourage the second-hand clothing market, Goodwill has established outlet stores that sell clothing by weight at significantly lower costs than their traditional stores. Beyond the environmental advantages of diverting textiles from landfills, Goodwill's initiatives also provide social benefits by employing people with disabilities through several of their programs. Additional programs from Goodwill include:

- Repurposing and repair of textiles such as repurposing towels into cleaning cloths and unsold jeans into shopping bags and aprons;
- De-branding clothing to remove brand labels and tags and de-trimming to remove fasteners such as zippers;
- A seasonal textiles sorting project with Goodwill International and Accelerating Circularity that utilizes a software app to collect detailed data on material composition which plays a significant role in understanding recyclability and potentially shaping future Extended Producer Responsibility (EPR) programs; and,

- Other initiatives to keep textiles in the local economy include partnerships with hospitals and penitentiaries, where Goodwill supplies mostly winter clothes such as winter coats, mittens and more.

Participants discussed the drivers behind their initiatives, which often came down to positive environmental and social impacts, reduced costs, and increased revenues. For all stakeholders, emissions and environmental impacts (from use of water, fertilizers, dyes) associated with the manufacture of textiles, as well as the plastic pollution generated from end-of-life disposal of textiles outside of landfills, drove initiatives to reduce these environmental impacts.

For municipalities, introducing collection programs for textiles can help reduce the volume of textiles in household waste. This results in savings for municipal operating budgets by reducing the costs of collection, transportation, and disposal.

For charities, increased volumes of textiles resulting from additional circular design and textile recovery practices would lead to increased resale revenues, and in turn support jobs and community social programs.

### 3.1.5 SUMMARY OF CURRENT INITIATIVES

The below table summarizes the various initiatives being implemented to support textiles circularity by stakeholder groups present at the workshop:

<b>Initiatives</b>	<b>Federal Government</b>	<b>Multi-Stakeholder Groups &amp; Associations</b>	<b>Municipalities</b>	<b>Charities</b>
Conducting Research (studies, applied research)	✓	✓	✓	✓
Providing Funding (to organizations for circularity efforts – e.g., research studies, pilots)	✓	✓	✓	
Convening Stakeholders	✓	✓		
Online platforms (e.g. CCTC, donation bin site locator)		✓	✓	✓
Education & Outreach	✓	✓	✓	✓
Collection/Sorting/Processing Infrastructure or Technology			✓	✓
Textile reuse and repurposing (into other products)				✓
Bin licensing			✓	
Conducting Pilots		✓	✓	✓
Advisory (i.e., Roadmaps)		✓		
Textile bans (from household waste curbside collection)			✓	

## 3.2 CHALLENGES & OPPORTUNITIES AROUND DIVERSION AND CIRCULARITY OF RESIDENTIAL APPAREL TEXTILE WASTE

Workshop panelists and participants discussed some of the challenges and opportunities to implementing circularity initiatives.





### 3.2.1 CHALLENGES

**Industry is manufacturing and selling too many products too quickly and enabling the overconsumption of textiles.** Instead of few, high quality, and timeless pieces, industry is creating and pushing quick, poor quality, and trendy pieces. This is also known as “Fast Fashion” and one example that was provided to illustrate the magnitude of the problem was that companies like Ulta, Shein, and Boohoo produce 6,000 new styles per day. This poses a challenge for stakeholders that are trying to responsibly manage and recover these large volumes of textiles.

**There is an absence of measures to reduce volumes and encourage better circularity and end-of-life management. There is also limited data about textile imports and exports which impacts our ability to understand the nature and source of problems, and design effective solutions.** Attendees mentioned that Canada was exporting too much poor-quality and impractical clothing to the global south (e.g., in some cases winter clothing has been exported to countries with warmer climates), the fate of which is unknown. Attendees noted that we don’t have accurate numbers around how much is being exported from Canada. Moreover, poor quality apparel textiles or “fast fashion” that are imported into Canada should not be treated the same way as sustainable textiles. One suggestion provided was to implement an import duty tax on low quality products, and better controls around what is leaving the country (for instance, this could include better sorting processes).

**Collection, sorting, and processing infrastructure is currently inadequate to support greater diversion.** Attendees stated that there is not enough infrastructure (facilities, equipment, and labour) to collect, sort, repair, reuse, and recycle. An example was raised from landfill/waste recovery facility operators that additional recovery efforts (e.g., adding staff from organizations that could recover materials onsite, to divert from landfill) would put undue pressure on the existing facility (requiring space/infrastructure to collect goods, and store temporarily). This was cited as a possible hurdle due to costs of associated infrastructure which suggests there may be a need to identify funding sources to support such infrastructure. Attendees noted that federal government could support municipalities with funding for waste recovery and recycling centres, both for building infrastructure and associated equipment.

**Counterproductive policies & incentives.** Many attendees brought up the duty drawback program and its unintended consequences, whereby retailers receive refunds for duties paid on imported textiles if they are exported or destroyed. This discourages the reuse and recycling of textiles and leads to unnecessary waste.

**Donation bins in municipalities across Canada are being run by unknown operators.** Multiple attendees noted that donation bins from unknown operators can create several challenges, including poor maintenance of the bins, absence of accessible customer service (with non-functional contact numbers), and a lack of data regarding the destination and collectors of the donated clothes. These donation bins can also deteriorate public trust and create a stigma around donation bins due to a lack of transparency. It can also cause municipalities to regulate bins more strongly, with the outcome of reducing the total number of bins, including the not-for-profit bins.

**There is a limited primary manufacturing sector for textiles in Canada.** A critical aspect of the business case for textile recovery and the circular economy is identifying strategic end uses for textiles that generate the highest value for the smallest cost. Attendees mentioned that Canada does not have a strong primary manufacturing sector for textiles, which might

inhibit textile-to-textile recycling. Therefore, as we try to identify uses for post-consumer textiles, we would likely need to look to the domestic manufacturing capabilities of other sectors – to make use of their equipment and supply chains to process and integrate textiles into other materials and keep them in the economy.

### 3.2.2 OPPORTUNITIES

**Multiple stakeholders, coming together, could work towards a common vision to transform the apparel textiles sector.** Participants emphasized the importance of sharing knowledge and working together to address textile waste. They expressed a strong interest in continuing this conversation through more workshops and opportunities to stay in touch. Panelists advised that formal collaborations across stakeholder groups require the following: a clear value proposition or vision to work towards; a governance framework with committees/working groups focused on specific themes that are non-competitive; a set of common principles, definitions, and standards; and a strategy with achievable targets and metrics. They also noted the importance of convening the right set of stakeholders that are interested in working towards the vision and that understand their role in that process.

Panelists and participants stated that the timing is critical, with Europe focusing on a circular economy for textiles and sustainable finance, Canada needs to build on this momentum and follow suit. They also identified other organizations for potential collaboration including Circular Cities and Regions Initiative, Circular Innovation Council, and Circular Economy Leadership Canada.

**Industry support and involvement in the transformation of the sector.** Industry needs to design for circularity and produce fewer, better-quality items. Designing for circularity looks at durability, disassembly, materials sourced, investing in people, and paying people to repair or upcycle. There needs to be a robust pathway for the collection of textiles at end of life, and collaboration across the value chain to share resources and partner with other sectors that can use textiles. Industry must play a role in educating consumers and work alongside partners such as government to support those communications. They can also invest in innovation by partnering with startups to take a collective action approach, or pool money with other brands or government to invest.

**Enabling textiles circularity with the right policies, regulations, and standards.** This involves a multifaceted approach, including implementing regulations and incentives that promote a circular economy. Several opportunities were identified including:

- Updating the duty drawbacks legislation to incentivize donations;
- Encouraging repair and textile reuse services;
- Establishing additional residential textiles collection methods, including requirements to increase accountability of donation bin operators and support the credibility, and therefore broader use, of such collection systems;
- Developing and communicating consistent guidance for residential donors, and consistent sorting practices and standards to increase the volume and improve the quality of textiles donations; and,
- Implementing regulations that promote donations as a diversion stream to reduce volumes landfilled.

Attendees also noted that regulations, policies, and standards must take a holistic view of the value chain and address upstream treatment of textiles, not just downstream solutions.

**Increased investment in collection, sorting, processing infrastructure, and emerging technologies/innovations** Attendees highlighted the need to address infrastructure gaps, such as in collection, reverse logistics, recycling, and reuse systems as major areas for improvements and investment. Innovation, in terms of research and development of technology for processing textiles, will be important to help enable new market pathways. In addition, innovations in processes, supply chains, and business models that support a circular economy will be required. International players with well-established textile circularity programs, such as the European Textile Strategy, were highlighted as resources that Canada can reference when developing infrastructure and systems. Some examples of innovative solutions that were mentioned, and may warrant exploration, included:

- Advancements in the collection process could include using Uber or shipping donations through platforms like Amazon to improve accessibility and convenience; and,
- Improving materials by addressing hazardous chemicals that can impact broader communities where textiles are manufactured.

Innovation in the textile industry and improving data collection can also enhance engagement with the financial sector by positioning the circular textiles economy as a more attractive business opportunity and fostering increased investment and interest in sustainable textile practices.

**Improved data collection and sharing.** Industry needs to have a better understanding of the materials in the system to develop effective solutions. Statistics Canada was highlighted by several participants as a key player in improving data and that partnerships between data organizations and industry players, such as NACTR, can help to drive improved data and circular economy solutions. Moreover, collaborative efforts across the value chain and various stakeholders are essential for comprehensive information gathering and dissemination. Participants also pointed out that sharing success stories, including effective municipal by-law strategies, can inspire and drive success among stakeholders.

**Communication to enable behavior change to support textiles circularity (municipalities are well-positioned to educate consumers).** Effective communication with consumers is a critical opportunity for advancing textile circularity, as it can raise awareness, promote responsible end-of-life management practices, and encourage the adoption of sustainable behaviors. Attendees noted that communication should come from reputable sources with strong public trust such as municipalities and promote the positive social and environmental benefits and impacts with consumers. To positively influence consumer behavior, it's vital to streamline education and maintain consistent messaging and terminology that effectively convey the right messaging (e.g., emphasizes the benefits to donating textiles for reuse). Furthermore, it is critical to avoid messages that erode public trust, such as emphasizing low recycling rates.

To provide effective education, it is important to engage with consumers through different methods, such as focus groups. This approach would help delve deeper into consumer behaviors, addressing issues like overconsumption, reasons for textile disposal, tackling information overload, decision fatigue, and understanding the specific needs of consumers.

## 4. THE FEDERAL GOVERNMENT'S ROLE IN ADDRESSING RESIDENTIAL TEXTILE WASTE

Participants discussed how the federal Government can support circularity of residential apparel textiles in Canada. Under the high-level roles articulated at the beginning of the report

and building on the opportunities above, more defined roles that emerged from the discussion have been outlined in the sections below.

### **Funding projects, pilots, innovation, and infrastructure**

- Fund projects and pilots, some examples mentioned were: ICI sector work; reuse pilots; and charities' and municipalities' convening work;
- Fund research, data, and reporting initiatives that quantify/measure small reuse and thrift retailers (i.e., smaller charity shop, hospital auxiliary groups, community shops, etc.);
- Fund best practice case studies, circular business models, roadmaps, innovation-applied R&D (e.g., creating new materials from textiles to feed into other industrial manufacturing processes);
- Fund innovation and small- and medium-sized enterprises (SMEs), giving them a space to experiment and create new products. SMEs also need support navigating government funding; and,
- Fund infrastructure (such as buildings for collection and storage), sorting equipment (machines that sort and separate fibers), trucks, and bins.

### **Collecting data and conducting research studies to address information gaps**

- Track textile import data, specifically: number of pieces, price, weight, fibre, and composition and ensure the data is accessible;
- Monitor textiles as their own waste type;
- Research on repair and refurbishing opportunities to extend the life of a garment;
- Develop industry roadmaps to understand what companies are doing, and a resource that shares what each organization in the ecosystem is working on;
  - Examine the lifecycle of textiles and find opportunities for reuse in manufacturing and recycling; identify stakeholder roles and develop outcomes and targets;
- Quantify and measure small reuse and thrift retailers (i.e., smaller charity shops, hospital auxiliary groups, community shops, etc.); and,
- Research on public awareness and behaviors to establish benchmarks for tracking future shifts and behavior changes, and to help define future messaging.

### **Convening stakeholders through workshops or working groups**

- Facilitate dialogue across all levels of government to share information and harmonize policies and plans as appropriate;
- Connect smaller stakeholders together that wouldn't otherwise have the opportunity to collaborate (e.g., manufacturers and collectors);
- Draw inspiration from and collaborate with community groups that are excelling at convening stakeholders;
- Plan and host a Canada-wide textiles conference and thrift-specific conference; and,
- Convene stakeholders in academia, applied research, design innovation, material science, non-governmental organizations (NGOs), knowledge disseminators, international experts, and financial sectors.

### **Participating in standards development efforts to inform policy and other initiatives**

- Create rules of engagement and a supportive policy framework that allows industry to make investments and enables the transition through incentives for businesses;
- Ensure there is two-way communication on policy so that industry has a voice in policy development, and they are aware of what's coming down the pipeline; and,

- Standards developments needs to be translated into regulation.

### **Other roles (not limited to the federal government)**

- Develop a system that rewards sustainable brands and punishes bad actors to level set the “green premium” – the higher price on goods associated with responsible practices (e.g., Offer incentives for products with recycled fibres, and taxes and duties on virgin fibres);
- Implement green procurement practices (including EoL management) for uniforms used by federal government;
- Develop an EPR policy for textiles where manufacturers are physically and/or financially responsible (e.g., through a producer responsibility organization) for the EoL management of textile waste, looking to e-waste as an example. Before considering EPR; however, a market for post-consumer textiles is required and can be initiated through conversations with buyers. Other considerations include ensuring that textiles reuse is a key priority in the development of an EPR policy/program for textiles; and that collection/sorting of used textiles should be led by thrift stores and charities.
- Implement municipal waste disposal fees or bans;
- Update the duty drawback legislation;
- Promote climate literacy and develop campaigns that educate the public on textile waste and make the connection to climate change;
- Develop a waste exchange program for organizations (e.g., an online platform where organizations can post materials they can give or materials they need). One example in Toronto is the 'Material Exchange - Partners in Project Green', which has been operating since 2013;
- Develop a database for sharing best practices;
- Work with industry to harmonize policy across all levels of government, where appropriate; and,
- Involve the ICI sector to play key role in developing and implementing projects and pilots.

## **4.1 PRIORITY AREAS**

Among the possible roles and associated actions discussed at the workshop, the key roles that were identified as a priority by workshop participants for the Federal Government to undertake were **funding projects, pilots, innovation (applied R&D), research studies, and infrastructure** to support circularity of textiles. More specifically, in the following areas in order of importance:

1. Infrastructure: support the procurement and innovation of buildings (for collection and storage), sorting equipment (machines that sort and separate fibers), processing equipment (machines that prepare textiles for recycling), trucks, and bins.
2. Collaboration: support collaboration models across value chains and address funding gaps
3. Research: support best practice case studies, circular business models, roadmaps, and applied research and development
4. Projects: continue funding projects to help divert textiles, such as pilots

## 5. KEY TAKEAWAYS

The workshop on Opportunities for Circularity in Apparel Textiles in Canada gathered perspectives from experts across the country on the challenges and opportunities to enhance the circularity of residential textiles, and where the Federal Government can lead or support in the transition. It also presented current initiatives that are being undertaken by different stakeholders. There were many actions discussed to enhance textile circularity, including increased collaboration, research, funding, and policy. Participants concluded that the priority role the Federal Government needs to undertake is funding projects, pilots, innovation, and innovative research on textiles. The key takeaways from the workshop are outlined below:

- With high volumes of textiles manufactured and distributed globally, and fast fashion and overconsumption patterns driving demand internationally and in Canada, managing post-consumer textile volumes is already challenging and the scale of the problem is growing.
- Various drivers exist for organizations to focus on textiles circularity, including: the reduction of domestic landfill volumes and exports and associated environmental impacts; reduced operating costs for municipalities by diverting textiles from residential curbside collection; opportunities to expand volumes of textiles received for resale by charities, and the resulting increased funds available for social programs supported by charities.
- Approaches are being applied at the municipal level to divert textiles through collection programs, including: distributed municipal bins at convenient drop off locations; periodic (monthly or quarterly) centralized collection programs; development and hosting of donation box locator maps on a municipal website to make donating easier. Some municipalities have already designed and implemented collection programs, others are considering options as they update long-term municipal solid waste plans. As such, this workshop was viewed as timely.
- The importance of communication between municipalities and charities as efforts move forward was also highlighted to help ensure all stakeholders can be aware of plans, and prepare respective operations to handle anticipated volumes so programs can run smoothly. Effective communication and public marketing campaigns for residents were also highlighted as a key factor for success, for awareness of donation opportunities and locations, what to donate, where, etc.
- Other stakeholder groups were identified, for their existing complementary efforts and potential roles to support textiles circularity, including the work of the Canadian Circular Textiles Consortium, the Circular Cities and Regions Initiative (CCRI), Circular Economy Leadership Canada, and the Circular Innovation Council.
- If efforts to increase residential textile diversion in Canada grow, there will be significantly higher volumes of textiles to manage. Some may be resold by charities, but remaining volumes would likely add to exports if we don't develop ways to process them domestically. Ideally, that processing would help enable new markets and keep those textiles in circulation in the economy (not just landfilling or incinerating those extra volumes). That work (applied research and development, followed by commercial uptake) takes years, so we need to start now and work in parallel with efforts to expand collection to handle existing volumes and prepare for even greater volumes as diversion efforts kick in.
- Applied research, currently undertaken by the National Research Council to contribute to the development of new market pathways, was considered a useful effort to support

the ultimate goal of helping to reduce textile volumes in domestic landfills and exports. Efforts by other stakeholders to support new market pathways were also outlined, including charities' innovative repurposing of textiles (for example, converting jeans into bags).

- Participants recognized that the recovery of textiles, along with their separation or triaging and temporary storage (until they can be picked up), constitute activities that are an area for growth to help divert materials from landfill. As such, key infrastructure needed to support these increased volumes of textiles (including buildings – where collection and temporary storage can occur, equipment to help triage and recycle textiles, and additional labour for collection, triaging and processing), are not currently in place and require planning and development.
- Existing federal roles were seen as valuable, and supported to continue, such as: funding research studies to fill gaps in data and knowledge; convening stakeholders; flowing funds for applied research and development and initiatives (studies, projects, and pilots) by various stakeholders. Additional federal roles, and roles for other stakeholders, were identified and prioritized in this report for consideration to further support textiles circularity.

## APPENDIX A ATTENDEE LIST

#	Name / Nom	Title / Titre	Organization
1.	Dany Drouin	Director General, Plastics and Waste Management Directorate / <i>Directeur general, Direction de la gestion des plastiques et des déchets</i>	Environment and Climate Change Canada (ECCC) / <i>Environnement et Changement Climatique Canada (ECCC)</i>
2.	Astrid Telasco	Director, Waste Reduction and Management Division (WRMD) / <i>Directrice, Division de la réduction et gestion des déchets (DRGD)</i>	ECCC
3.	Sophie Bernier	Manager, Strategies and Coordination (WRMD) / <i>Gestionnaire - Stratégies et coordination (DRGD)</i>	ECCC
4.	Catherine Kerr	Head of Circular Economy Unity (WRMD) / <i>Superviseure - Unité sur l'économie circulaire (DRGD)</i>	ECCC
5.	Shankari Sreetharan	Program Scientist (WRMD) / <i>Scientifique de programme (DRGD)</i>	ECCC



6.	Alena McFaul Freeman	Program Scientist (WRMD) / <i>Scientifique de programme (DRGD)</i>	ECCC
7.	Elizabeth Baxter	Senior Economic Advisor (WRMD) / <i>Conseillère économique senior (DRGD)</i>	ECCC
8.	Eric Corneau	Section Head, Measures Development and Sector Analyses, Plastics and Marine Litter Division (PMLD) / <i>Chef d'équipe, Développement de mesures et analyses sectorie, Division des plastiques et déchets marins (DPDM)</i>	ECCC
9.	Carolina Seward	Senior Policy Advisor, Circular Economy, Strategic Policy Branch (SPB) / <i>Conseiller principal en politiques, Economie Circulaire, Direction générale de la politique stratégique (DGPS)</i>	ECCC
10.	Minh-Tan Ton-That	Senior Research Officer / <i>Agent de recherche principal</i>	National Research Council Canada (NRC) / <i>Conseil national de recherches Canada (CNRC)</i>
11.	Sajjad Saeidlou	Research Officer / <i>Agent de recherches</i>	NRC / CNRC

12.	Shona Moss Lovshin	Industry Analyst / <i>Analyste de l'industrie</i>	Innovation Science and Economic Development Canada (ISED) / <i>Innovation, Sciences et Développement économique Canada (ISDE)</i>
13.	Kelly Drennan	Founding Executive Director of FTA / <i>Directrice générale et fondatrice de FTA</i>	Fashion Takes Action (FTA)
14.	Paul Shorthouse	Managing Director at CELC & the Director of Strategic Initiatives at Canada Plastics Pact / <i>Directeur général à CELC &amp; Directeur des initiatives stratégiques du Pacte canadien sur les plastiques</i>	Circular Economy Leadership Canada (CELC)
15.	Rory Gilsean	Director General, Hazards, Adaptation and Operations Branch, Lands and Minerals Sector / <i>Directeur general, Direction des risques, de l'adaptation et des opérations, Secteur des terres et des minéraux</i>	Natural Resources Canada/ Ressources naturelles Canada
16.	Kiana Klassen	Program & Communications Coordinator	Circular Economy Leadership Canada (CELC)
17.	Claudia Marsales	Senior Manager of Waste & Environmental Management / <i>Directrice principale de la gestion des déchets et de l'environnement</i>	City of Markham / <i>Ville de Markham</i>
18.	Mariane Maltais-Guilbault	Planning Advisor/	City of Montreal /

		<i>Conseillère en planification</i>	<i>Ville de Montreal</i>
19.	Madeleine Myhill	Waste Program Coordinator in the Compliance and Performance Division / <i>Coordinatrice des programmes de gestion des déchets au sein de la Division de la conformité et du rendement</i>	City of Guelph / <i>Ville de Guelph</i>
20.	Mortimer Capriles	Director of Sustainability and Innovation / <i>Directeur de la durabilité et de l'innovation</i>	Goodwill Industries of Alberta
21.	Carl Turgeon	Sustainability Manager / <i>Gestionnaire principal développement durable</i>	Renaissance Quebec
22.	Tonny Colyn	President and co-founder of NACTR / <i>Présidente et cofondatrice de l'ANRTC</i>	The National Association for Charitable Textile Recycling (NACTR) / <i>L'Association Nationale du Recyclage Textile pour les Causes Charitables (ANRTC)</i>
23.	Hélène St-Jacques	Founder of Informa Market Research / <i>Fondatrice de Informa Market Research</i>	NACTR / ANRTC
24.	Sara Hicks	Business Development and Sustainability Department /	Salvation Army / <i>L'Armée du Salut</i>

		<i>Département du développement des entreprises et du développement durable</i>	
25.	Andrew Telfer	Executive Director (acting) for the Smart Cities Office at City of Guelph / <i>Directeur général (intérimaire) du Bureau de l'initiative des Villes intelligentes de la ville de Guelph</i>	Circular Opportunity Innovation Launchpad (COIL)
26.	Christopher Coghlan	Director of Curriculum & Strategy / <i>Directeur du curriculum et de la stratégie</i>	Innovation Guelph
27.	Corey Pembleton	Advisor, Learning and Partnerships, Green Municipal Fund <i>Conseiller, des apprentissages et des partenariats, Fonds municipal vert</i>	Federation of Canadian Municipalities (FCM) / <i>Fédération canadienne des municipalités</i>
28.	Karen Storry	Senior Engineer / Ingénieur principale	Metro Vancouver
29.	Jason London	Business Strategist - Strategic Planning and Policy, Waste & Recycling Services / Stratège d'entreprise - Planification et politique stratégiques Services des déchets et du recyclage	City of Calgary / <i>Ville de Calgary</i>

30.	Annette Synowiec	Director, Policy Planning and Outreach Solid Waste Management Services, City of Toronto /  Directrice, Des services de gestion des déchets solides, Ville de Toronto	City of Toronto / <i>Ville de Toronto</i>
31.	Christelle Honnet	Project Manager, Residual Materials Management Plan /  <i>Chargée de projet Plan de gestion des matières résiduelles (PGMR)</i>	City of Gatineau / <i>Ville de Gatineau</i>
32.	Nichole Hoover-Bienasz	Program Manager Long Term Planning, Solid Waste Services /  <i>Gestionnaire de programme, Planification à long terme, Services des déchets solides</i>	City of Ottawa / <i>Ville d'Ottawa</i>
33.	Steven Bethell	Co-founder of the Bank and Vogue family of companies /  <i>Cofondateur de la famille d'entreprises Bank et Vogue</i>	Bank & Vogue
34.	Anna Copeland	Project Manager, Environment and Climate Change /  <i>Chef de projet, Environnement et changement climatique</i>	Canadian Standards Association (CSA Group) /  <i>Groupe CSA</i>
35.	Christine Seidel	Executive Director /	Recycling Council of Alberta

		<i>Directeur exécutif</i>	
36.	Jo-Anne St. Godard	Executive Director / <i>Directeur exécutif</i>	Circular Innovation Council

## APPENDIX B WORKSHOP AGENDA

### Opportunities for Circularity in Apparel Textiles in Canada Agenda

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**Objectives:** Reduce domestic apparel textiles waste and export volumes (and thereby reduce associated environmental impacts – e.g. microplastics, GHGs), by focusing on collection, triaging and processing – identifying possible federal (ECCC) roles to support enhanced circularity at each stage.

Through three panels we will explore gap areas for possible federal (ECCC) support, followed by breakout sessions for discussion and brainstorming.

- *Panel 1 – Setting the Stage – Key Issues, Lessons from other Initiatives*
- *Panel 2 – Municipal Efforts and Plans, Gaps for Federal Support (ECCC)*
- *Panel 3 – Lessons Learned – Collection and Triaging, Gaps for Federal Support (ECCC)*

Date / Time	September 25 <sup>th</sup> , 2023	
8:30 – 9:00am	<b>Welcome refreshments</b>	<ul style="list-style-type: none"> <li>• Coffee/tea will be provided upon arrival</li> </ul>
9:00 – 9:10am	<b>Introduction and opening remarks</b>	<ul style="list-style-type: none"> <li>• Introduction from ECCC/C. Kerr to open the session and welcome the group</li> <li>• Opening remarks from Dany Drouin, Director General, Plastics and Waste Management Directorate (ECCC)</li> </ul>
9:10-9:30am	<b>Basis for Workshop</b>	<ul style="list-style-type: none"> <li>• Presentation from ECCC on <b>Setting the Policy Landscape</b> (issues and drivers)</li> </ul>
9:30 – 10:20am	<b>Panel 1: Setting the Stage – Key Issues, Lessons from other Initiatives</b>	<ul style="list-style-type: none"> <li>• Panelists               <ul style="list-style-type: none"> <li>○ Panelist 1: Kelly Drennan, Founding Executive Director (Fashion Takes Action - FTA)</li> <li>○ Panelist 2: Paul Shorthouse, Managing Director (Circular Economy Leadership Canada – CELC)</li> <li>○ Panelist 3: Rory Gilseman, Director General, Hazards, Adaptation and Operations Branch (Natural Resources Canada - NRCan)</li> <li>○ Moderator: Katie Baker (Stratos)</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>• Questions <ul style="list-style-type: none"> <li>○ What are the biggest issues / challenges in Canada today with moving to a more circular textiles industry? (Kelly)</li> <li>○ What sort of circular strategies, solutions or actions are needed to transform the textiles sector in Canada? (Paul)</li> <li>○ What is the role for industry, government, and other stakeholders more specifically as part of this transformation? (Kelly 1st, Paul 2nd)</li> <li>○ Can you tell us more about the CCTC and how you see it supporting the transition over the next 2-3 years? (Kelly)</li> <li>○ What can we learn from other platforms and models for ‘pre-competitive’ collaboration, such as the Canada Plastics Pact, in terms of supporting sector transformations? (Paul)</li> <li>○ Where and how can the federal government best support these efforts in terms of policy and other actions? (Paul 1st, Kelly 2nd)</li> <li>○ We heard, in ECCC’s opening presentation, about possible federal policy roles that may be applied to textiles circularity. From your experience with other multi-stakeholder initiatives, are there insights you could share about identifying possible roles for the federal government? (Rory)</li> </ul> </li> </ul>
10:20-10:30am	<b>Health Break</b>	<ul style="list-style-type: none"> <li>• Coffee/tea will be provided</li> </ul>
10:30 – 10:50am	<b>Icebreaker and Introductions</b>	<ul style="list-style-type: none"> <li>• Facilitated by Katie (Stratos)</li> </ul>
10:50-11:35am	<b>Panel 2: Municipal Efforts and Plans, Gaps for Federal Support (ECCC)</b>	<ul style="list-style-type: none"> <li>• Panelists: <ul style="list-style-type: none"> <li>○ <u>Panelist 1</u>: Claudia Marsales (City of Markham)</li> <li>○ <u>Panelist 2</u>: Vivian DeGiovanni (City of Guelph)</li> <li>○ <u>Panelist 3</u>: Mariane Maltais-Guilbault (City of Montreal)</li> </ul> </li> </ul>



11:35-12:05pm	<b>Facilitation Overview and Breakout Session for Panel #2</b>	<ul style="list-style-type: none"> <li>• Large group will break out into smaller discussion groups</li> </ul>
12:05-12:20pm	<b>Summary of Breakout Session for Panel #2 Key Messages</b>	<ul style="list-style-type: none"> <li>• Summary in Plenary of Key Messages from Breakout Session for Panel #2</li> </ul>
12:20-1:00pm	<b>Lunch</b>	<ul style="list-style-type: none"> <li>• Lunch and beverages will be provided</li> </ul>
1:00-1:45pm	<b>Panel 3: Lessons Learned – Collection and Triaging, Gaps for Federal Support (ECCC)</b>	<ul style="list-style-type: none"> <li>• Panelists: <ul style="list-style-type: none"> <li>○ <i>Panelist 1</i>: Tonny Colyn, President and co-founder (National Association for Charitable Textile Recycling - NACTR/Salvation Army)</li> <li>○ <i>Panelist 2</i>: Mortimer Capriles, Director of Sustainability and Innovation (Goodwill Alberta)</li> <li>○ <i>Panelist 3</i>: Andrew Telfer, Executive Director (acting) (Smart Cities Office at City of Guelph)</li> </ul> </li> </ul>
1:45-2:25pm	<b>Facilitation Overview and Breakout Session for Panel #3</b>	<ul style="list-style-type: none"> <li>• Group breaks down into smaller table groups of 3 each</li> </ul>
2:25-2:45pm	<b>Summary of Breakout Session for Panel #3 Key Messages</b>	<ul style="list-style-type: none"> <li>• Summary in Plenary of Key Messages from Breakout Session for Panel #3</li> </ul>
2:45-3:00pm	<b>Health/Networking Break</b>	<ul style="list-style-type: none"> <li>• Coffee/tea will be provided</li> </ul>
3:00-4:25pm	<b>Possible Federal Roles and Next Steps</b>	<ul style="list-style-type: none"> <li>• Facilitated discussion by Katie <ul style="list-style-type: none"> <li>○ What are the opportunities for us?</li> <li>○ What next steps would be required?</li> </ul> </li> </ul>

4:25pm	Concluding Remarks	<ul style="list-style-type: none"><li>• Closing remarks from Catherine (ECCC)</li></ul>
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## APPENDIX C DETAILED STAKEHOLDER INITIATIVES

**Municipality:** Ville de Montréal

**Contact:**

Mariane Maltais-Guilbeault  
Conseillère en planification  
Ville de Montréal

**Initiatives:**

- Le geste des citoyens qui souhaitent se départir de leurs textiles est déterminant; ce sont eux qui décident de les mettre à la poubelle ou de les destiner au réemploi (par le don, par exemple). Comment favoriser que les citoyens posent le bon geste pour que les textiles en bon état soient réemployés plutôt que jetés? Pour améliorer la récupération des textiles, la Ville de Montréal mène présentement une **analyse comportementale** afin d'identifier comment intervenir le plus efficacement possible pour influencer ce comportement en faveur du réemploi.
- Les textiles dont la qualité n'est pas suffisante pour être réemployés n'ont pratiquement pas d'autres avenues en ce moment que l'enfouissement. Il manque les maillons du tri, du conditionnement et du recyclage pour détourner les textiles en mauvais état des sites d'enfouissement. Pour soutenir les marchés de la valorisation des textiles, la Ville de Montréal a contribué à l'élaboration d'un défi dans le cadre des Défis Innovation par TechniTextile (OBNL), financé par le ministère de l'Économie et de l'Innovation et Énergie. Cet **appel à projets** est doté d'une enveloppe de 2 Millions de dollars (jusqu'à 50% de financement; au total jusqu'à 500 000 \$ d'aide par projet) pour trouver une organisation (entreprise, entreprise d'économie sociale, OBNL, etc) ou un regroupement qui pourrait créer de l'innovation pour favoriser la circularité des textiles à Montréal.
- La Ville de Montréal souhaite aussi faire preuve d'**exemplarité**. Le service de l'approvisionnement a aussi lancé un défi dans le cadre des Défis Innovation pour réduire l'empreinte environnementale des uniformes et vêtements de travail utilisés à la Ville. Cet appel à projets vise donc le défilage d'uniformes en fin de vie, puis la production de nouvelles étoffes en boucle fermée. Une part du défi porte sur la recherche d'alternatives propres, innovantes et durables pour remplacer les apprêts et teintures chimiques présentement utilisés dans la fabrication des uniformes des travailleurs de la Ville.

- En 2021, la Ville de Montréal a octroyé une subvention de 500 000 \$ à Renaissance et Vestechpro, centre de recherche et d'innovation en habillement basé à Montréal, pour permettre la mise sur pied sur 2 ans d'un **projet pilote en 3 volets** : réduction à la source, réemploi et recyclage.
    - Volet 1 - Réduction à la source: production du Petit guide de la consommation responsable qui donne des trucs concrets sur des comportements à adopter chez-soi, comme la préparation d'une garde-robe capsule, le rangement des vêtements pour maximiser ce qu'on possède, les bons choix à l'achat et des trucs pour prolonger la durée de vie de nos vêtements.
    - Volet 2 - Réemploi: projet-pilote d'intégration d'un service de réparation aux opérations de Renaissance pour favoriser le réemploi de textile en limitant le gaspillage et en réduisant l'enfouissement. Ce service crée de nouveaux emplois pour le parcours d'insertion socioprofessionnelle lié à la mission de Renaissance en reposant sur des formations en réparation et reconditionnement de vêtements grâce à l'expertise de son partenaire, Vestechpro.
    - Volet 3 - Recyclage: Au Québec, la collecte de vêtements fonctionne bien grâce à un réseau d'économie sociale bien implanté et capable de recueillir 100 % des textiles jetés par les citoyens. L'enjeu est le développement du recyclage. Ce troisième volet consiste à accélérer le transfert de compétences/connaissances en recyclage par des activités de recherche et développement, avec l'appui des chercheurs de Vestechpro et de leur défibreuse de laboratoire. Ces activités sont jugées essentielles à l'intégration réussie du recyclage chez Renaissance et au développement subséquent d'un pilote industriel. Quelques années de recherche en équipements spécialisés, en caractérisation de textiles recyclés et en analyse de débouchés seront nécessaires.
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**Municipality:** City of Guelph

**Contact:**

Madeleine Myhill

Waste Program Coordinator

Compliance and Performance, Environmental Services, City of Guelph

**Initiatives:**

- Guelph began licensing donation bins in 2015 to help alleviate overflow and spillage, keep track of bins, eradicate illegal bins, and to increase safety
  - Guelph now has a donation map to help residents identify nearby locations accepting textiles:  
<https://guelph.ca/living/environment/garbage-and-recycling/clothing-donation-locations/>
  - Guelph has a collaboration with the Guelph Tool Library who does a lot of work in the textile reuse/repair space.
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**Organization:** Goodwill Industries of Alberta

**Contact:**

Mortimer Capriles (he/him)  
Director, Sustainability and Innovation  
Goodwill Industries of Alberta

**About:**

Goodwill is an award-winning social enterprise often referred to as a For Impact organization (officially a Non-Profit charity). Goodwill Industries of Alberta is affiliated (by name and purpose) with 160 Goodwill's in 17 countries and is the only sanctioned Goodwill in western Canada. Goodwill has operated in Alberta since 1963 and incorporated in 1975, strengthening the community and changing lives for the better.

Goodwill celebrates in 2023 its 60th Anniversary of delivering so much impact within our journey of good. In 2023, Goodwillians across the province are rallying in celebration of Goodwill crossing the 1000 team member (in 2023) plateau. Our product is **people**; Our core purpose is to **impact people and our planet for an amazing Alberta** and we do this through an environmental lens.

**Initiatives:**

- Selling of textiles at a low price by the pound.
- Repurposing of towels and other textiles into cleaning cloths and mixed rags.
- Repurposing of discarded jeans into aprons and reusable totes.
- Mending of uniforms.
- Selling unwanted textiles in good shape to non-profits and government agencies at a discounted price.

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**Municipality:** City of Toronto**Contact:**

Annette Synowiec  
Director, Policy, Planning & Outreach  
Solid Waste Management Services

**About:**

The City of Toronto's (City) [Long Term Waste Management Strategy](#) envisions a zero waste future and has implemented various programs that support waste reduction, reuse, and the move towards a circular economy.

The City has undertaken a number of initiatives with the objective of reducing and diverting textile waste. A summary of key actions are listed below.

**Initiatives:**

- **Sewing Repair Hubs**

- Since 2018, the City has funded four Sewing Repair Hubs, as part of the Community Reduce and Reuse Programs. They aim to reduce textile waste by providing workshop spaces to encourage repair and reuse of clothing and other textiles to help reduce the amount of textiles discarded each year. Program activities include regular instruction on the basics of alterations and repairs, and opportunities to make and design clothes from repurposed textiles. The program also provides an opportunity for residents to access tools, equipment, and supplies needed to repair their own clothing. Sewing Repair Hubs have had over 20,000 participants, have repaired 1,700 kg of clothing, had over 5,225 hours volunteered, hosted over 1,400 workshop sessions, and repaired or refurbished over 15,875 of textile items.

- **Textile Collection from Community Environment Days**

- Since 1991, Community Environment Days are one of many of the City's ReduceWasteTO programs that helps reduce the amount of reusable or recyclable waste going to landfill. Since collecting textile specific data in 2019, over 58.5 tonnes of textiles were collected, representing between 25 and 45 per cent of all reusable items collected by weight at these events. Over 50 events were held across the city in 2023.

- **Waste Reduction Community Grants**

- Between 2018 and 2021, the City implemented the Waste Reduction Community Grants, a program aimed to identify, develop, and initiate community-led actions that reduce residential waste and increase participation in the City's waste diversion programs. The City funded four agencies dedicated to textile waste diversion and reduction. One product resulting from the Program funding included the development of a SWAP Toolkit.

- **Promotion and Education**

- The City encourages textile waste reduction through various channels of promotion and education. Toronto residents can also visit the City's webpage, City's Reducing Clothing and Other Textile Waste, to learn about various ways to reduce textile waste and to shrink their clothing footprint, such as repurposing, swapping, borrowing, repairing, and shopping consciously.
- In addition, the City's TOwaste App also provides a listing of Donation Centres in Toronto where residents can take their used textiles to be reused. The City's online Waste Wizard search tool also encourages residents to donate items that can be reused before instructing them on which waste stream the item should be disposed in.

- **Clothing Drop Box Location Permit**

- The City's Municipal Licensing and Standards Division oversees the City's Clothing Drop Box Location Permit, which provides regulations around the safety and maintenance of clothing drop boxes.
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**Municipality:** City of Ottawa

**Contact:**

Nichole Hoover-Bienasz  
Program Manager, Long Term Planning  
Solid Waste Services

**About:**

Currently, Ottawa residents have access to a few different options for textile diversion. These include the [Take it Back! Program](#), where retailers and charities accept household items, including textiles, for reuse and recycling. Residents can also drop off materials at clothing donation boxes located throughout the city, making it a convenient method to donate used or unwanted clothing and other materials. Some charities also offer at home clothing collection.

Items donated through clothing donation boxes are often used to help support programs and initiatives undertaken by various organizations. This includes registered charities and non-profit corporations, for-profit textile recycling companies, as well as local thrift stores. Clothing donation boxes are often heavily relied upon as sources of revenue for their charitable programs and initiatives. Several of the organizations who currently own and operate clothing donation boxes in Ottawa are members of the National Association for Charitable Textile Recycling (NACTR). This organization works to promote positive social and environmental impacts of charitable textile reuse, recycling, and thrift retail. The use of clothing donation boxes helps divert clothing, textiles, and other materials away from local landfills. Based on the City's 2018/2019 four season waste audit, approximately 5% of waste going to the City's Trail Waste Facility Landfill are textiles.

**Initiatives:**

- **Recent Changes to Ottawa's Permit and Reporting Process**
  - On September 27, 2023, Ottawa City Council approved changes to Ottawa's Clothing Donation By-law to introduce a permitting system to hold clothing donation box owners and private property owners more accountable for the location, signage, maintenance, and safety of outdoor clothing donation boxes in Ottawa. The new permit system, which will come into effect on January 31, 2024, will focus on the protection of persons and property, including consumer protection, public health and safety, and the prevention of public nuisances.
  - The new regulations were developed to provide increased municipal oversight, transparency of operator information, routine maintenance obligations, and additional enforcement tools to prevent problems from occurring and to address issues of noncompliance when they do occur. The new regulations will allow residents to make an informed decision when choosing to donate clothing or textiles through donation bins. An annual reporting requirement of donation data is also part of the new

permit regime to help inform textile waste diversion enhancement initiatives being considered in the development of the City's new Solid Waste Master Plan.

- **Future Changes**

- Looking at ways to enhance existing textile waste diversion in Ottawa has been identified as a recommended area of focus for the City's new Solid Waste Master Plan. Staff have identified opportunities for the City to improve resident access to donation options by enhancing bin placement across the City, enhance existing tools to help residents easily identify where they can donate used textiles, invest more in promotion, education and outreach, hosting reuse and repair events that will focus on clothing swaps and clothing repairs, considering materials bans to support textile diversion efforts, and efforts to gather data insights to help the City better understand how it can work with organizations, other levels of government and industry to advance reuse and recycling of textiles.
  - The draft Solid Waste Master Plan will be tabled for Committee and Council information on November 21, 2023 and December 6, 2023 respectively. A final solid Waste Master Plan will be tabled for Council approval in Q2 2024 following a final round of community and stakeholder engagement.
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**Organization:** Renaissance Goodwill Montréal

**Contact:**

Carl Turgeon

Sustainability Manager / *Gestionnaire principal développement durable*

**About:**

Renaissance is a Quebec non-profit organization that promotes the social and occupational integration of people facing barriers to labour market entry, while encouraging everyone to take concrete action for the environment. Renaissance serves the community through three missions: social, environmental and economic. Donating to and shopping at Renaissance helps change the lives of thousands of people each year and protects the environment by diverting millions of kilograms of clothing and household items from landfill.

**Initiatives:**

- **Development of a socio-economic, sustainable and scientific approach to reduction, reuse and recycling of post-consumption textile” (Sept. 21 - Feb. 24).**
  - This R&D project is focusing on the feasibility of establishing a mechanical recycling pilot line for post-consumer textiles, with our technical partner VESTECHPRO ([www.vestechpro.com](http://www.vestechpro.com)). This work is being funded by City of Montreal through a 0.5M\$ grant within their 2020-2030 roadmap for circularity. Ultimately, this project will be studying 3 of the most promising non-woven applications using post-consumer textile and their potential for industrial commercialization.
- **Integration of a pilot study for a new textile repair and upcycling insertion program for participants at Renaissance (June 23 - Dec. 24)**
  - This new pilot program will validate all steps necessary to introduce basic repair skills and some upcycling concepts to a group of 4 participants through our existing frame of socio-professional insertion programs. If proven efficient and financially viable, this pilot study could lead to subsequent and larger cohorts of participants, establishing a sustainable solution for donated clothes at Renaissance that need minor repairs, in order to avoid further recycling or elimination.

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**Municipality:** City of Calgary

**Contact:**

Sheela Das (she/her)  
Business Strategist | Strategic Planning & Policy  
Waste & Recycling Services, The City of Calgary

**About:**

Waste & Recycling Services is focused on enabling Calgarians to reduce and manage their waste responsibly, now and into the future. The service delivers residential Black Cart, Blue Cart, Green Cart programs, container collection, as well as several community-based waste reduction and diversion programs.

**Initiatives:**

- **Textile Recycling and Reuse**
  - The City of Calgary accepts clothing and textiles, even damaged goods at our three City Throw N’Go’s in partnership with Goodwill Alberta.
  - Clothing and textiles are donated, reused or recycled depending on their condition.
    - Any reusable clothing is sent for resale to retailers internationally.



- If the item isn't reusable, it will be recycled instead. Textile recyclers turn old clothing, shoes, linens and fabrics into new products. Materials are sorted, cleaned and can be turned into wiping rags or shredded down for upholstery stuffing or fiber recycling.
  - In 2023, The City ran a pilot project with Goodwill Alberta to collect Reusable Items at our Spy Hill Throw N'Go location with the goal of diverting household items suitable for reuse instead of landfill disposal. The reusable items were collected and sold at Goodwill's Calgary store locations.
  - **The City of Calgary Circular Economy Grant (CEG) program**
    - This program provides \$5,000-\$25,000 in funding for non-profit organizations to lead local waste reduction, reuse, recycling, and composting initiatives to help Calgary move to a circular economy. This pilot program started in 2023 and will run through 2026.
    - Three of the applications selected for funding in 2023 focus on textile sharing, repairing and reuse:
      - The Arusha Centre - Repair Exchange Calgary: This is an initiative to enhance knowledge and skills around repairing personal and household items. The program organizes free community events where citizens fix things alongside the help of a community member, including textiles such as clothing, zippers, blankets, backpacks, etc.
      - Canadian Parks and Wilderness Society Southern Alberta Chapter - Re-wear and Repair, Outdoor Gear in a Circular Economy: This project diverts outdoor recreation material waste through organizing in-person school presentations and online workshops, outdoor gear repair events, an outdoor gear library and the ChangeMaker online hub.
      - Silvera for Seniors - Free Little Fibre Libraries and Community Knitting Hub: This project will reuse and upcycle fibre and yarn through building Free Fibre Libraries in communities, setting up knitting thrift stores, and organizing knitting clubs.
  - **Waste Reduction Initiatives**
    - The City is currently considering additional opportunities to reduce textiles waste such as behaviour change, education, programs or services, and partnerships.
- 

**Municipality:** City of Markham

**Contact:**

Claudia Marsales, Senior Manager  
Waste & Environmental Management | City of Markham

Kimberley Dunsmoor, Supervisor, Waste Diversion Programs

**About:**

The City of Markham offers residents a unique solution for the sustainable recycling of unwanted textiles that incorporates a safe and accessible city-wide collection system; with transparent reporting on cost-savings, environmental outcomes and community partnerships and increased diversion.

**Initiatives:**

- In 2012, Council approved 10 environmental initiatives including expanding diversion opportunities for household textiles.
  - Waste composition audits (2012) conducted by York Region in cooperation with the local municipalities found that textiles accounted for up to 5 to 7 percent of waste destined for landfill.
  - In 2014, Markham conducted residential focus groups to determine residents' level of interest in textile recycling and gathered data for designing Markham's textile diversion program. The research provided valuable insight to how little residents knew about textile recycling and indicated strong support for a Markham managed program.
  - In 2015, Markham introduced a licensing By-law for textile donation containers and began the removal of all unregulated donation containers/illegal dumping.
  - An extensive educational campaign was incorporated during all phases of the program with specific resources designed to raise residential awareness, increase participation and engage the public at-large.
  - The Textile Recycling Program was launched in the fall of 2016 with the installation of charity owned and Markham-branded donation containers in safe, convenient locations across the City.
  - In April 2017, Markham Council banned textiles from curbside garbage collection.
  - The program has grown to over 160 public access locations and 63 multi-residential properties, Markham bins are easy to find.
  - In October 2023, Markham hit the 30 million lb. milestone (13,608,000 kg) of donated unwanted clothing and textiles, diverting valuable resources away from landfill for reuse and recycling.
  - Markham continues to educate residents and build awareness about textile waste.
- 

**Municipality:** Ville de Gatineau

**Contact:**

Christelle Honnet

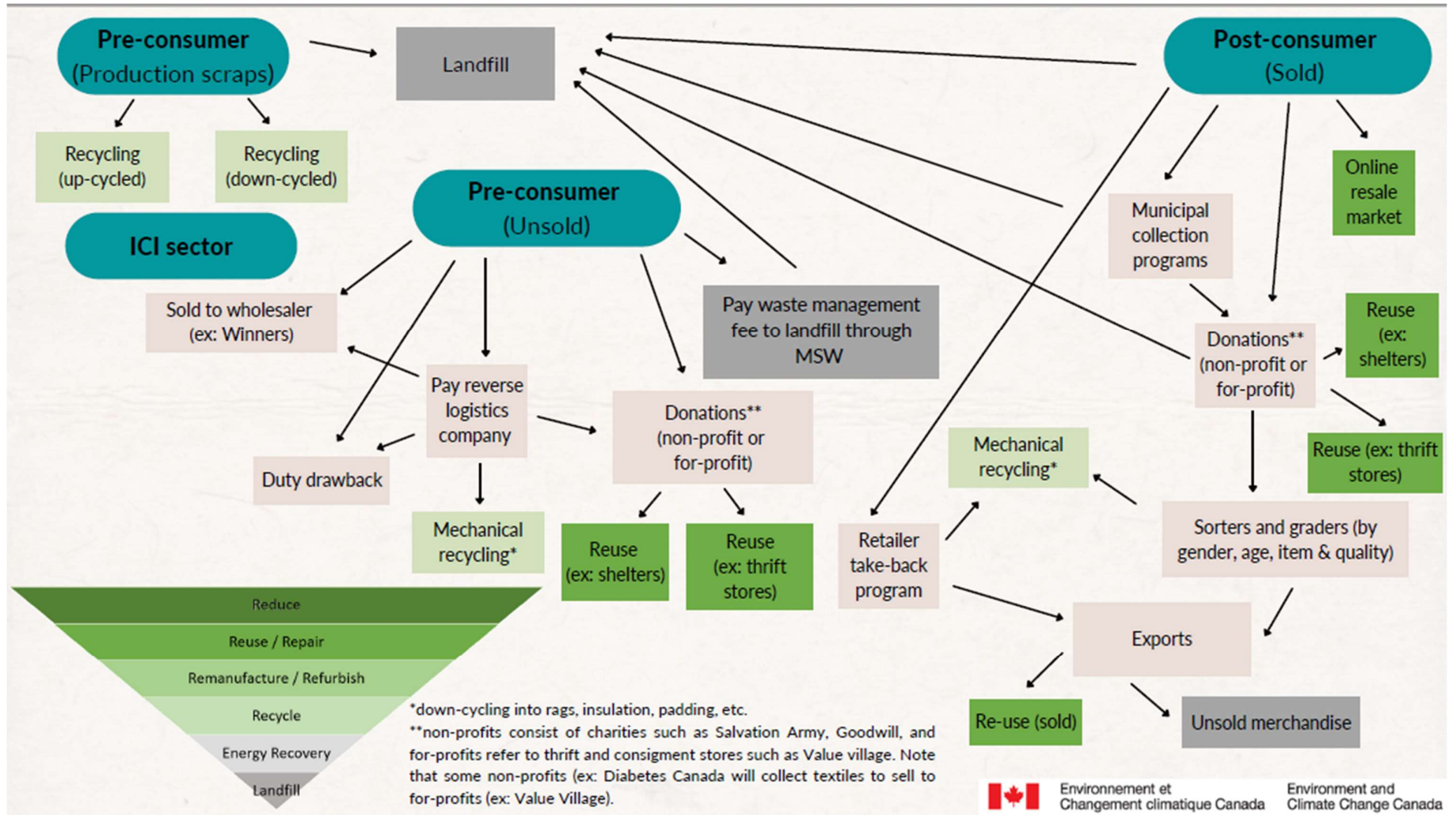
Project Manager, Residual Materials Management Plan

Eau et matières résiduelles

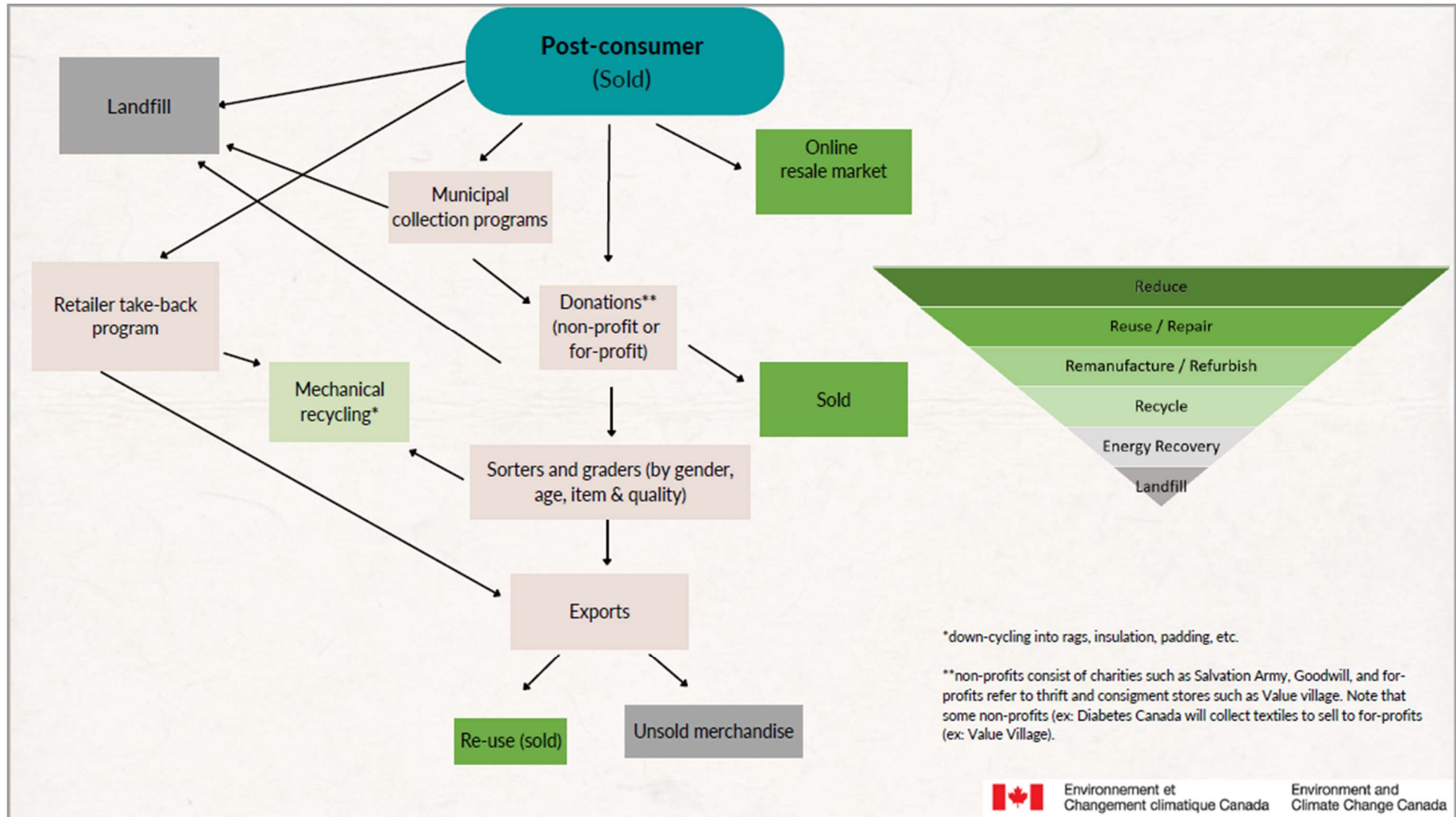
**Initiatives:**

- The City of Gatineau is currently organizing a working group on textiles collection and recovery with all the non-profit organizations of Gatineau, 6 meetings are planned to design together a model of textiles collection and recovery for Gatineau.
- Gatineau is also conducting a circular economy study that includes a material flow analysis for textiles. Results to be available for mid-2024.

## APPENDIX D TEXTILES APPAREL FLOW



## Small Sector flow for textile





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**ERM Ottawa**

1404-1 Nicholas Street  
Ottawa, Ontario  
Canada K1N 7B7

T: 343-688-2105

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