Circular Ontario: A Descriptive Study Comparing Ontario's Blue Box Recycling System

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BACKGROUND

There has been an exponential growth in consumerism, driven by demand for convenience and novelty. One consequence is the copious amounts of post-consumption waste, with paper and packaging materials (PPM), like plastic, glass, and metal, being a major contributor. An approach in public policy to manage such waste is *Extended Producer Responsibility* (*EPR*), i.e., the responsibility of end-of-life management of products and their packaging to the producers (Lakhan, 2016). EPR applies *Stewardship* and internalizes the *Polluter Pays* principle (Vermeulen & Campbell-Johnston, 2024).

Ontario was the first in the world to establish a curbside recycling program for PPM, referred to as 'Blue Box'. Historically, municipalities were responsible for funding all the net costs of their Blue Box programs. The *Waste Diversion Act, 2002* was enacted to standardize waste diversion programs, including Blue Box, and create a collaborative, financially sustainable approach. Based on *Shared Responsibility*, 50% of the costs were borne by municipalities while the other was recovered from industry stewards.

The Resource Recovery & Circular Economy Act was enacted in 2016 to move Ontario towards a circular economy. Under this Act, Ontario Regulation 391/21: Blue Box was published to overhaul the Legacy Program and transition the system to an EPR framework, making producers fully accountable and financially responsible for their products and packaging once they reach their end of life.



RESEARCH QUESTION

How does Ontario Regulation 391/21 under the RRCEA, 2016, attempt to address the shortcomings of the Legacy Program? Objectives:

- 1. Describe the structure of the Legacy Program
- 2. Describe the structure of O. Reg. 391/21: Blue Box
- 3. Discern the strengths and weaknesses of the new Regulation

METHODOLOGY

I conducted an analysis of policy documents through a comprehensive review of legislative policies, reports, program plans, and studies pertaining to the Legacy Program and the newly implemented Regulation available through the organizational websites of Stewardship Ontario (SO) and Resource Productivity and Recovery Authority (RPRA).

A literature review was also conducted, relying on peer-reviewed research, relevant to the success and limitation of the Legacy Program. Key words included, but were not limited to, 'blue box', 'blue box Ontario', 'product stewardship Ontario'.

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KEY STRUCTURAL DIFFERENCES

LEGACY PROGRAM

- Based on a 50-50 Shared Responsibility financial model, with municipalities managing local recycling programs.
- Categorized recyclable materials into distinct types (e.g., printed paper, plastics, metals), with certain materials not captured.
- Implemented province-wide but with inconsistencies across municipalities affecting recycling capabilities.
- Managed by Waste Diversion Ontario, with SO acting as the Industry Funding Organization ensuring funds are received from Stewards to help municipalities recover costs.
- Relied on a shared funding model between municipalities and stewards, using the Activity-Based Costing Protocol and Pay-In Model.
- Used data to measure the net system cost and recycling rates, aiming to improve waste diversion rates through municipal efforts.
- Focused on public education and awareness activities managed by municipalities and SO.

REGULATION

- Based on a full EPR financial model, making producers responsible for the end-of-life management of packaging and products.
- Expands the list to include packaging-like products, to discourage single-use materials, and focuses on a uniform set of materials to be recycled across the province.
- Homogenized recycling system across Ontario, with a phased transition for municipalities and First Nations communities from 2023 to 2025.
- Shifts the responsibility to producers, overseen by RPRA, and introduces Producer Responsibility Organizations (PROs) to operate a on behalf of producers.
- Introduces program fees charged to producers based on the amount of material supplied.
- Sets out stringent and material-specific management requirements with recovery percentages for materials.
- The responsibility of public education and awareness shifts towards producers and PROs to educate consumers about the new system.

DISCUSSION

The transition from a shared responsibility model to full EPR moves burden of recycling post-consumption waste from municipalities to producers. Under the Legacy Program, recycling of materials depended on municipal capacities, however O. Reg 391/21 introduces uniform recycling standards across Ontario by legally obligating producers to ensure all materials get recycled. Moreover, it also includes packaging-like products, capturing single-use items and plastic wraps, and difficult-to-recycle items. This encourages sustainable alternatives amidst federal ban and promotes innovation in design and material use.

LIMITATIONS OF O. REG 391/21

Lakhan (2020) argues that including "packaging-like products" amidst a federal ban on single-use plastics could confuse households and undermine recycling efforts. On the contrary, this move standardizes recycling materials, ensuring single-use plastics get captured in the system if produced, and discourage the production of single-use plastics, aligning with federal efforts. However, Lakhan (2020) is right to point out that such materials are prone to being categorized as contamination and often end up being discarded rather than recycled, increasing private costs to producers without brining environmental benefits for the public.

The Regulation adopts a variable fee structure, however does not differentiate between Blue Box materials. Different materials have varying environmental costs, e.g., plastic waste versus paper waste. Eco-modulation of fees target eco-design by reducing costs for products that are easier to recycle and less environmentally harmful (Lifset et. al., 2023). Moreover, there are currently only 3 PROs in the system, which brings in concerns over competition, innovation, and efficiency in the market.

RECOMMENDATIONS

Incorporate Eco-modulation in Fees:

Lower fees could be applied to packaging made from materials that are easily recyclable within Ontario's existing infrastructure, encouraging producers to consider environmental impacts in their design process.

Encourage Competition:

Facilitate the entry of new PROs in the market, set performance benchmarks to drive innovation and efficiency, and ensure transparent and fair access to recycling infrastructure for all producers.

Expand Deposit Return System for Non-Alcoholic Bev. Containers:

Expand on the system already established by LCBO and Brewers Retailers Inc. to include non-alcoholic beverage containers. Ontario should invest in comprehensive consumer awareness campaigns and develop an accessible and convenient return infrastructure by leveraging technology to facilitate returns, such as the Return-It Express model in British Columbia, which offers a contactless, efficient system for consumers (Encorp Pacific, 2021).

Harmonization of EPR Programs

Diggle and Walker (2020) call for harmonization of EPR strategies across Canadian provinces towards a cohesive national framework for waste management and recycling. This would synchronize regulations, standards, and practices across jurisdictions, thereby eliminating the existing patchwork of policies that can confuse producers and consumers alike.