

Grassroots Innovations in Solid Waste Management

SOCIAL AND CIRCULAR INNOVATIONS FROM BELOW: INSIGHTS FROM BINNERS INDIVIDUAL EXPERIENCES IN VICTORIA

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1. INTRODUCTION

This column presents preliminary results from an ongoing research project with waste pickers in Canada, where they are commonly called bidders, exploring different forms of grassroots social innovation identified during fieldwork.

The project started in October 2025 and involved bidders from Victoria and Vancouver, both in British Columbia, with a focus on understanding their educational background, needs, wishes, and dreams. Activities included: i) conversations and connections with non-profit organizations working with people experiencing social vulnerability; ii) visits to Bottle Depots, where bidders deliver beverage containers, for observations and informal conversations; iii) short interviews with those interested in participating in the project; iv) and one workshop.

Although the project initially focused on education, this immersion into the daily realities of bidders also provided broader insights into their experiences. Bidders contribute to resource recovery and circular economy systems by collecting bottles discarded in public spaces, or recovering recyclables incorrectly disposed of in waste bins, and helping to keep refund money circulating within the local economy. In this sense, they simultaneously resist social exclusion while generating environmental benefits for society.

One of the main differences observed between the two cities is that, in Vancouver, many bidders are connected through the Bidders' Project (Bidders' Project, 2025), while in Victoria they work mainly individually.

Our last research project conducted in this region in 2024 explored the role of grassroots organizations in the circular economy, showing examples of their social innovation, but was not able to explore the individual experiences of bidders (Castro et al., 2026). For this reason, this column will focus on the case of Victoria, presenting the experience of three bidders working individually, emphasizing their informal environmental stewardship and contributions to the circular economy.

Our argument is that social innovation also emerges among waste pickers working individually, even though the literature and our previous work often focused on organized groups such as cooperatives as case studies (Cam-

pos et al., 2022; Castro & Gutberlet, 2025; Gutberlet, 2021; Gutberlet et al., 2020, 2023).

2. CONTEXTUALIZING WASTE PICKERS IN CANADA

Waste picking activities in Canada are closely connected to Deposit Return Systems (DRS), also known as bottle bills (Container Recycling Institute, n.d.). In these systems, consumers pay a deposit when purchasing beverages and receive the money back when containers are returned to designated collection points. Since many containers are never returned by consumers, this creates an opportunity for people in need of income to collect and redeem them (Talbot, 2021). Different from many Global South contexts, where waste pickers usually sell different recyclable materials (Morais et al., 2022), in Canada, bidders mainly return beverage containers and receive the deposit refund, as shown in Figure 1.

Some people question the relevance of this activity, since Canada already has separate collection and recycling systems in place. However, many beverage containers still end up littered in public spaces such as beaches and parks, or mixed with waste in incorrect bins, as showed in Figure 2. In this sense, bidders help reduce pollution and increase recycling rates by recovering these materials. They also collect containers previously separated by residents for recycling. In these cases, the material would likely be recycled anyway, but the refund money would remain within the private recycling system. When collected by waste pickers, this money instead circulates within the local economy and can contribute, even in a limited way, to poverty reduction.

In Vancouver, waste pickers are commonly called bidders; in Victoria, bidders or diverters; and in Montreal, valoristes. In Vancouver and Montreal, grassroots waste picker organizations advocate for workers' rights and recognition while also creating better work opportunities (Castro et al., 2026). In Victoria, British Columbia, an organization called The Diverters' Foundation (DF) operated between 2020 and 2025, but the organization eventually ended its activities.

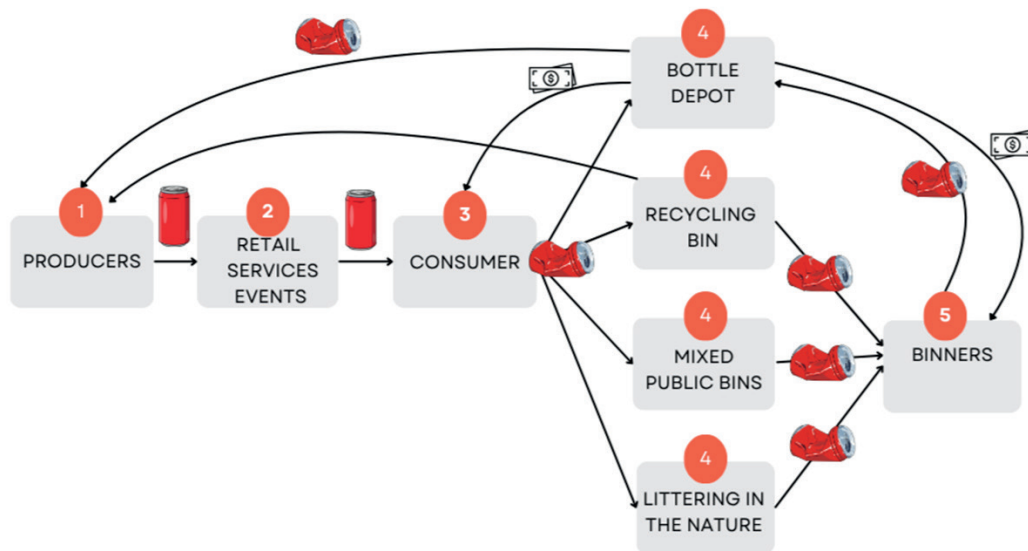


FIGURE 1: Flow of beverage containers with refunds in Victoria, highlighting where binners operate (Source: Authors).

3. BINNERS' SOCIAL AND CIRCULAR INNOVATIONS IN VICTORIA

Currently, there is no grassroots organization bringing binners together in Victoria to organize work or promote collective action. As a result, most binners work independently, with only a few collecting alongside a partner or friend, and the activity remains completely informal. Participants were approached and invited to join the research in front of a Bottle Depot in the downtown area, where many binners regularly deliver the beverage containers they collect.



FIGURE 2: A public waste bin located on Dallas Road in Victoria, BC, in April 2026. The bin did not allow for waste segregation, resulting in mixed waste disposal. Once full, recyclables such as beverage containers overflowed onto the ground, illustrating the role of binners in preventing pollution and diverting recyclable materials from landfill (Source: Authors).

Across interviews and informal conversations, broader issues such as housing insecurity, mental health challenges, stigma, and the ongoing drug crisis in British Columbia frequently emerged, reflecting some of the social vulnerabilities that shape the daily realities of many binners in the region.

This section discusses experiences and perspectives shared by three male participants who have been engaged in binning for several years: i) Binner 1, Ryan Thomas, a former member of The Diverters' Foundation (DF), who expressed pride in having his name included in the study and participated in both an interview and a workshop (Figure 3); ii) Binner 2, who participated in an interview but preferred to remain anonymous; and iii) Binner 3, who did not wish to participate formally in the interview process, but with whom informal conversations were conducted on two occasions near the depot.

Ryan expressed pride in being a binner and highlighted several positive aspects of the activity, including physical exercise, environmental contribution, and the possibility of earning daily cash income. He also demonstrated genuine concern for the environment, society, and his local community.

"I love this planet and I don't know why we're being so hazardous to it. It's disgusting... I just keep doing what's right, what I believe is right (...). There's so many positives that I've been mentioning that come from it (being a binner), like the exercise, the helping in the environment, the cash daily, so many positives for how could I not be proud of it?" (Ryan Thomas, April 10, 2026).

According to Ryan, binning in Victoria remains largely an individual activity, despite the existence of some sense of community among workers. He explained that working collectively can sometimes become distracting, reduce earnings, and limit autonomy regarding when, where, and how to work. He also mentioned that unequal levels of effort may create tensions when income needs to be shared.



FIGURE 3: From left to right, Julia, Ryan, and Ana, during the workshop held on April 10, 2026, at the public library in Downtown Victoria (Source: Authors).

These perspectives resemble reasons often identified in the literature for why some independent waste pickers do not want to join cooperatives (Rosaldó, 2022; Sekhwela & Samson, 2020).

When he was a member of the DF, Ryan participated in activities such as providing waste sorting and awareness services at events, organizing Bottle Drive initiatives where community members could donate containers and interact with binners, and contributing to the filming of a documentary about binners. At the same time, he continued collecting containers independently on the streets, which he still does today.

The contribution of binners to the circular economy extends beyond recycling. Besides recovering beverage containers, they also recover and recirculate reusable goods that would otherwise be discarded. Both Ryan and Binner 2 mentioned the large quantity of usable items disposed of by society and how binners intervene in this process. For example, Binner 2 regularly collects discarded materials to resell:

"What introduced me to it (to become a binner) was... I was in Vancouver when they had a significant garbage strike and garbage just started piling up in the alleys and such and I was living in a low income neighborhood. There was just so many products in the driveway. VCRs, bikes, furniture, TVs, and you know, you can look at some of it and you say, well, that's garbage, that's garbage, but it's like 'oh, somebody will give me two bucks for this, and this here is 10 bucks'. So it was through that, that really, 'cause you walk by and you think 'I can't, I can't walk. I'll take a chance'". (Binner 2, March 10, 2026).

"Christmas in the dumpsters are like hilarious man, like people's whole living rooms get thrown out because they get new stuff. Like you open up a bin and you're like 'oh I know this person's room is in here' (...) it's like perfectly good elec-

tronics, they still work and stuff like that (...). Its brutal how wasteful this society is." (Ryan Thomas, April 10, 2026).

Despite the contribution of binners to reuse and repurpose, this activity faces significant stigmatization. Ryan argues that it is essential for the community to understand that it is important work and to recognize how creative and talented these people are:

"That's the cool thing, is how the bottle collectors will find stuff in garbages, and they make something out of it, like a trailer to bring with them or something, they make out of scraps. and some of these things are amazing what they come up with (...). I think that's a part of the stigma that needs to be exposed about these people. A lot of the stigma is that people that do that kind of work are pretty much useless to society. A lot of people view them like that, and some of the stuff they come up with will blow you away, man. And that means they're working too, like they make things". (Ryan Thomas, April 10, 2026).

Binner 3 provides a clear example of this type of innovation through reuse, as he built his own adapted bicycle for collecting beverage containers, allowing him to transport and store larger quantities of materials while facilitating mobility, which may help explain his high productivity (Figure 4). Ryan also demonstrates high productivity and relies on a particular mode of transportation, using roller blades to move more quickly between collection points. In contrast, Binner 2 collects materials on foot and transports them to the depot by bus (this is only feasible because it's not a large quantity, since binners with big bags and a cart usually can't use public transport with them).

These three collection and transportation methods generate little or no pollution when compared to conventional waste collection systems that rely on trucks. In this sense, binners contribute not only through material recovery, but also through relatively low-impact collection practices.

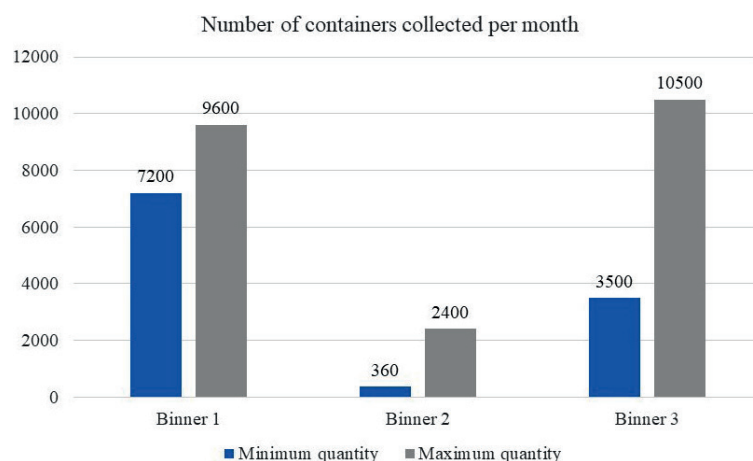


FIGURE 4: Estimated minimum and maximum number of containers collected by each binner per month. Source: Authors' calculations based on estimates provided by binners during fieldwork conducted in Victoria in 2026.

4. FINAL CONSIDERATIONS

This column presented an ongoing research project and some initial reflections on grassroots social innovations identified during fieldwork with binners in Victoria. The experiences discussed here illustrate how binners contribute to circular economy practices through reuse, repurposing, resale, and recycling activities, acting as informal environmental stewards despite persistent stigma and social vulnerability.

Based on our experiences conducting research in these regions, we recognize that grassroots organizations can strengthen the impacts generated by binners and improve their living conditions, by increasing visibility, creating more income opportunities, and supporting better working conditions. In this context, our intention is not to suggest that working individually is preferable. Rather, this column seeks to show that even with limited resources and support, binners working independently continue to develop adaptive practices and make environmental and social contributions to their communities.

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