

Circular Economy Transitions: Informal Recycling and Expanding the Deposit Refund System in BC



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Introduction

The colossal amount of **waste** produced every year worldwide has immense impacts socially, economically, and environmentally, and is ultimately **unsustainable**—especially within the context of the climate crisis. Disposable coffee cups make up a significant portion of the waste generated in Canadian cities and are often not recycled properly, but rather left in the garbage or littered throughout streets, parks, and other public spaces. Comparatively, refundable beverage containers have a much higher recycling rate (Gutberlet et al., 2018). Informal recyclers known in Canadian cities as “**binners**,” “**diverters**,” on the West coast or “**valoristes**” in Quebec, who collect and return refundable beverage containers as part of their livelihood, play an important dual social and environmental role: creating their own independent source of income by recycling these refundable materials, and simultaneously **supporting a circular economy** and city waste recovery (Sholanke & Gutberlet, 2020). Despite significant stigma and social exclusion, binners perform extremely important environmental work as the unsung heroes of waste management. Yet **without a refund in place, they cannot afford to recover materials**, such as coffee cups, that often end up in the garbage or littered throughout public space, costing the city money in transport and landfilling.

The Vancouver-based Binners' Project and the Victoria-based Diverters Foundation have been modelling what an expansion to the BC refund system to include coffee cups might look like through an annual event known as the **Coffee Cup Revolution (CCR)** (Sholanke & Gutberlet, 2022). The CCR offers a one-day pop-up depot to administer refunds for coffee cups and facilitate participatory dialogue about waste management and has been a successful event in terms of providing income to binners and diverters, engaging the community and stakeholders, and advocating for increased awareness. Overall, this research aims to better understand and emphasize the **relevance of the Deposit Refund System (DRS)** for increasing recovery rates of recyclables and simultaneously providing income opportunities for binners and diverters, thus contributing to a more sustainable, inclusive, and socially just circular economy.

Methodology

Working in the University of Victoria's Community-Based Research Lab in the Geography Department, the research aimed to link global sustainability issues with locally relevant actions. Building on pre-established relationships with three binners' organizations in Canada, the research aimed to understand the social, economic, and environmental work being done on-the-ground by local binners. Qualitative research methods, approved by the University of Victoria Human Research Ethics Board, were employed to explore the following research questions:

1. **How could a coffee cup deposit refund system in BC contribute to transitioning to a more socially just circular economy?**
2. **What challenges or barriers might there be to such an expansion of the deposit refund system?**

Primary data was gathered through multiple semi-structured interviews. Interview audio was transcribed into text, before undergoing content analysis through manual coding to thematically analyze the data. The qualitative analysis involved an inductive approach, allowing for codes, patterns, and key themes to emerge from the data itself (Linneberg & Korsgaard, 2019).

Figure 1: Volunteer counting coffee cups at the Vancouver Coffee Cup Revolution.



Source: The Binners' Project. (2019)

The October 2022 Coffee Cup Revolution in Vancouver resulted in the collection of 75,243 cups in 3 hours, generating \$7,500 in refunds for Binners (Binners' Project, 2023).

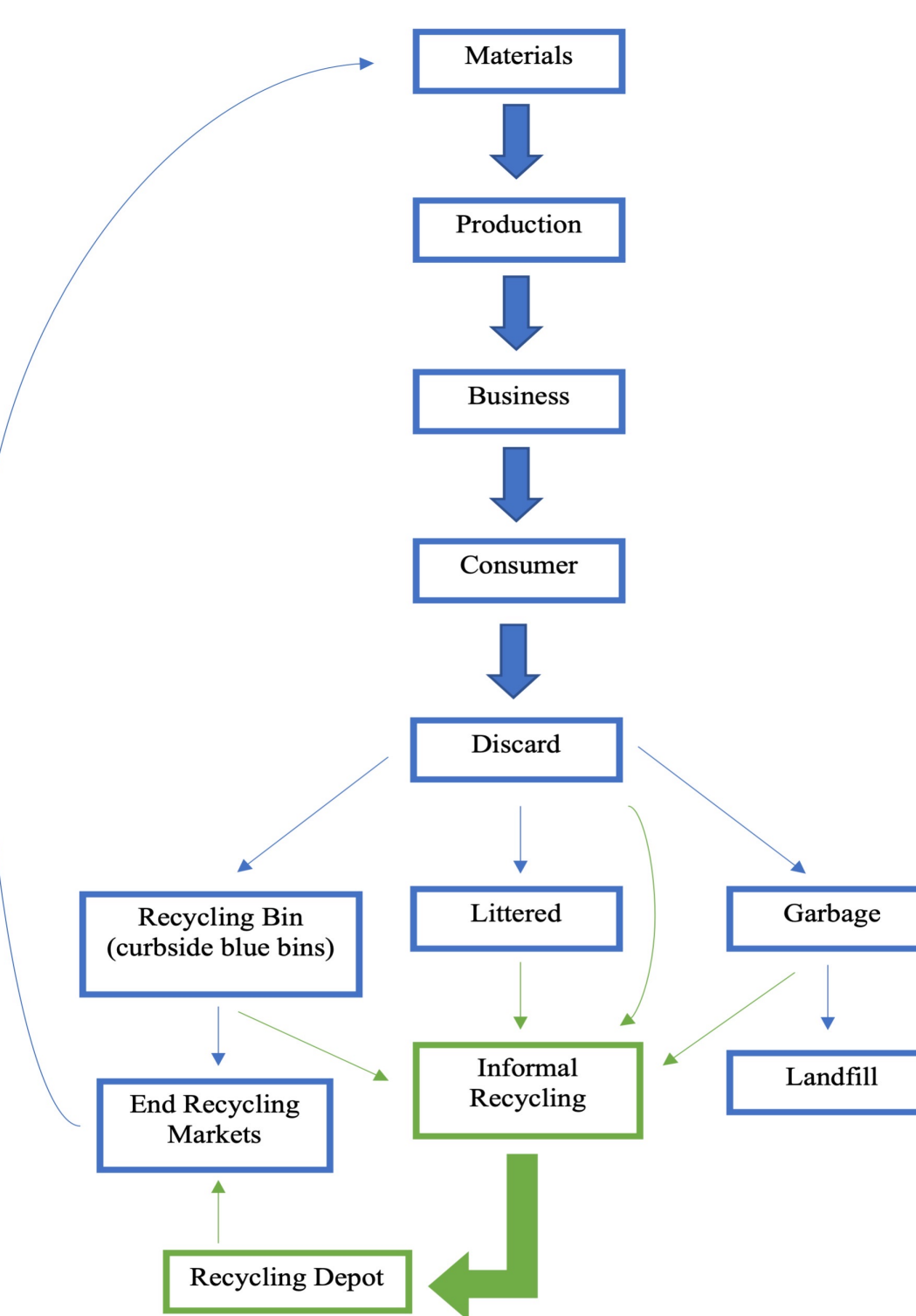
Results

Data collection and analysis revealed a number of ways in which a permanent coffee cup deposit refund might generate positive social, economic, and environmental impacts, as well as several key challenges that reduce the feasibility of including coffee cups in the province's refund system.

Opportunities

As identified by the binners' organizations interviewed, a **permanent coffee cup refund** would make it affordable for binners to recover these materials, which would otherwise likely be landfilled, into the recycling stream. Not only would this bring the environmental benefit of **cleaner cities** with less litter and higher recovery rates into recycling streams, but it would also contribute to binners' income, **fulfilling a social purpose** as many binners experience social exclusion, poverty, and/or housing insecurity (Gutberlet et al., 2009). An expansion of the DRS to include coffee cups is an opportunity to further destigmatize informal recycling and encourage increased public awareness and education about binning and binners, as, at present, binners are the primary advocates for this change. This also presents a significant opportunity for **increased collaboration with binners and local government** through inclusive, participatory approaches to waste governance.

Figure 2: The disposable coffee cup life cycle process at present in BC (blue). Changes to the life cycle following the potential expansion of the DRS and greater inclusion of binners into the formal system of waste management (green).



Challenges and Limitations

Recyclability of Coffee Cups

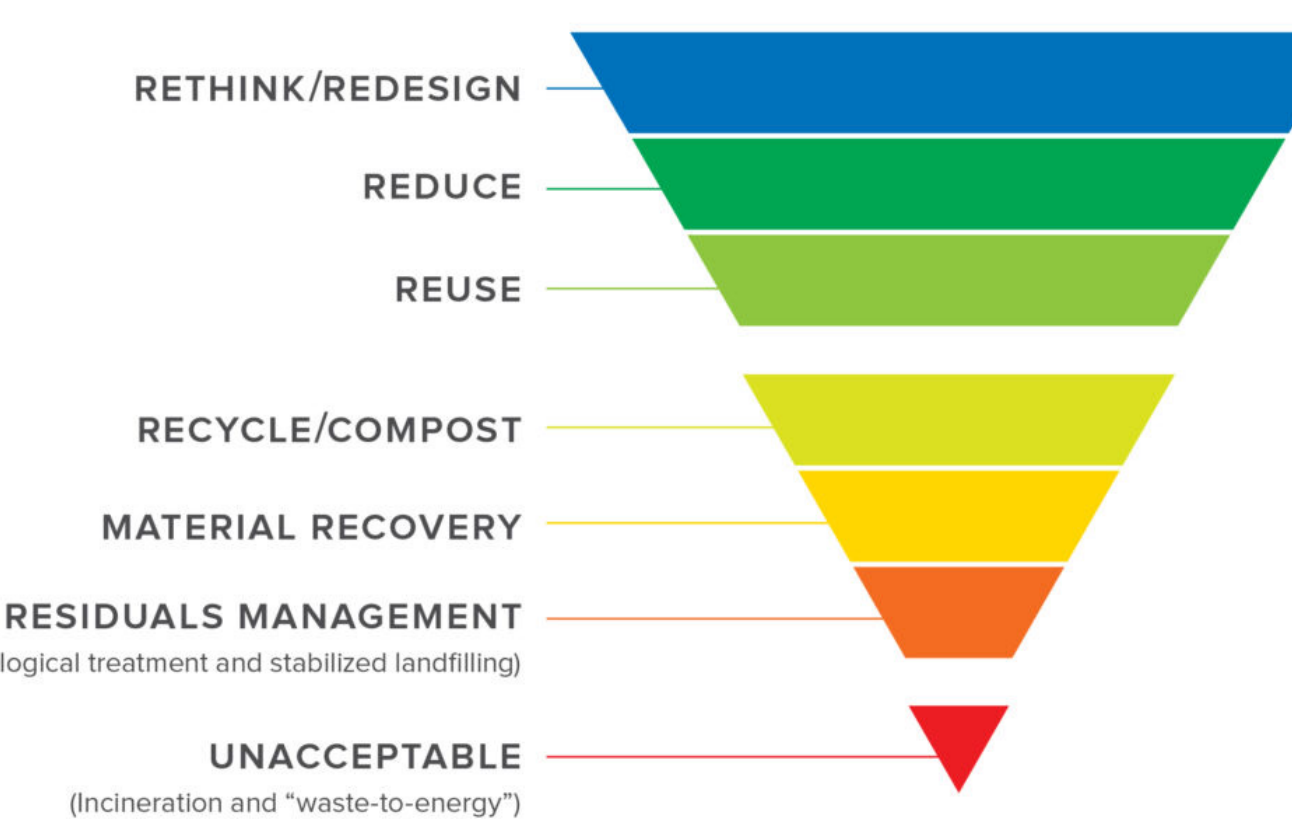
Issues related to the **recyclability** of coffee cups emerged as a key challenge in expanding the DRS. Disposable coffee cups are typically made of a mixture of materials in what is known as a paper-plastic laminate (PPL) and these layers can be difficult to separate and recycle, making it challenging and potentially costly to find end markets for coffee cup waste. However, it is generally considered that **recycling, despite its challenges, is the preferable outcome for coffee cups** compared to the landfill.

According to waste hierarchy theory, it is favourable to prioritize avoidance, **reduction and reuse before recycling**, leading to a general policy preference of focusing on prevention and reduction first (Energy Justice Network, n.d.). This may divert resources from exploring an expansion of the DRS to other policy measures, such as the introduction of cup fees. However, the DRS still provides a valuable opportunity to combat waste while also generating income to binners and can be adopted in conjunction with other reduction measures.

Binners' Legitimacy and Local Politics

Interviews revealed a common theme of binners' frustrations with the **stigma attached to informal recycling**, and at times, a lack of political will to support their advocacy and work in a more active way. Local politics proved to play a significant role in the “wins” and “losses” of binners' organizations, and their dynamic relationships with different levels of government, as well as funding opportunities. As the main proponents of an expansion to the refund system, a **lack of public awareness** about the benefits of informal recycling and legitimacy over binners' work also proved to be a key challenge in increasing support and strengthening advocacy.

Figure 3: The Zero Waste Hierarchy



Source: Energy Justice Network. (n.d)

The expansion of the DRS in BC depends on the provincial and not the municipal jurisdiction, which poses another limitation. Changes in policy need to be taken at the provincial level, warranting a need for province-wide support for such a change, as well as involvement and agreement with Recycle BC and Encorp Pacific. **These stakeholders need to be actively included** in conversations about coffee cups and the DRS; without their support it is unlikely that such changes will be realized. Overall, the opportunities and challenges related to an expansion to the DRS to include coffee cups are complex. Binners face a variety of challenges in their work, including **stigmatization, little public awareness, and a lack of funding, recognition, and support**. These issues form the main barriers to binners' ability to advocate for change.

An Inclusive and Circular Future

An **expansion** of the BC deposit refund system to **include disposable coffee cups** would contribute to a more socially just circular economy by making it attractive for binners to recover these recyclable materials. Binners and binner organizations face a variety of challenges in their work, including stigmatization, little public awareness, and a lack of funding, of recognition, and support; these issues form the main barriers to binners' ability to more productively contribute to the circular economy.

As a non-profit organization, the Diverters Foundation continues to deliver programming that helps **provide skills, economic opportunities, and education to marginalized people in Victoria**, while also working to destigmatize diverting. The Foundation is **continually evolving and changing**, with recent developments adding new projects, such as collaborations with new local community partners, exploring different types of waste diversion such as organic and food waste, organizing new ways to strengthen and support the binner and diverter community, and even being featured in a new Telus Storyhive docuseries set to air in autumn 2024.

As the Foundation's focuses adapt and change over time, advocating for the addition of coffee cups to BC's deposit refund system is essential to creating a new circular economy that is inclusive and socially just. **Destigmatization** of diverting, the integration of binners and diverters' work into formal waste management systems, public education, and greater collaboration and partnership between the local community are necessary. By **uplifting these grassroots efforts** to change how we manage and interact with our waste, it is possible to work toward a more **inclusive and environmentally conscious future**.

For more information see the [Community Based Research Lab](#) website.



Figure 4: The Diverters Foundation starting the 2021 Coffee Cup Revolution, Victoria BC.

Source: Patrick Hallis. (2021)

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