The Future of Textile Waste Management in BC

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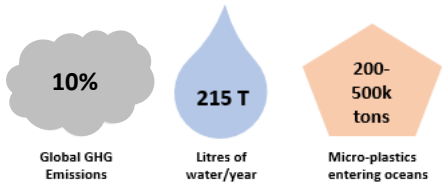
INTRODUCTION

As one of the fastest growing waste streams worldwide, textile waste is a major contributor to pollution, GHG emissions and **a hazard to human and ecosystem health**. On June 6, 2023, the Federal Government tabled a bill regarding the establishment of a national strategy for reducing textile waste. Though it is only in its first reading, the potential of this bill passing is high.

SOCIAL & ENVIRONMENTAL CONCERNS



Hazardous chemicals including pesticides, fire-retardants and PFAS are used in textile dye and finishing agents. These enter soil and water, **endangering** those who live or work near textile manufacturing facilities (TextileWorld, 2021).

Most textile waste ends up in landfills or is incinerated due to a lack of **regulation and infrastructure.** Perpetuation of a "disposable" consumer mindset, resource extraction, the use of heavy chemicals and dangerous working conditions for garment workers all contribute to **climate and social injustices**.

The production and disposal of textiles has a significant effect on **planetary boundaries**, most notably: freshwater use, land-system change and the introduction of novel entities.

GLOBAL RESPONSES

Countries:
- EU Strategy for Sustainable and Circular Textiles
- EU countries calling for Extended Producer Responsibility (EPR) requirements
- Global South refusing exported textiles

Organizations:
- UN Fashion Industry Charter for Climate Action
- Fashion Takes Action Textile Recycling Feasibility Study

Individuals:
- Consumer awareness/education
- Calling for brand transparency
- Shopping less & shopping second-hand
- Repair vs. Re-purchase

FEDERAL AND PROVINCIAL RESPONSE

Linear Model: Canada sends **93%** of its post-consumer textiles to landfill (Government of Canada, 2021).
BC encourages municipalities to follow the 5 R Pollution Prevention Policy of **reduce, reuse, recycle, recovery and residuals management** (Government of BC, n.d.).

RECOMMENDATIONS

Policy & Governance:
- Reduce allowance of exportable textile waste – this could encourage post-consumer textile waste as raw material
- Development of a classification system for separating usable or recyclable textiles
- Require sustainability reporting and monitoring from organizations
- Regulation of hazardous chemical allowance in imported clothing
- Extended Producer Responsibility (EPR) requirements for fashion brands & textile producers

Education:
- Encouragement of life-cycle thinking & adaptive co-management that addresses end-of-life considerations in textile design
- Incentivization of take-back programs and repair services

Technology/R&D:
- Focus on improving structural and systemic inefficiencies present in current recycling programs (Gothár & Schanz, 2022)
- Improve value recovery & create infrastructure for the supply of secondary end markets to ensure a high-quality of available recycled product (Government of Canada, 2021)

ALIGNMENT WITH PROVINCIAL CLIMATE GOALS

- Establish requirement for net-zero 2050 plans for industry
- Develop province-wide Circular Economy Strategy
- Implement energy intensity targets/policies for movement of goods
- Local government climate action plan
- Supporting innovation for companies creating negative emissions technologies
- Household affordability
- Improving health and well-being
- Providing economic and social opportunities

(Clean BC Roadmap to 2030, n.d.)

CONCLUSION

True textile recycling is not yet fully feasible due to challenges with infrastructure and classification systems. With the introduction of Bill C-337, Canada is well on its way to addressing this issue, and provinces will need to be prepared. Following recommendations laid out by Bill C-337, BC can address its textile waste issue while advancing its climate goals. This will require collaboration, systems thinking, and an embrace of waste-to-value 3rd generational sustainability.

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