

Environmental Justice Assessment of Aluminum Recycling Programs + Community Engagement

 A Report for Can Manufacturers Institute

Challenge Summary

Key Challenge

Aluminum recycling continues to be a large economic and environmental opportunity for local communities and canning stakeholders alike. A key challenge in expanding Recycling Refund Programs (RRPs) that exists surrounds inadequate guidance or mandates on how states can equitably meet the needs for convenient redemption in all communities, for all people.

Layered with this key challenge, lies frameworks that provide little incentive or enforcement surrounding accessible retailers to host redemption options at all their stores, or at stores of a certain size. Currently there are also convenient penalties and fees retailers can pay to opt out of these critical programs.

Due to the exclusive nature of industry development and historical lack of economic recognition of informal economy workers, past legislation has not taken into account individuals who serve as key drivers of recycling refund programs and their needs.

These layered challenges limit the number of people who can meaningfully participate in RRP, and current frameworks ignore the needs of key program participants, preventing social and cultural shifts around supporting canner communities and widening public participation.

Key Opportunity:

CMI faces an opportunity to design new legislation and guidelines to expand recycling refund programs RRP with convenient redemption for all in mind - marked by equitable access, redemption and engagement in mind.

Due to the critical role retailers can play in expanding RRP, and making them more accessible to all communities, it's imperative new legislation acknowledges and addresses retailer concerns surrounding program investment, engagement, staffing, and more - to properly mandate and sufficiently support / guide productive adoption and participation.

Due to CMI's priority in creating more access, ease, and equitable outcomes for RRP participants, it's imperative that program improvements and guides for retailers are deeply informed by social and environmental justice thought leaders and organizers with expertise in the challenges and priorities of primary stakeholders + key program drivers.

Project Summary

Environmental Justice Assessment + Engagement Initiative

In an equity + environmental justice engagement initiative, CMI received guidance, suggestions and feedback from a taskforce created by Intersectional Environmentalist - of environmental justice organizers, cancer community stakeholders - and experts in sustainability, city planning, policy, and academic research.

In this report, the IE Taskforce provides key learnings + recommendations surrounding:

- Strategic use existing data due to lack of comprehensive data in this space
- Priorities when uncovering new data in future surveying efforts
- Guidance on how RRP centers can serve diverse communities
- Key considerations for staffing, training, and equipping centers
- Key considerations for how Community Benefits Agreements (CBAs) can create accountability
- Creating mutually beneficial relationships with NPOs + grassroots organizations

This initiative additionally aimed to strengthen community + clarity between CMI and participating environmental justice experts surrounding actionable and inclusive considerations for industry practices and legislation provisions being developed and supported by CMI and industry partners.

Goal Outcomes

Through the learning gathered in this project, CMI aims to:

- disrupt historical industry-wide exclusion by creating space for environmental justice thought-leaders to inform critical developments in the recycling industry.
- explore ways to educate community stakeholders about the current effectiveness of recycling refund programs, and opportunities to strengthen and expand impact.
- gather input + adopt learnings from diverse experts + stakeholders on ways to improve CMI's model bill.
- ensure final proposed bill creates convenient, equitable redemption options for all consumers and creates new economic opportunities for traditionally underserved communities.
- ensure final proposed bill reflects diverse stakeholder feedback, perspectives, and suggestions, with initial goal to see passed in IL / MN where there is ample opportunity.
- create accessible pathways for EJ + equity group / individual supporters of CMI's recycling refund program / principles to endorse this legislation in IL and MN.

Project Taskforce

SUSTAINABILITY
EXPERTS

CITY PLANNING
EXPERTS

POLICY + EJ
ACADEMIC EXPERTS

GRASSROOTS
ORGANIZERS

EJ LEGISLATIVE
EXPERTS

CANNER COMMUNITY +
STAKEHOLDERS



Diandra M. Esparza
CO-FOUNDER +
EXECUTIVE DIRECTOR

[Diandra Marizet Esparza](#) is a cultural organizer, researcher, writer and poet whose work advocates for the accessibility of diverse stories available to rising generations. Diandra is a co-founder of [Intersectional Environmentalist](#), where she currently serves as the Executive Director, and is a contributing writer in the academically adopted book, 'The Intersectional Environmentalist: How to Dismantle Systems of Oppression to Protect People + Planet'. [Diandra can be reached at diandra@isxenvironmentalist.com.](mailto:diandra@isxenvironmentalist.com)



Kiana Kazemi
CO-FOUNDER +
PROGRAM DIRECTOR

[Kiana Kazemi](#) is a data engineer whose work focuses on the intersection of [technology and environmental justice](#). Kiana is a co-founder of Intersectional Environmentalist, where she currently serves as the Programming Director. Kiana has supported the launch + led the implementation of IE's efforts centering environmental justice, education, and art - including community-driven projects like IE's Free Book Store, [Earth Sessions](#), IE School, CommunIEty Journal, IE's Contributor Zine + Contributor's Network. [Kiana can be reached at Kiana@isxenvironmentalist.com.](mailto:Kiana@isxenvironmentalist.com)



Kristofer Brown
MANAGER, THE
PEOPLE'S DEPOT

[Kristofer Brown](#) is a former homeless informal recycler. He now manages an alternative bottle redemption center called The People's Depot, which is a project for Ground Score Association. Ground Score Association aims to be inclusive by offering low barrier jobs and training that leads to formal work. He is an advocate for bottle bills and alternative redemption centers as they have been key to re-entering the workforce. Kristopher can be reached at: kris@trashforpeace.org.



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UNIVERSITY OF NORTH
CAROLINA

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DIRECTOR, WATER EQUITY
+ CLIMATE RESILIENCE

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Khalil Shahyd
MANAGING DIRECTOR,
NRDC

[Khalil Shahyd](#) is a Managing Director of Environmental and Equity Strategies at Natural Resources Defense Council (NRDC). Khalil's expertise lies in urban political ecology, environmental justice, economic and urban geography. His work focuses on the environmental + urban geographic implications of sustainable cities and transitions to a green economy, including impacts of green transitions on labor, race/gender equity and the production of urban space. His research centers the emergence of environmental gentrification as the latest manifestation of gentrification. Khalil Shahyd can be reached at: kshahyd@nrdc.org.

Assessment Findings + Recommendations

1

Can existing data surveying and studying stakeholder communities sufficiently inform program development, needs and priorities?

Available data is not representative of canning communities for effective understanding.

When assessing stakeholder needs in the development of Recycling Refund Programs, it's critical to note what data exists to uncover key opportunities and optimal considerations / frameworks.

Due to the limited nature of data surrounding canner and recycling community engagement, improving data collection to continue developing key considerations and opportunity areas when addressing stakeholder ability to redeem more easily is critical to the success of recycling redemption programs.

Data we currently have access to include reports like the [2022 National Survey](#), which currently presents bias challenges across a number of factors that can be addressed in the near future via the cross-referencing of other data sources, and improved upon with new data collection initiatives to address data gaps.

Key Considerations + Recommendations

Address Social Desirability Bias + Accessibility

Social desirability bias; a type of response bias that occurs when individuals respond to survey questions or interviews in a way that they believe is socially acceptable or desirable, rather than providing accurate or truthful information about themselves, which leads to an overestimation of socially desirable traits.

Address by:

- Normalizing All Behaviors: Acknowledge that there are various reasons why people might not recycle. This can be done through the wording of the questions or the introduction. For example, "People have different habits around recycling due to various reasons such as lack of time, resources, or information."
- Using a Third-Person Technique: Ask respondents what they think other people do or believe. This can sometimes reveal their own behaviors or beliefs. For example, "What do you think most people in your neighborhood do with items that could be recycled?"
- Including Factual Knowledge Questions: Ask about their knowledge of recycling processes or local recycling policies. This can provide context to their recycling behaviors.
- Using More Accessible Language: To create accessibility to the survey for community members that may not be as educated or familiar with the topic, write questions with less jargon and explain specific terminology. It is also important to conduct surveys in several languages based on the demographics of the community.

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Assessment Findings + Recommendations

1

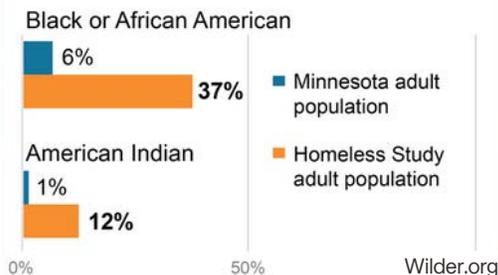
Can existing data surveying and studying stakeholder communities sufficiently inform program development, needs and priorities?

Key Considerations + Recommendation: Address Limited Demographic Data / Bias + Survey Inclusivity:

EJ organizers and leaders understand that canning communities experience significant overlaps with houseless populations. Because most major cities provide homeless census' and demographic data, this data can be cross-referenced to better understand where canner communities are, who they are, and what resources/retailers may be in close proximity to them when identifying areas for and designing urban redemption centers with houseless communities in mind. Address this by:

- Expanding Race / Ethnicity: White respondents currently make up 61% of the survey pool, and there is little evidence to suggest that canning communities are largely composed of white community members. A [2018 report by Wilder.org](#) shows that African American and American Indian adults are overrepresented in Minnesota's homeless population.
 - Similarly, according to a 2022 report by [endhomelessness.org](#), the largest percentage of houseless community members reside in the city of Chicago, and according to [chicagohomeless.org](#), 82% of people experiencing homelessness are people of color.

African American and American Indian adults are overrepresented in Minnesota's homeless population



Homelessness often begins at a young age.

"Most homeless adults (77%) have had multiple experiences with homelessness, and many adults have experienced repeated homelessness starting from an early age. More than half (52%) of those surveyed first became homeless by the time they were age 24, and over one-third (36%) first became homeless at or before age 18."

Wilder.org

- Expanding Age Group Demographic Data: The featured survey includes 3 age groups, leaving the youngest group being "Under 45". This limits understanding of youth audiences. MN data showcases that youth (defined as 15-21 by [The Bridge for Youth](#)) are disproportionately affected relative to their population, making up nearly half of the homeless (46%). In Minnesota 13,300 unaccompanied youth experience homelessness over the course of a year; this includes 5,800 minors ages seventeen and younger. Opportunity to study ongoing experiences of older generations but also proactively seek data capture for younger generations that have previously gone unstudied in this context, starting with pre-existing youth houseless data.

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Assessment Findings + Recommendations

1

Can existing data surveying and studying stakeholder communities sufficiently inform program development, needs and priorities?

Key Considerations + Recommendations

- Addressing Gender and Sexuality Bias: This survey currently includes 1% of respondents who identify as non-binary and 0% of those who prefer not to say, and there is much evidence that points to non-binary and trans communities experiencing disproportionate rates of homelessness.
 - In 2019, the [National Law Center on Homelessness and Poverty](#) created an IL state Index on Youth Homelessness, and found that LGBTQ youth have a 120% increased risk of homelessness when compared to heterosexual and cisgender youth.

33% of youth who accessed homelessness services identified as LGBTQ.

National Law Center on Homelessness and Poverty

LGBTQ youth have a 120% increased risk of homelessness when compared to heterosexual and cisgender youth.

National Law Center on Homelessness and Poverty

- Addressing Multi-Cultural Factors: Data collection pool is made up of 100% voting citizens and does not include responses from non-voting members, such as undocumented populations that can greatly inform accessibility information, additional service needs, and more.
 - Data surveys are not offered in multiple languages and does not include primary languages spoken by identified key stakeholders.

In Conclusion, CMI has a current opportunity to:

- utilize pre-existing data connected to communities facing environmental justice burdens that largely make-up canning communities - as reported by the taskforce.
- engage with and / or advocate for stronger surveying projects that provide an understanding of data gaps that can shed light on details and recommendations provided throughout this brief. CMI can commission a survey of residents in IL and MN (or a national survey) that improves upon the methodological shortcomings of the 2022 national survey conducted by Lincoln Park Strategies, which is skewed toward wealthy respondents who are more likely to recycle, to better understand Recycling Refund Program recyclers.
 - The survey participant pool should not be restricted to just registered voters. Unregistered voters, legal non-citizens and even undocumented residents are part of our communities who participate in the recycling process.

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Assessment Findings + Recommendations

1

Can existing data surveying and studying stakeholder communities sufficiently inform program development, needs and priorities?

Key Considerations + Recommendations

Additional opportunity connected to this effort includes addressing a historical lack of acknowledgement and data that take account of today's informal economies and their stakeholders. It should be noted that supporting acknowledgement of informal economy workers creates:

- Economic Resilience: The informal economy can sometimes act as a buffer during economic downturns, providing a source of income for individuals who may struggle to find formal employment during challenging times.
- Employment Flexibility: The informal economy often provides employment opportunities for individuals who might face barriers to entry in the formal sector. Recognizing and addressing the needs of informal workers can contribute to a more inclusive labor market.
- Development Capacity: Addressing the issue of data collection, paired with advocacy for recognition for informal economy workers, can improve confidence and support for the creation of accessible, standardized guidelines for program expansion. This can also build off of pre-existing resources such as the [EPA's Best Practices for Solid Waste Management: A Guide for Decision-Makers in Developing Countries](#), with the intention of creating guidelines that can best serve domestic programming.



EPA's Best Practices for Solid Waste Management: A Guide for Decision-Makers in Developing Countries

While we have studies and policies to address informal recycling in the "global south", these same realities are too often ignored by policy and formal data collection in the U.S. Through projects that seek to better understand demographics of those who serve as key drivers of recycling programs, CMI has the opportunity to set a new progressive precedent for informal economy work of all kinds.

Additional research + study here can be found in resources such as the [Science Direct Review: Informal recyclers as stakeholders in a circular economy](#) : explaining how the "informal recycling sector can play a decisive role in curbing the negative impacts of a linear economy, and integrate into formal urban waste management systems (UMWSs), and consequently in a [circular economy](#) (CE) support progress towards gender equality, improvement of [occupational health](#), reduced inequalities, and the eradication of poverty and hunger whereas its exclusion can be "highly counterproductive."

Assessment Findings + Recommendations



What can be done to make people feel welcome at redemption points?

Unwelcome sentiments at redemption centers are a reflection of RR programs not being informed by challenges faced by key stakeholders.

Creating a welcoming environment at redemption points is very important to increase and maintain accessibility. 'Feeling welcome' can vary from participant to participant. Nevertheless, it is very important to understand what it means to participants from a variety of backgrounds, the challenges they experience including reaching redemption points and for processing redemptions, and to consider what improvements can be made to help enhance the sense of feeling welcome.

The many challenges stakeholders face at existing redemption centers must be acknowledged before considering effective survey questions, such as:

- Vulnerable populations
- Access to limited redemption sites
- Local resistance to redemption site development
- Online banking vs immediate cash redemption options

Key Recommendations:

In connection with data opportunities uncovered in section 1 of the report, conducting community engagement surveying with local organizations, schools, and/or businesses, with the below questions in mind is a longer term recommendation for this section.

Questions to Consider

- How can understandings of environmental justice impacts of recycling refund centers be used to provide guidelines for future spaces?
- Where are redemption centers and who redeems at redemption centers?
- What is their current experience like redeeming at these redemption centers (e.g., access and process of redemption)?
- Who is responsible for maintaining the centers? What resources are dedicated to maintaining them?
- What are participants' demographics (e.g., race/ethnicity, annual household income, renter/homeowner, age, level of education, etc.)
- Who is left out? Where are locations that could benefit?
- What do participants need in order to improve their experience and help them feel welcome?
- What challenges do participants face in reaching redemption sites (e.g., lack of transportation)?
- How are redemption participants framed or stereotyped?

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Assessment Findings + Recommendations

2

What can be done to make people feel welcome at redemption points?

Key Recommendations: Uncover community integration opportunities by reaching out to public servicers and grassroots organizations to connect programming more closely with services needed at redemption points, such as:

- Grassroots organizations in IL and MN:
- IL Recycling Association and Foundation
- Landscape Recycling Center, IL
- Farmers' markets
- Local sustainability clubs
- Homeless shelters
- Immigrant rights organizations
- Local chamber of commerce organizations

Additional Recommendations:

- Conduct brief 5–8 min. surveys at redemption sites for participants to share challenges faced accessing redemption sites and improvement ideas (e.g., partner with local university to conduct).
- Lobby for a bottle law that will incentivize canning + benefit extremely low-income communities and communities rendered invisible ([Ashenmiller 2011](#))
- Advocate for state-wide and city-wide waste management plans where the needs of vulnerable communities are exalted ([New York City, 2006](#))
- Partner with cities to develop programs + maintenance for redemption sites ([New York City, 2006](#))
- Rebrand redemption centers as “community sustainability and education centers” ([Jovine 2015](#))
- Include way-finding / clear signage directing participants or potentially new participants where to redeem cans.
- Ensure a clean, safe, and maintained location with sufficient lighting and staffing to meet the needs of participants.
- Provide translation and interpretation for participants who may not speak or understand English. If another language is primarily spoken in the surrounding area, a staff member should be available to help the participant (Ex: [CalRecycle](#)).

Recommendations Outlined Further in This Report:

- Lobby for a law that requires any place that sells beverage containers to have a redemption facility.
- Plan for more redemption centers- it is of preference to canners given the long wait lines from reverse vending machines.
- Train staff/managers to more effectively engage with canner communities.
- Take customer service out of retailer's hands completely to mitigate problems (e.g., de-escalation training).
- Hire professional and helpful staff that provide efficient service including timely redemptions and payments.

Assessment Findings + Recommendations

3

Should other services people need be combined at locations where they can redeem containers?

“Alternative Redemption points should be attractive enough to impoverished communities where they would prefer to redeem their recyclables at these places instead of at retailers.”

Big chain retailers already provide a multitude of services along with bottle redemption in states that have bottle bill mandates. These services usually encompass the needs of the surrounding communities and turn these retailers into one stop shops and community focal points. In areas with smaller populations these redemption options can be enough. In urban centers with higher homeless populations the services these retailers provide may not be the same services these at risk communities may need.

In urban centers with higher impoverished populations, there should be access to alternative redemption options that align with the type of services they need. Alternative redemption centers should be community focal points just like the local grocery store where they can have multiple needs met. These centers could be a powerful tool for overcoming barriers to housing and job security. If community space was created at these redemption centers, this would allow for multiple services to be provided to these communities by partnering with other local non profits. At [The People's Depot](#), one of the only alternative bottle redemption depots in Oregon, several community partners offer services while the depot is in operation. The services these community partners offer range from hot meals, mobile libraries, vaccine clinics, I.D. assistance, housing assistance, and hot and cold weather supplies. These services are crucial to the local community and community partners are welcome to offer them at the depot because they know the people that they are trying to reach congregate there. Alternative redemption centers don't have to be responsible for providing these other services, but are willing to share their space with partnering organizations that can help provide these essential services.

Alternative Redemption points should be attractive enough to impoverished communities where they would prefer to redeem their recyclables at these places instead of at retailers. This could help ease the tension between retailers and homeless communities and allow retailers to focus on serving the community that they aim to serve. Impoverished communities should have every right to redeem their recyclables at these retail locations, but if there is a redemption option more suitable to meet their needs they will more than likely use alternative redemption compared to redeeming at retail chains.

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Assessment Findings + Recommendations

3

Should other services people need be combined at locations where they can redeem containers?

Key Considerations + Recommendations

- Mandating alternative redemption centers in urban areas with large homeless populations.
- PIT counts (Point in time counts) among the homeless population are [conducted every year in larger cities](#). This data could be used to research where alternative redemption is most needed.



PIT Counts collect information on people in emergency shelters and transitional housing (the sheltered count). PIT Counts also collect information about people sleeping on the streets, in cars, on abandoned properties, or on other places not meant for human habitation (the unsheltered count).

- The PIT Count improves our understanding about the size and characteristics of our homeless population, which informs strategic planning.
- The PIT Count results also impact our funding.

hsh.sfgov.org

- Making sure these alternative redemption centers are big enough to create “community” space for partnering non-profit organizations and other community partners to offer services.
- Engaging with local non-profits and other community service members prior to opening alternative redemption centers to brainstorm what services are needed.

Assessment Findings + Recommendations

4

How can learnings from EJ or community-driven programs be applied to Recycling Refund spaces?

Aluminum has an opportunity to leverage current recycling bill targets + goals.

Although recycling reduces the need for virgin material (metal, plastic, and paper), overall rates of the recycling are dismal. In the U.S., only about 5% of the plastic gets recycled ([Greenpeace](#)). The recycling rate for metals is much higher. For instance, more than 65% of Aluminum is recycled in the U.S. and in some sectors such as automotive and construction, recycling rate is higher than 90%. This suggests that there is a clear distinction among the public regarding the worth of used metal vs plastic. This distinction may also be influenced by the fact that aluminum recycling takes only 5% of the energy it takes to produce virgin aluminum, thereby limiting its impact on the climate. It is also lighter than glass and plastic, thus easier to transport, leading to cost efficiencies.

Any effort to increase the recycling rate for aluminum cans must seek to normalize can recycling by focusing on the fact that people recycle metal cans at a high rate already (present a comparison with the community) and it has a clear environmental benefit. If these messages can be paired with the fact that dedicated recycling of aluminum (as opposed to sending them to single-stream recycling) can be economically valuable to them, we can appeal to different segments of the population that may be looking for a different reason to recycle.

In specific geographies, the proposed recycling laws and programs must be organized to further the goals of other environmental initiatives. See two Example Bills below. In light of new and proposed legislation in IL, Aluminum cans can be presented as a clear alternative to plastic and plastic-adjacent methods such as carton packaging.

[Public Act 103-0470](#)

Illinois recently passed [Public Act 103-0470](#) that aims to reduce the quantity of single-use plastics used or purchased by each state agency and public university by 50% on or before 2031 and by 75% on or before 2036.

[ILGA.gov](#)

[HB 2376](#)

The Illinois House of Representatives approved [HB 2376](#) that will ban retail establishments from selling or distributing disposable food service containers made out of polystyrene foam starting in 2025; the bill awaits a vote in the Senate.

[ILGA.gov](#)

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Assessment Findings + Recommendations

4

How can learnings from EJ or community-driven programs be applied to Recycling Refund spaces?

Key Considerations + Recommendations

Key considerations

- Appeal to different segments of the population that are looking for a reason to recycle - environmental, social, economic.
- Rely on scientific surveys of residents to assess market demand and preferences/attitudes toward recycling and deposit return programs.
- Tie the recycling program to other larger programs and initiatives that have goals related to plastic elimination or carbon reduction and where aluminum could be a clear alternative to current methods.
- Engage a broad coalition of the community members in the recycling process. It should not be restricted to environmental advocates and the extremely poor, leaving the vast middle out of the process.
- Proposed legislation in IL and MN should be written to ensure it is comprehensive yet nimble to adapt in the future.
- Opportunity to identify ways to collaborate with cities or local governments to show aluminum recycling and litter containment as part of their carbon-reduction goals.

Key Recommendations:

- Mimic the Bay Area Air Quality Management District's James Cary Smith Program - funds nonprofits to build leadership capacity within communities.
- Create grants made to serve specific communities similar to the California Air Resources Board's AB 617 Community Air Protection Program. This program mandated a framework drafted by environmental justice leaders in California. See the program: <https://ww2.arb.ca.gov/blueprint-20>
 - See the "[People's Blueprint](#)"
 - This program could be expanded to be more inclusive of other communities that face different environmental justice issues; calculation of environmental and social indicators should be made more flexible for communities to qualify for this grant
- The proposed legislation in IL and MN should be structured such that the legislation sets broad targets, provides authority to specific agencies within the states, and ensures that an accompanying regulatory framework is established within a reasonable time period.
 - An example is the historic Federal Water Pollution Control Act of 1972 (commonly known as the Clean Water Act). It set a broad goal that made it unlawful to "discharge any pollutant from a point source into navigable waters, unless a permit was obtained" and gave authority to the Environmental Protection Agency (EPA) to issue permits and monitor compliance through rulemaking and enforcement powers.

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Assessment Findings + Recommendations

4

How can learnings from EJ or community-driven programs be applied to Recycling Refund spaces?

Key Considerations + Recommendations

- Set up partnerships with local shelters/soup kitchens and schools. Students collect cans from neighbors and family members and drop off at recycling centers. Deposit fee payments are provided to designated shelters/soup kitchens.
- Consider Community Benefits Agreements between bottle sellers (industry, not just supermarkets) to establish education and workforce training, infrastructure or priority project upgrades, such as construction of new local facilities (e.g., recreational centers and childcare centers), and environmental investment funds. See [California's DTSC CBA page](#).
 - CBAs are a legally enforceable contract between a coalition of community-based organizations and the developer of a proposed project. In exchange for the coalition's public support of the project in the approval process, the developer agrees to contribute benefits to the local community if the project moves forward.

Assessment Findings + Recommendations

5

How can redemption options be more accessible to people to ensure equitable ability to redeem containers for their refund? What types of redemption processes should exist to empower everyone to participate?

“Having the right bottle redemption limit is key to ensuring quick and efficient service for customers.”

Redemption options have certainly improved over the course of the last decade due to advances in technology and research in this sector. The majority of the public has embraced these technologies due to making redeeming recyclables convenient and this is shown through substantial increases in return rates. As redeemable technology improves, there should be increases in daily limits of redemption. At most retail chain locations over 5000 sq ft in Oregon, the daily limit is 144 containers or \$14.40, at the “official” bottle redemption centers the limit is more sustainable at 350 containers or \$35.00, and at The People's Depot we offer a 500 can limit or \$50.00. The People's Depot daily average containers per customer is around 315 or \$31.5 per customer, with about 10-15% of our daily customers turning in their max allotted amount. I recommend that retailers especially increase their daily limit per customer to match what “official” redemptions are already offering. People redeeming their containers shouldn't have to go to 2 or 3 different stores to cash in what they've collected.

Having the right bottle redemption limit is key to ensuring quick and efficient service for customers. \$50-\$60 limits allow people to turn in a meaningful amount of cans but not enough to slow down the redemption process. Not having a limit will cause stress and tension for people who are waiting to redeem. We should only spend 5-10 minutes per customer especially on busy days. Bulk drop off programs shouldn't have any limits and will incentivise people to use the bulk program compared to using other redemption options.



Key Recommendation: Raise the maximum limits that customers are allowed to turn in at a time.

Bulk drop off programs like the [OBRC's green bag program](#) should be offered as much as possible. Most people want to participate in the recycling process as long as it is quick, easy, and convenient for them as customers. Oregon's green bag program takes the customer est. 2 minutes to get their recyclables dropped off compared to the half an hour spent feeding a [reverse vending machine \(RVM\)](#). The green bag program is so successful that it is responsible for almost half of Oregon's return rate and there are more green bag program drop offs compared to places with RVMs. People want to be able to drop off their recyclables and have their account credit them later on. This works for the vast majority of Americans who have bank accounts and debit cards. This does not work for people who may have food, housing or job insecurities, and they need their cash as quickly as possible.

Continued on the next page ...

Assessment Findings + Recommendations

5

How can redemption options be more accessible to people to ensure equitable ability to redeem containers for their refund? What types of redemption processes should exist to empower everyone to participate?

Key Recommendation: States with bottle bills or potential bottle bills should mirror and build upon The OBRC's green bag program.

Redemption centers should be offering both bulk redemption options and an option to receive cash then and there. It can be quite confusing for people if one place only offers bulk and another place only has reverse vending machines and hand counts. It can be confusing for redeemers if one retailer has a 24 container limit, another retailer has a 50 container limit, another place has 144 container limit and then another one has a 350 container limit, and the vast majority of customers don't know why certain retailers only accept 24 containers compared to the other one down the street who has a 144 container limit.



[Learn more about Green Bag Drop Options](#)

Key Recommendation: Bottle bills can often be confusing for customers and retailer employees alike. There should be more conformity and multiple ways to redeem bottles and cans in the same locations.

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Assessment Findings + Recommendations

5

How can redemption options be more accessible to people to ensure equitable ability to redeem containers for their refund? What types of redemption processes should exist to empower everyone to participate?

 **Key Recommendation: The entities enforcing the state's bottle bill should also offer trauma informed training to employees of bottle redemption centers, particularly in urban areas. Properly staffed bottle rooms create safer environments for both customer and employee alike and creates more accountability and trust between customer and worker. Training should include de-escalation, first aid, how to identify and help people with mental issues, and team building exercises.**

Mobile redemption services are another overlooked service that can provide redemption access to those that are unable to bring their bottles to a bottle drop. These services can and should cater to the disabled who live by themselves or in group home settings. Mobile redemption services would be a great small business opportunity that could be funded by grants aimed towards underserved communities such as BIPOC, Native, and LGBTQ.

Opportunity for grants that provide living wages to people willing to take on mobile redemption services. These services should be reserved for people who are unable to make it to redemption centers I.E our elderly and disabled. If there isn't a handling fee attached to the bottle bill then these grants should cover the costs and labor to maintain mobile redemption. This will help curb black market selling of bottles and cans below the redemption price and ensure that our elderly and disabled get full value for their recyclables.

Alternative redemption centers like [The People's Depot](#) and [Sure We Can](#) have proven that "canners" are an untapped workforce. Both of these redemption centers hire within the "canner" community to create job stability and meaningful employment. "Canners" are not averted or put-off by the dirty side of recycling and are usually very educated on their local bottle bill. Who better than to count and sort recyclables than people who are already familiar with the job? This also makes fellow "canners" feel more welcome at these redemption centers because the people who are counting their bottles and cans know exactly what they went through to make their money.

All in all, more people should have more access to small business opportunities within these bottle bills. Having entities besides retailers and "official" bottle redemption centers contributing to the bottle redemption process would create more inclusion from all communities!



Assessment Findings + Recommendations

6

How specific do convenience standards within a recycling refund bill need to be so there is sufficient confidence that convenient access will be provided to all?

Key Questions for Consideration

- How are convenience zones defined?
- How are supermarkets being held accountable/ how are convenient zones enforced?
- How are convenience zones in rural areas being defined? What defines rural communities? What tools can help define these?
- What tools/technical assistance/funds exist to provide underserved zones with infrastructure? How are these tools/technical assistance/funds evaluated on their performance and participant satisfaction?
- What processes exist to allow expansion of convenience zones?
- Why are supermarkets expanding convenience zones in rural communities?
- How are exemption zones accepted?

Key Recommendation: Create a tier system of enforceable convenience zones based on the amount of bottles/cans sold from a grocery store. If a supermarket makes more than a certain amount of revenue, they should be mandated to host a redemption center (make options for paying fines limited)

- Create stricter enforcement for larger supermarkets/corporations
- Create technical assistance for smaller supermarkets
- Use pre-existing convenience stores, such as grocery stores. Grocery stores already do market research to optimize store locations. These stores could be good grounds for PROs to research where the consumer feels most comfortable with the location of their local redemption center. Most may say they would prefer it to be closer to their local grocer so they can redeem their bottles and cans then go shopping. Retailers should keep the consumer opinion in mind before opting out of participating in the bottle bill.

Key Recommendation: Write specific consequences around underreporting to ensure enforcement of legislation.

- For example, [CalRecycle says most retailers have promised to take in-store recycling. The agency confronts retailers only when it receives a consumer complaint—fewer than 100 people complained last year.](#)
- Be specific on how and when reporting and auditing should be done regularly.

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Assessment Findings + Recommendations

6

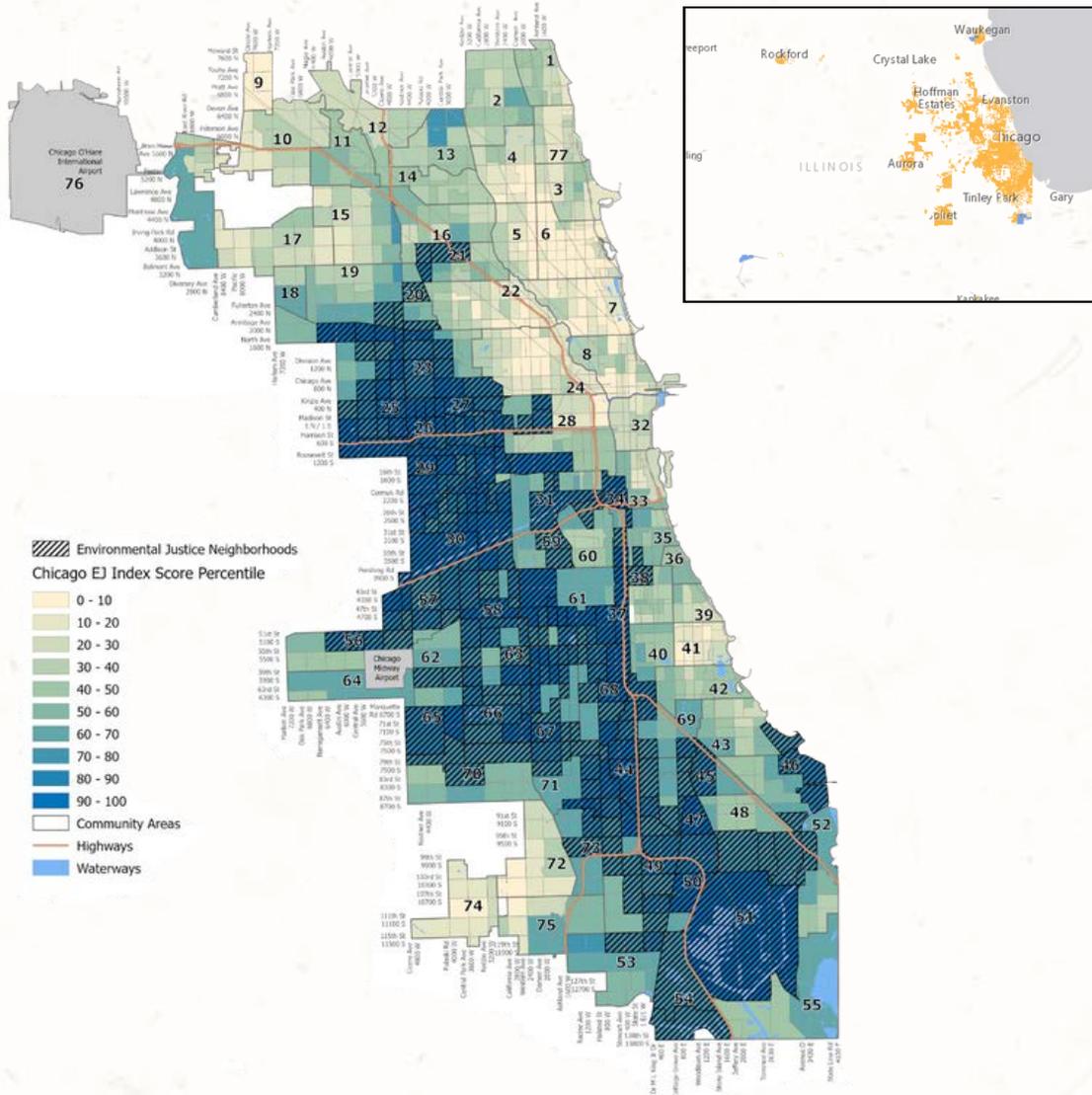
How specific do convenience standards within a recycling refund bill need to be so there is sufficient confidence that convenient access will be provided to all?



Key Recommendation: Create a process to understand why rural communities are underserved.

Look into existing mapping to define communities in need and leave flexibility for local data sources to be utilized to define Environmental Justice or rural communities:

- For example, [Chicago 's Environmental Justice Map](#) below fills in data gaps compared to [Illinois's Environmental Justice Communities Map](#) pictured here in the upper right box.



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Assessment Findings + Recommendations

6

How specific do convenience standards within a recycling refund bill need to be so there is sufficient confidence that convenient access will be provided to all?

 **Key Recommendation: When determining if an area is overserved/underserved, be specific on the below items:**

- how community input is collected and how long should the public have to respond? (i.e. online surveys, paper surveys, # of tabling events, # of CBO's contacted). Be more specific than "good faith" efforts.
- how many testimonies need to be collected (what % of a census tract was contacted and responded.)
- how equitable is the outreach (ie. how many languages were surveys conducted in, are responses from different economic, culture, and housing groups).

According to [CA.gov](https://www.ca.gov), in the state of California, "A convenience zone may be exempt from the requirement to have a recycling center within its boundaries if one or more mandated conditions are met in accordance with PRC 14571.8." These conditions include:

- Ease of access to redemption center by consumers
- Reasonable distance to next closest recycling center
- Consumers in area predominantly using curbside program for recycling
- Recycling centers in the area fail to meet a sufficient volume for economic viability.

Additionally, "The director may grant an exemption from the requirements of Section 14571 for an individual convenience zone only after the department solicits public testimony on whether or not to provide an exemption from Section 14571", but what defines public testimony?

"The solicitation process shall be designed by the department to ensure that operators of recycling centers, dealers, and members of the public in the jurisdiction affected by the proposed exemption are aware of the proposed exemption. After evaluation of the testimony and any field review conducted, the department shall base a decision to exempt...", but what guidelines help make it the most accessible?

[See California's FAIR Maps Act Section 21628](#) for examples around specific outreach criteria.

Assessment Findings + Recommendations

6

How specific do convenience standards within a recycling refund bill need to be so there is sufficient confidence that convenient access will be provided to all?

 **Key Recommendation: Create a fund for smaller supermarkets / underserved communities to access for infrastructure needs.**

- Create [flexible guidelines](#) on how these funds are accessed, how they should be used, and where these funds can be used in order to give flexibility to different needs from different communities.
- Specifically designate a committee/department to continuously audit, study, build, and repair recycling redemption infrastructure.

 **Key Recommendation: Allow flexibility for processing payment formulas to evolve with changing markets to support redemption centers.**

- For example, California's "current payment formula uses a [12-month scrap value average from the previous year](#), with a minimum three-month lag time, meaning it does not account for real-time changes in scrap values". Therefore, harming redemption centers when scrap prices drop. As a result, "SB 353 will help halt these trends by [allowing CalRecycle to base processing payments on the average scrap value from the preceding three months.](#)"

Key Conclusions

☯☯ Promote inclusive practices that widen programmatic success by disrupting historical industry-wide exclusion through existing data on impacted + participating communities, and partnering with local grassroots justice orgs and thought-leaders to ongoingly inform development in key areas outlined in this report.

☯☯ Leverage local recycling policy and bill goals to advocate for seamless education efforts led by local grassroots organizations who are well positioned to educate community stakeholders about the current effectiveness of recycling refund programs, and opportunities to strengthen and expand impact for local communities.

☯☯ Gather input + adoptable learnings from diverse experts, stakeholders and case study examples on ways to improve CMI's model bill based upon the recommendations outlines in this report, spanning inclusive demographic surveying, creating clarity around key definitions, defining where flexibility is needed to accomodate diverse localities and more.

☯☯ Create convenient, equitable redemption options for all consumers and create new economic opportunities for traditionally underserved communities by taking success learnings from case studies outlined in this report that properly incentives local retail participation, empower local grassroots organizations to led efforts, and provides the flexibilities needed to accommodate traditional and newer recycling participants.

☯☯ Ensure final proposed bill reflects diverse stakeholder feedback by requesting inclusion of key considerations, recommendations and quotes from experts in this reporting taskforce, and additional organizations identified in target areas, demographics and professions.

☯☯ Similar to the development of this report, continue investing in and creating open lines of communication for EJ + equity group / individual supporters of CMI's recycling refund program to ongoingly provide feedback on and / or endorse new proposed legislation in IL and MN.

This equity + environmental justice engagement initiative was conducted by Intersectional Environmentalist - a Black-founded and Women of Color-Led organization with a mission to increase awareness and access to education about intersectional environmentalism and drive support toward grassroots environmental justice efforts.

Learn More: <https://www.intersectionalenvironmentalist.com/>