

Towards Zero Waste: Case Studies and Policy Guidelines for Reusable Food Service Ware

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Disclaimer

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Executive Summary

This report highlights the urgent need for businesses in Metro Vancouver to transition from single-use food service items to reusable alternatives. In 2023, 1.3 billion single-use items were disposed of in the region, illustrating the significant environmental burden of such waste.

The global crisis of plastic pollution, with its severe impacts on human health and the environment, has led to stricter international and Canadian regulations, creating a favorable climate for the adoption of reusable service options.

The objective of this research is to identify best practices and lessons learned to guide the large-scale implementation and promotion of reusable food service ware. The study reveals the inefficiencies associated with single-use plastics, which contribute significantly to global plastic production and waste.

Despite recycling efforts, much of this waste remains unrecycled, exacerbating environmental and health issues. The report underscores the importance of transitioning to a circular economy, where products are designed for reuse, thereby reducing environmental impacts and generating economic value.

Case studies included in the appendix of the report provide practical insights into how businesses and organizations in British Columbia (B.C.) are successfully transitioning to reusable food service ware systems. The case studies, including Hyack Festival (New Westminster), Bard on the Beach (Vancouver), Field & Social (Vancouver), Grounds & Greens Cafe (White Rock), Café Ami (Vancouver), and Koffie (Vancouver), detail the implementation process, benefits, challenges, success metrics, lessons learned, and policy recommendations. These case studies provide valuable lessons for others considering similar transitions.

An overall summary of responses from interviews with reusable service providers, detailing their experiences with businesses implementing reusable systems, also captures the common challenges faced, such as initial costs and customer adaptation, while also highlighting the strategies and solutions that have proven effective in supporting successful transitions.

The case studies feature smaller, more nimble organizations that did not need to rely on a competitive procurement processes. For those organizations that cannot do a direct award to a reuse provider of their choice, the report also provides insights from Metro Vancouver's procurement process for their MetroTower III Cafeteria, highlighting how local governments can use their purchasing power to promote the adoption of reusable food service ware.

Key findings of the report include:

- **Environmental Impact:** Reusable food service ware considerably lessens environmental impact compared to single-use items, especially regarding waste generation and resource use. Life cycle assessments demonstrate that reusable options often achieve their environmental "break-even point" after a few uses, making them a more sustainable long-term choice.
- **Policy Landscape:** The report reviews global and Canadian policies that are steering the shift away from single-use plastics. Initiatives like the European Union's Single-Use Plastics Directive and the United Nations' Intergovernmental Negotiating Committee on Plastic Pollution are setting the groundwork for substantial reductions in plastic waste. Recent federal regulations in Canada, including bans on certain single-use plastics, support the growth of reusable service providers.
- **Economic Considerations:** Although literature suggests that most businesses can achieve cost savings within a few months to a year after implementing reusable service ware, the real-world experiences of businesses vary. Those who offer both reusable and disposable options have not observed significant cost savings. However, they have not seen a negative impact on their bottom line, which motivates them to continue offering reusables, often driven by a sense of corporate responsibility. In contrast, one of our case studies, Grounds & Greens, has fully transitioned to reusable containers and successfully reduced their spending on takeout containers by 40%.
- **Consumer Behavior:** Changing consumer habits is a key challenge for adopting reusable food service ware. However, growing evidence shows that consumers are increasingly open to reusable systems. A 2021 IGD report found that 83% of UK consumers are receptive to these systems, especially when effective incentives and education highlight the environmental benefits.

The transition to reusable food service ware is not only necessary but also feasible, with a growing number of businesses and institutions in British Columbia already making significant strides in reducing their reliance on single-use items. This transition is supported by evolving policies at both the global and local levels, aimed at reducing plastic waste and fostering sustainable practices.

By providing a detailed analysis of the opportunities, challenges, and best practices, this report serves as a valuable guide for businesses and policymakers working towards a more sustainable future.

Introduction

Metro Vancouver, a federation comprising 21 municipalities, one electoral area, and one treaty First Nation, manages a broad array of regional utility services in the Lower Mainland of British Columbia, Canada. This multifaceted organization is responsible for essential services including water supply, sewer systems, and wastewater treatment, as well as solid waste management, air quality regulation, urban growth planning, regional parks management, and affordable housing. This diverse portfolio highlights the region's commitment to both reducing its environmental footprint and enhancing the quality of life for its residents.

In 2023, the region disposed of 1.3 billion single-use items, averaging 360 items per person. This total includes a substantial quantity of cups (35%), utensils (25%), takeout containers (19%), and retail bags (15%). In response to this challenge, Metro Vancouver is leading efforts to transition to reusable food service ware, with the goal of significantly reducing reliance on single-use items and minimizing the region's environmental impact.

The global plastic pollution crisis, as underscored by the United Nations, poses severe threats to human health and the environment. The escalating adverse effects of single-use plastics are driving a shift in both global and Canadian policies, which are becoming increasingly stringent. This evolving policy landscape creates a favorable environment for the growth of reusable service providers, offering businesses in this sector the opportunity to expand and collaborate with restaurants, cafes, event organizers, large venues, and educational institutions.

In British Columbia, the rise of reusable service provider startups marks a pivotal moment. Some partnering businesses are transitioning from pilot phases to full implementation, making significant strides in reducing their single-use item usage. This report explores the business case for reusable food service ware, including the implementation process, benefits, and key considerations. Through a thorough literature review, an analysis of Metro Vancouver's procurement process for reusable food service ware and the development of six case studies, this report aims to serve as a comprehensive guide for businesses navigating the transition to more sustainable practices.



Methodology

This research project employed a mixed-method approach consisting of four phases.

Phase One: Literature Review

The first phase involved a review of academic and gray literature on reusable container programs. Sources were gathered from academic libraries, including UBC's online library and Google Scholar, as well as from Google for relevant news articles, web pages, and organizations. Project mentors also provided suggested literature. In total, over 70 resources were collected.

These resources were then refined to prioritize journal articles and grey literature reports. The key ideas and findings from these prioritized sources were summarized, and five journal articles along with five reports were selected to form the foundation of the literature review. The literature review was an iterative process, as findings from the case studies were then verified and compared to the literature.

Phase Two: Case Study Identification and Outreach

The second phase focused on identifying and reaching out to restaurants, cafes, and event organizations that partner with reusable container suppliers. ShareWares and Reusables were identified as the primary reusable cup and container platforms operating in the Metro Vancouver region, and both companies post publicly available maps listing all their partner businesses. Initially, project mentors identified four potential case studies—two of which agreed to participate and two of which could not be secured, prompting an expanded search.

To expand the list, the Scholar reached out to businesses listed on the ShareWares and Reusables.com websites. From this expanded outreach, 10 interviews were conducted, resulting in 6 case studies. Information collected in interviews that didn't result in a case study was incorporated into the report findings.

Phase Three: Interviews

In the third phase, interviews were scheduled and conducted. In collaboration with project mentors, a total of 36 interview questions were prepared, divided into two main categories.

For business owners and event organizers, 24 questions were developed, addressing themes such as implementation timelines, processes, benefits, challenges, lessons learned, customer support, and policies. Additionally, 12 questions were created for representatives of reusable service providers, focusing on their experiences collaborating with businesses during implementation, as well as emerging trends and consumer behavior. Each interview lasted between 30 and 60 minutes.

Phase Four: Data Analysis and Writing

In the fourth and final phase, notes from the interviews were organized into the case study format. The literature review was synthesized and written, incorporating insights gathered from the interviews.

The Opportunity for Reusable Food Service Ware

This report presents the findings from an extensive literature review and a series of interviews, offering a comprehensive analysis of the opportunity for reusable food service ware. The report begins with an examination of the global plastic pollution crisis, detailing the environmental and health impacts associated with plastic waste. Following this, the report introduces the concept of the circular economy, emphasizing the principles that support a transition from single-use plastics to more sustainable practices. An overview of the policy landscape is provided, highlighting global, Canadian, and British Columbia policies on single-use plastics, with examples of Canadian municipalities that are leading the way.

The report then explores reusable food service ware, providing definitions and examining various models as practical alternatives to single-use items. The business case for reusable food service ware is presented next, discussing the economic, environmental, and consumer behavior considerations, as well as the benefits and challenges of adoption. Finally, the report concludes with an analysis of Metro Vancouver's procurement process for reusable food service ware, assessing its alignment with broader sustainability goals.



The Drivers for Reusable Food Service Ware

The growing crisis of plastic pollution is not just a consequence of the material itself but is deeply intertwined with our throw-away culture and the systems that perpetuate it. According to Upstream's *Reuse Wins* report, the core issue extends beyond plastic; it lies in the unregulated production and consumer behaviors that encourage a disposable mindset (Gordon, 2021). This culture has allowed the burden of plastic waste to fall heavily on consumers, who are often left with few sustainable options (Gordon, 2021).

Historically, the environmental mantra of “reduce, reuse, recycle” has been skewed towards recycling, often at the expense of more sustainable practices like reducing consumption and reusing products. However, the plastics industry has long been aware that recycling plastic at scale is neither economically viable nor technically feasible (Allen et al., 2024). Many plastic products, particularly those used in food service, are difficult to recycle due to contamination and the complex nature of the materials. Yet, the myth of effective plastic recycling has persisted, driven by the economic interests of those who benefit from continued plastic production (Gordon, 2021).

Additionally, compostable food service ware, which has been promoted as an environmentally friendly alternative, often fails to deliver on its promises. In fact, per the B.C. Government's Fact Sheet: "Most compostable plastics are made by processing plant-based materials, like corn starch or sugar cane. These plastics need specific conditions to break down. These plastics often don't break down properly and do not contribute to high-quality, environmentally beneficial compost. In B.C., they often can't be composted or recycled, and end up in our landfills or environment" (n.d.). This realization has motivated many businesses and organizations to explore more reliable, sustainable alternatives, such as reusable food service ware.

It has become increasingly evident that recycling alone cannot solve the plastic waste crisis. To effectively address this issue, we must confront the root causes by redesigning the systems that generate waste in the first place (Gordon, 2021). This shift in perspective is driving the movement toward reusable food service ware, a solution that aligns with both environmental sustainability and long-term economic viability.



The Global State of Plastic Pollution

Global plastic production has grown exponentially since the 1950s, and currently, the world produces 430 million tonnes of plastics each year (UNEP, 2023). It is estimated that half of global plastic production is for single-use items (World Economic Forum, 2024b).

Geyer et al. estimate only 9% of plastic waste produced globally has been recycled, 12% has been incinerated, and the remaining 79% has accumulated in landfills or leaked into the environment (2017).

From an economic standpoint, single-use plastic is inefficient, with 95% of its value being lost after initial use, equating to \$100 billion annually (World Economic Forum, 2024a). Plastic production accounts for more than 3% of total United States (U.S.) energy consumption, and it is estimated that carbon emissions from plastic production will reach 17% of the global carbon budget by 2050 (Moss et al., 2022).

Plastic pollution is a global problem that was exacerbated by the COVID-19 pandemic, during which the consumption of single-use plastics increased by 250-300 percent (Becker et al., 2024, Gordon, 2021). Unless we change course, plastic pollution is expected to triple in the next 20 years (Gordon, 2021).

Tackling the global environmental threats posed by single-use plastics will require a combination of government regulation, business innovation, and changes in individual behavior (Walker et al., 2021).



The Human Health Impact of Plastic Pollution

Plastic has been found to be harmful at every stage of its lifecycle, from the toxic air emissions during petroleum extraction to the carcinogens and reproductive toxins released during manufacturing and consumption, and finally to the hazardous emissions from waste incineration (Gordon, 2021). These impacts disproportionately affect low-income communities, communities of color, and those near extraction and processing facilities (Gordon, 2021).

Many traditional takeout packaging products are made from petroleum-based chemicals that can leach into food. For example, a chemical group known as "forever chemicals" or per- and polyfluoroalkyl substances ("PFAS"), have been used since the 1950s for their non-stick properties (Matthesen, 2023). It is used in molded fiber food service ware products for fries and pastries as a grease barrier.

They persist in the environment and the human body, affecting both health and the planet. In fact, it has been found that over 97% of the U.S. population has PFAS in their bodies (Matthesen, 2023). When hot food is placed in plastic containers, chemicals and microplastics can leach into the food, posing health risks such as hormone interference and reduced fertility (Matthesen, 2023). PFAS have been linked to reproductive, developmental, liver, kidney, and immunological issues, as well as low birth rates and thyroid disruption (Matthesen, 2023).

The vast majority of PFAS have little to no data demonstrating their safety (Blake, 2018). The health impact of these chemicals depends on various factors, and while long-term effects are still being studied, it is important to seek safe, sustainable alternatives such as reusable food service ware.

The Environmental Impact of Plastic Pollution

Plastic pollution, particularly from single-use food and beverage packaging, poses a significant threat to our oceans and environment. According to the 2023 Ocean Conservancy and International Coastal Cleanup #SeatheChange report, over 15.5 million items were collected, with 8 out of the top 10 most commonly found plastic items originating from single-use food and beverage packaging.

Disposable packaging consumes vast resources, including petroleum, trees, energy, and water throughout its lifecycle (Powell, 2015). One-third of all plastic packaging produced ends up in the environment, amounting to approximately 31 million tonnes annually, with 11 million tonnes entering our oceans each year (Gordon, 2021).

This accumulation equates to 34 pounds of plastic for every foot of global coastline (Gordon, 2021). If current trends continue, it is projected that by 2050, there will be more plastic in the ocean by weight than fish (Gordon, 2021).

The impact of plastic packaging extends beyond visible pollution. The production of plastics, often used in takeout containers, relies heavily on fossil fuels, releasing air contaminants that degrade air quality and contribute to climate change (Matthesen, 2023). Plastics manufacturing is responsible for significant greenhouse gas emissions, accounting for about one percent in the U.S. (Matthesen, 2023).

Most discarded packaging ends up in landfills or as litter, carried by wind and water into the environment (Matthesen, 2023). Plastic packaging does not degrade quickly and can leach harmful chemicals into groundwater and soil. In oceans, the issue has reached a critical level, with the United Nations declaring plastic pollution a "planetary crisis."

Plastic single-use items littered in the environment break down into microplastics that contaminate ecosystems. Reducing single-use plastic packaging through the adoption of reusables is essential to mitigating this growing environmental crisis.

"We will not recycle our way out of the plastic pollution crisis: we need a systemic transformation to achieve the transition to a circular economy."
- Inger Andersen, UNEP Executive Director (UNEP, n.d.).

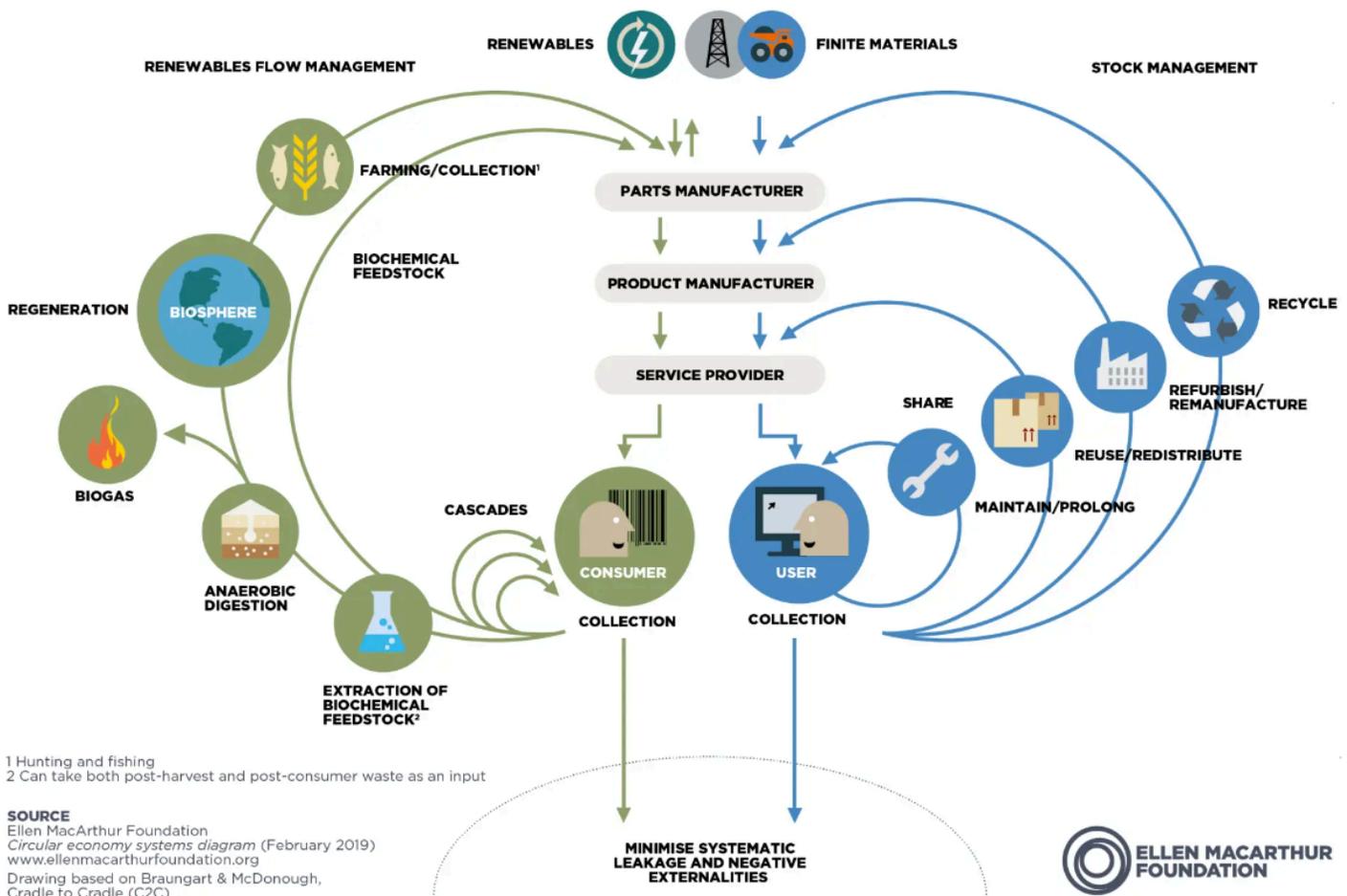


Embracing the Circular Economy: A Pathway to Sustainable Resource Management

The growing momentum towards sustainable practices has given rise to the concept of a circular economy, which offers a solution-focused approach to environmental challenges. By designing products for reuse and reintegrating them into the production loop, we can conserve materials, energy, and reduce waste pollution (Matthesen, 2023).

According to the Ellen MacArthur Foundation, the **circular economy** is defined as: **“A systems solution framework aimed at addressing global issues such as climate change, biodiversity loss, waste, and pollution through three key principles: eliminating waste and pollution, circulating products and materials at their highest value, and regenerating nature.”**

The Ellen MacArthur Foundation’s *Circular Economy Systems* (2019) butterfly diagram illustrates the flow of materials through a circular economy, highlighting the pathways for the regeneration of renewable biological materials and the improved circulation of finite technical materials. It visually represents the interconnectedness of different processes in the circular economy, highlighting how resources can be managed sustainably through cycles of reuse, repair, remanufacturing, recycling, and regeneration.



Unlike the current linear economy, which follows a 'take-make-dispose' model, the circular economy redefines consumption by promoting the sustainable use of materials and keeping them in use for as long as possible through intentional product and business model design (Ellen MacArthur Foundation). This approach not only protects the environment, health, and communities, but also creates economic value by reducing the reliance on single-use packaging and raw materials (Kachook & GreenBlue, 2023).

By focusing on the utility and durability of products and offering new features and technologies, brands and retailers can leverage the circular economy to advance their reusable packaging goals, ultimately decoupling economic growth from resource consumption (Kachook & GreenBlue, 2023).

By adopting these principles, the circular economy addresses pressing environmental challenges and redefines resource management. This progressive approach is gaining traction worldwide, influencing policy decisions and legislative actions aimed at reducing single-use plastics and fostering sustainability on a global scale.

Global Single-Use and Plastic Waste Reduction Policy Landscape

Around the world, countries are intensifying their efforts against single-use plastics and setting ambitious policies and targets.

In April 2024, the European Parliament took a significant step by adopting new measures to make packaging more eco-friendly and reduce waste across the European Union (EU) (European Parliament, 2024). These rules, which include ambitious packaging reduction targets—5% by 2030, 10% by 2035, and 15% by 2040—specifically aim to cut down plastic packaging waste. Starting January 1, 2030, single-use plastic items, including packaging for unprocessed produce, takeaway food and drinks, individual condiment packets, toiletry miniatures in hotels, and ultra-thin plastic bags, will be banned. This legislation aligns with the goal of building a circular economy, minimizing waste, and phasing out non-sustainable packaging.

Notable countries leading the path include France, Chile, Germany and Luxembourg. France adopted its comprehensive Anti-Waste Law in 2020, which aims to phase out single-use plastic packaging by 2040 (Ellen MacArthur Foundation, 2022). Chile's Law No. 21,368, published in August 2021, limits the distribution of single-use products, regardless of the material they are made of, for consumption within food establishments (Lührmann, 2023). In January 2023, Germany required restaurants to provide a reusable packaging alternative at no extra cost to consumers (Perez Becker et al., 2024). In Luxembourg, starting January 2025, takeout and delivery meals will only be served in reusable containers (Perez Becker et al., 2024).

Complementing these efforts are the United Nations' Intergovernmental Negotiating Committee on Plastic Pollution. The fourth session of the Intergovernmental Negotiating Committee (INC-4) was held in Ottawa, Canada, from April 23 to April 29, 2024. INC-4 saw some progress, including the development of a list of products and chemicals of concern and standard design requirements to improve recycling capabilities (Chase, 2024). However, discussions did not address the need to reduce the production of new plastics, likely due to the influence of nearly 200 fossil fuel lobbyists present, a 37% increase from INC-3 (Chase, 2024).

These combined efforts, at both national and international levels, not only aim to cut plastic waste but also have the potential to save governments money. Upstream has estimated that our current "one-way, throw-away" economy costs businesses and city governments \$6 billion annually in solid waste management (Gordon, 2021). They estimate that implementing a reuse economy has the potential to save governments \$5.1 billion (Gordon, 2021).

Canadian Single-Use and Plastic Waste Reduction Policy Landscape

In 2022, Canada implemented the **Single-use Plastics Prohibition Regulations** which officially prohibits the manufacture, import, and sale of six single-use plastic categories: checkout bags, cutlery, food service ware made from or containing problematic plastics, ring carriers, stir sticks, and straws (Government of Canada, 2023).

These regulations are expected to result in a net decrease of approximately 1.3 million tonnes of plastic waste over the 10-year analytical period (2023 to 2032), representing around 3% of the total estimated plastic waste generated in Canada each year (Government of Canada, 2022). They are also expected to reduce plastic pollution by approximately 22,000 tonnes over the same period, representing around 5% of the total plastic pollution generated each year (Government of Canada, 2022).

In British Columbia, the **Single-Use and Plastic Waste Prevention Regulation** (2023) provides a framework for phasing out certain single-use and plastic items to reduce waste and pollution (Government of British Columbia, 2024). Starting December 20, 2023, food service providers can no longer offer single-use (disposable) plastic food service accessories such as utensils. Food service providers can give out other disposable items, like wooden spoons, but only on request.



As of July 15, 2024, businesses are restricted from selling or distributing single-use food service ware made with certain hard-to-recycle plastics. This includes disposable take-out containers and some packaging used to hold food and drinks, such as certain bowls, boxes, cartons, cups, plates, platters, trays, hinged containers, lidded containers, egg cartons, and film wrap. Hard-to-recycle plastics include biodegradable plastics, compostable plastics, oxo-degradable plastics, polystyrene foam, PVC, and PVDC (see B.C. government website for more information).

What you need to know

As of December 20, 2023, B.C. businesses are restricted from selling or distributing single-use (disposable) utensils that contain compostable plastic.

PROHIBITED AS OF 2023



Starting July 15, 2024, prohibited items will include compostable plastic items, such as take-out containers and shopping bags.

PROHIBITED AS OF JULY 15, 2024



What you need to do

As of December 20, 2023:

1. Stop using plastic utensils

Don't provide customers with single-use plastic, including compostable plastic, knives, forks, spoons, chopsticks, stir sticks or splash plugs.

As of July 15, 2024:

2. Stop using plastic shopping bags

Don't provide customers with single-use plastic bags, including compostable plastic bags, at the checkout.

3. Stop using plastic food service ware

Don't pack food or drinks you prepare for immediate consumption (including take-out or delivery) in single-use compostable plastic containers or packaging.

Graphic from Government of British Columbia's "Compostable Plastic" Fact Sheet (n.d.).

This fact sheet is part of a toolkit produced to help B.C. businesses comply with the regulation. Looking for options to single-use plastics? Find their handy alternatives guide, plus fact sheets on other restricted items and additional printable tools – including posters and signs that you can use to inform your staff and customers – at gov.bc.ca/reuse.

Framework for Policy Approaches to Reducing Single-Use Items

Heiges’s "Eliminating single-use disposable foodware: An emerging and cascading norm" (2023) explores the emergence of policies aimed at reducing single-use disposable foodware. Due to the array of policies to reduce single-use items being implemented across jurisdictions, this can be described as a policy mix that spans cross-sector, cross-level, and cross-administrative domains. As illustrated in Table 1., there are two main categories of policies within a policy mix: **creative** and **destructive**.

Creative Policies:

Creative policies support localized innovations and efforts aimed at sustainability, encouraging transformation and participation towards a shared goal, such as the reduction of single-use items. Key examples of creative policies include educational policies, knowledge creation policies, data transparency policies, and economic policy instruments.

Destructive Policies:

Destructive policies, on the other hand, aim to dismantle the existing entrenched system of unsustainable single-use food service ware by restricting their use and reducing production and consumption. Key examples include command-and-control mechanisms, quantity limits, take-back or right-to-repair structures, and BYO (bring your own) schemes.

Policy Mix	Examples of Policy Mechanisms
<p>Creative Policies Knowledge creation, development and diffusion Establishing market niches/market formation Entrepreneurial experimentation Support from powerful groups/legitimation Influence on the direction of search</p>	<p>Educational; knowledge creation; generated and disseminated resources; data transparency Economic policy instruments; public procurement mandates</p> <p>Diversifying offerings and capabilities; financial investments Third-party verifications or certifications</p> <p>Non-binding goals and voluntary actions; demonstrations</p>
<p>Destructive Policies Control policies Significant changes in regime rules Changes in social networks, replacement of key actors</p>	<p>Command-and-control; market-based; choice architecture (nudges); quantity limits; material requirements Take-back; right-to-repair; shared responsibility; bring your own schemes; pool system Remove incumbent actors</p>

Table 1. Replicated from Heiges (2023, p. 5), illustrates examples of creative and destructive policy mechanisms associated with reducing single-use items.

Canadian Municipalities Leading the Way in Reducing Single-Use Plastics

For almost two decades, communities across Canada have experimented with various strategies to reduce single-use plastics including bans, fees, and other policies. On April 2, 2007, Leaf Rapids, Manitoba, became the first municipality in North America to ban plastic bags (Chung, 2024). In March 2023, Montreal, Quebec, banned all plastic cups, stir sticks, straws, on-site consumption utensils, plastic utensils for delivery and takeout, and polystyrene in plates, containers, trays, and lids, with the city reporting a 92% compliance rate after one year of implementation (Chung, 2024). Heiges (2023) categorizes these municipal bans as **destructive** policies because they curb the widespread use of plastic by restricting certain plastic items.

In July 2023, Banff, Alberta, introduced a by-request policy, allowing restaurants to give straws and cutlery only if the customer requests them. Takeout food can only be served in reusable containers provided by the customer. The second phase of Banff's bylaw requires all restaurants, bars, and cafes to serve dine-in customers with reusable dish ware. All new restaurants must have dishwashers to get licensed to operate. As part of this bylaw, Banff also launched a pilot program allowing tourists to borrow reusable metal cups at 15 cafes and hotels for free. The cups can be returned to any participating location within 30 days, with a fee charged if they are kept longer (Chung, 2024). These policies are a combination of **destructive** policies (restrictions on single-use items) and **creative** policies (innovative pilot program for reusable cups).



On March 1, 2024, the City of Toronto, Ontario, implemented a by-request policy for utensils, straws, napkins, stir sticks, beverage takeout trays, condiment packages, and paper shopping bags (except for certain types such as bakery and prescription bags) (CBC News, 2024). To support the move to zero waste business models, the City of Toronto launched the Circular Food Innovators Fund in February 2024 for local small businesses (both for-profit and not-for-profit) to implement reuse systems that replace single-use and takeaway items with reusable food service ware that is collected and redistributed for further use (City of Toronto, 2024).

The City's website states, "The City will consider grant funding requests starting at \$5,000 and up to a maximum of \$35,000. A maximum of \$250,000 of total grant funding is available under Phase One of the Fund" (City of Toronto, 2024). Toronto's policies represent a mix of **destructive** policies (by-request policy) and **creative** policies (fund to support reuse systems) reshaping the status-quo.

Not all efforts have been successful. The City of Calgary, Alberta, repealed their by-request bylaw for single-use items only two weeks after it went into effect due to significant public pushback (Chung, 2024). In January 2022, the City of Vancouver chose a market-based control policy by implementing a \$0.25 fee on single-use cups, but the fee was removed on May 1, 2023. Both of these cases illustrate the difficulties of implementing disruptive policies that challenge current practices, leading to reversals. Since these policies have been implemented in other jurisdictions, it suggests that even within Canada some policies succeed in one jurisdiction, but fail to get the support needed in another.

Reusable Food Service Ware: A Sustainable Alternative

Reusable food service ware refers to items used for serving, storing, and consuming food and beverages that are designed for multiple uses instead of being discarded after a single use. These items are typically made of ceramic, stainless steel, shatterproof glass, or durable plastic materials and can be utilized for both dining on-site and takeout purposes.

While reusable food service ware generally has a higher upfront purchasing cost compared to single-use containers, it is important to consider the long-term benefits. Single-use items are inexpensive initially, but their ongoing replacement costs add up over time. In contrast, reusable containers can be used repeatedly, eliminating the need for continual purchases (Matthesen, 2023). Some restaurants implement their own reusable container systems, such as North Vancouver's NOMAD Coffee & Bakery, but most are operated by reusable service providers.

Environmental Impact and Lifecycle Considerations for Reusable Food Service Ware

A review by Upstream of 18 Life Cycle Assessments (LCAs) found that reusable foodware generally outperforms disposable alternatives across 14 standard environmental measures (Gordon, 2021). Reusable food service ware exhibits lower greenhouse gas emissions and typically uses less water over its lifecycle. For example, while 500 paper cups consume nearly 370 gallons of water, using and washing one ceramic cup 500 times requires only 53 gallons of water (Gordon, 2021).

The break-even point—where the environmental impact of using reusable food service ware becomes comparable to or less than disposable items—varies by type. For cups, this point ranges from two to 122 uses; for plates and clamshells, it spans from three to 50 uses; and for utensils, only two uses are required. For a detailed breakdown of break-even points per material, see the Summary of Break-Even Points for Reusable and Disposable Foodware table on page 39 of Upstream's *Reuse Wins* report.

Most reusable products are designed to last at least 200 uses, with materials such as steel, glass, and ceramic extending beyond 1,000 uses (Gordon, 2021). However, it is crucial that reusable items are actually reused a sufficient number of times to realize their environmental benefits compared to disposables (Moss et al., 2022).

In terms of material impact, reusable glass and ceramic tableware generally show the lowest environmental impact across various measures. Among reusable cups, glass leads in performance, with ceramic and stainless steel also being viable options. For plates, reusable porcelain outperforms all single-use options, while plant-based materials like PLA and cellulose pulp show the highest climate impacts (Gordon, 2021).

Other trade-offs must also be considered. Plastic, though lightweight and potentially having lower emissions during transport, poses risks such as chemical leaching and microplastic contamination. Glass and ceramic, while inert, are heavy and less durable, whereas stainless steel, though durable and safe, has a higher environmental impact (Moss et al., 2022).

Further analysis by Hitt et al. (2023) introduces a parametric life cycle assessment (LCA) and cost model to evaluate the effects of customer behavior on greenhouse gas (GHG) emissions, primary energy use, water consumption, and costs associated with reusable container systems. Their study fills gaps in previous LCAs by addressing the impact of customer behavior, particularly regarding container washing and transportation.

Their findings suggest that transitioning to a reusable container system can substantially reduce primary energy use, global warming potential (GWP), water consumption, waste, and costs. Reusable alternatives can achieve a break-even point in GWP and primary energy impacts within 4-13 uses, depending on the type of single-use container they replace. However, the success of these reductions relies heavily on customer practices during the "use" phase (Hitt et al., 2023).

The study highlights the importance of proper customer behavior, recommending that containers be quickly rinsed with cold water before returning them. It also notes that if fewer than 5% of customers make additional trips solely to return reusable items, the environmental footprint may surpass that of single-use options, even over short distances of 2 miles, depending on vehicle type. Thus, designing systems that facilitate convenient returns and minimize travel is crucial for maintaining a lower environmental impact compared to single-use systems (Hitt et al., 2023).

Effective customer education is also key to optimizing the environmental benefits of reusable systems. The study advocates for informational labels on containers, signage in restaurants, employee engagement, and accessible online resources to promote best practices (Hitt et al., 2023).

Exploring Reuse Models for Cups and Containers: Deposit, Fee, and Membership Approaches

Reusable cup and container programs are implemented in various ways, typically involving upfront deposits, fees for non-return, or membership models (Moss et al., 2022). Ensuring efficiency, effectiveness, and economic sustainability is critical in designing these systems (Perez Becker et al., 2024).

Around the world, businesses are emerging that provide Business-to-Business (B to B) services, offering circular systems for collecting, washing, sanitizing, and restocking reusable food-service ware (Gordon, 2021). Food-service establishments contract these "reuse service providers" to manage desired amounts and types of reusable to-go ware (Gordon, 2021).

This concept is gaining traction as a new reuse service economy for take-out and delivery emerges, creating significant opportunities for entrepreneurs, investors, and customers (Gordon, 2021).

How reuse services for take-out and delivery work

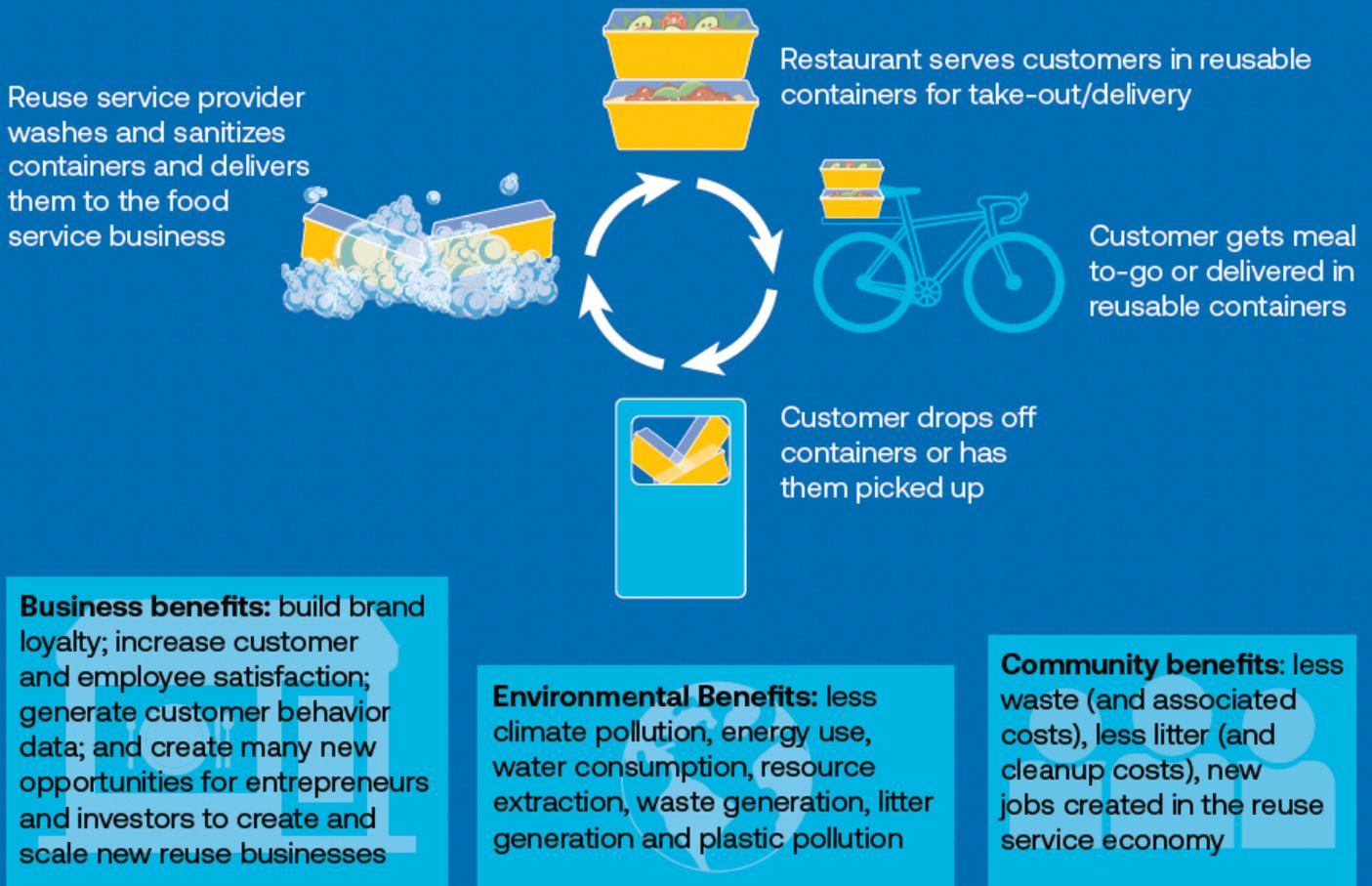


Illustration from Upstream's Reuse Wins Report, page XVII (Gordon, 2021).

The infographic provided by Upstream demonstrates how a circular reusable container system operates in a takeout setting and outlines the benefits it provides for businesses, the environment, and the community.

Companies worldwide are adopting various models for reusable cup services, such as lending libraries, deposit systems, and subscriptions (Gordon, 2021). Innovations also extend to reusable containers for take-out meals, with integrated dishwashing and logistics services, and large venues like stadiums and festivals are increasingly implementing these systems (Gordon, 2021).

Many of these systems utilize a deposit-based approach, where customers pay a refundable deposit to encourage returns and reduce inventory loss (Perez Becker et al., 2024). Some suppliers further enhance this model with technology, such as apps or QR codes, to streamline the tracking of containers and deposits (Perez Becker et al., 2024).

To better understand the practical applications of these systems, it is essential to consider the two primary logistical models for reusable food service ware: point-to-point and hub-and-spoke.

Comparison of Point-to-Point and Hub-and-Spoke Reusable Models

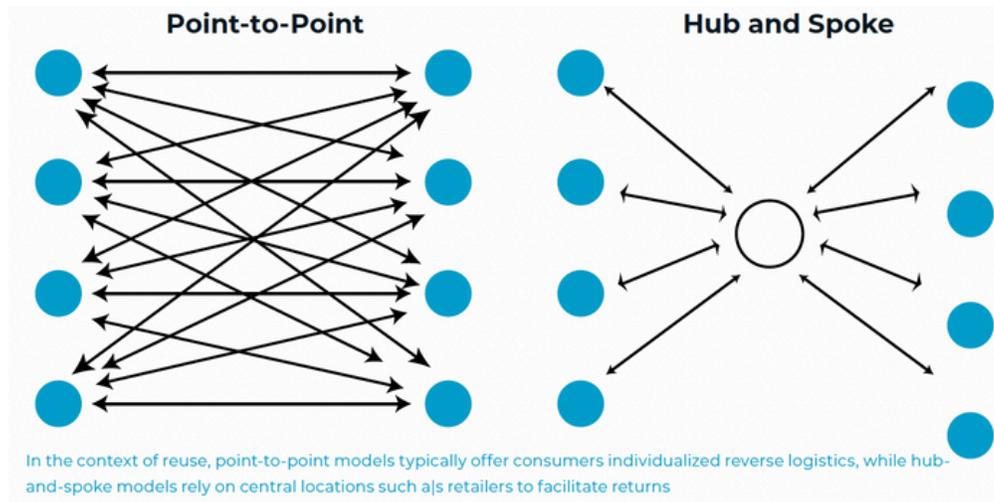


Illustration from Sustainable Packaging Coalition (Kachook & GreenBlue, 2023, p.35).

The Sustainable Packaging Coalition (SPC)'s report, *Designing More Successful Reusable Packaging Programs*, offers insights into the advantages and challenges of point-to-point versus hub-and-spoke models (Kachook & GreenBlue, 2023). While their analysis primarily focuses on sustainable packaging, the principles are directly applicable to reusable food service ware:

A point-to-point system involves:

- Direct delivery of reusable packaging to consumers through e-commerce.
- Providing consumers with a return label to send empty packaging directly back to the brand for refill.
- Collecting empty containers directly from consumers' homes.

This model offers convenience by facilitating home delivery and pick-up. However, it may have a higher environmental impact due to increased individual trips. The impact depends on the efficiency of the pick-up route and the logistics provider. For frequent deliveries (such as restaurant takeout), it can reduce the overall footprint by using existing delivery routes (Kachook & GreenBlue, 2023). So far, this system is primarily used for refillable containers. However, we have seen reusable service providers such as Reusables.com in Vancouver, begin to make partnerships with delivery services like UberEats.

A hub-and-spoke system involves:

- Consumers visiting a retail location to purchase products or use dispensers that provide reusable packaging.
- Returning reusable packaging to a central location, such as a restaurant or retailer.
- Sending reusable packaging to a third-party facility, such as a distribution or cleaning centre.

This model centralizes collection points and operational efficiencies but may be less convenient for consumers who are not accustomed to returning empty containers while shopping or running errands. Despite utilizing existing infrastructure, challenges may arise concerning capacity or space constraints at restaurant or retail locations (Kachook & GreenBlue, 2023).

Both models offer distinct advantages and challenges in implementing reusable food service ware systems. The choice between point-to-point and hub-and-spoke models depends on factors such as consumer behavior, logistical capabilities, and environmental considerations. Finding the right balance between convenience and environmental impact is crucial for the successful adoption of reusable food service ware programs. (Kachook & GreenBlue, 2023).

Transitioning from logistical models, the various implementations of reusable container programs are now examined. These implementations vary widely and can be categorized into several distinct models.

Models for Reusable Cup and Container Programs

Different models of reusable programs are being tried around the world:

The Lending Library

Companies adopting the "lending library" system offer customers a cup provided by a third-party service for free, without requiring a deposit. Customers borrow the cup and return it to participating businesses. Operational costs are covered by the retailer or cafe. Customers typically need to download an app and provide credit card information; failure to return the cup within a specified period may result in charges (Gordon, 2021).

The Deposit System

In the deposit system, customers pay an upfront deposit refunded upon returning the cup. Some systems offer subscription services where customers pay monthly or annually for the service (Gordon, 2021).

BYOC Discounts

Certain businesses incentivize reusable use by offering discounts to customers who bring their own containers. However, without effective promotion and customer education, these initiatives often struggle to achieve high engagement (Gordon, 2021).

No service

A growing number of cafes are opting out of providing disposable containers altogether, encouraging customers to use reusable options exclusively (Gordon, 2021).

Innovative Reusable Container Programs in B.C.

To illustrate these models in practice, several innovative programs have been implemented in British Columbia. These programs highlight the diversity and creativity in designing reusable container systems.



Bread & Butter Collective

Bread & Butter's Reusable Container Program is based on Vancouver Island and uses a Deposit System that allows users to purchase a container for \$8 and once returned, receive their next container free of charge. Learn more at breadandbuttercollective.com



mugshare

Founded in 2019 by students at the University of British Columbia, mugshare uses a Deposit System where users pay a \$5 refundable deposit and receive a refund upon returning the mug to any mugshare location. Learn more at [@mugshare](https://www.instagram.com/mugshare) on Instagram.



Reusables.com

Founded in 2021 and based in Vancouver, BC, Reusables.com uses a Lending Library approach. Users request containers at participating locations, providing a phone number or ReuserID. With the free app, containers must be rinsed and returned within 14 days to avoid a refundable deposit of up to \$20. New members get a free 30-day trial, with ongoing membership at \$5 CAD per month. Learn more at reusables.com



ShareWares

Founded in 2020, ShareWares is based in Vancouver, B.C., and uses a Deposit System where users pay a deposit of \$1.50 for a reusable container with a unique QR code. After use, they return the container to a ShareWares bin, where once it's scanned, their deposit is refunded. The containers are then washed and redistributed to participating businesses for reuse. Learn more at sharewares.ca



The Nulla Project

Founded in 2019, The Nulla Project is based in Victoria, B.C., and uses a Deposit System. When customers visit a partner location and ask for a Nulla cup or container, they pay a \$5 refundable deposit. Customers can reuse their Nulla cup or container, exchange it for a freshly cleaned one at any partner location, or return it to receive a refund. Learn more at thenullaproject.ca

The Adoption of Reusable Solutions: A Global Perspective

Moss *et al.*'s "Global landscape analysis of reuse and refill solutions" (2022) delve into the increasing shift towards replacing disposable items with reusable alternatives as a strategy to combat plastic pollution. Their comprehensive research, detailed in "The Global Landscape of Reusable Solutions," provides a publicly accessible dataset available at www.reuselandscape.org/database.

As of June 10, 2022, the Landscape cataloged 1,196 reusable solutions operating across six continents and 119 countries. These solutions are categorized into 557 Package-Free Shops, 169 Reuse Advocacy Programs (excluding for-profit advocacy efforts), and 155 Reusable Cup and Container Programs. Notably, 79.6% (952) of these initiatives are start-ups or small businesses, including single-location Package-Free Shops. Regionally, Europe leads with 441 reuse solutions, followed by North America with 317.

Updated data as of June 11, 2024, indicates a growth to 1,246 distinct reuse solutions worldwide.

From the results of 30 semi-structured interviews, Moss *et al.* (2022) identified key enablers for the growth of reuse models, notably the existence of successful models, better data, increased system design expertise and enabling policies. Survey results highlighted campaigns to normalize reuse behavior and additional monetary resources as major enablers. Additional considerations included addressing greenwashing, integrating with food delivery services, educating consumers about health risks from microplastics and chemicals, and providing subsidies or incentives for adopting reuse practices (Moss *et al.*, 2022).

They also identified six primary barriers hindering the broader adoption of reuse initiatives:

- 1. Addressing the material and assortment of reusable items.**
- 2. Integrating reusable cups and containers into existing infrastructure, particularly in terms of accessing or establishing adequate washing facilities.**
- 3. Motivating businesses to adopt reuse solutions.**
- 4. Navigating restrictive policies and advocating for reuse-focused lobbying efforts.**
- 5. Securing sufficient funding and investment in the reusable solutions space.**
- 6. Shifting consumer behavior and raising awareness about the benefits of reuse.**

The authors emphasize that these challenges require collective action from the sector as a whole, rather than individual businesses tackling them in isolation. Addressing these barriers systematically is essential for scaling up the adoption of reusable alternatives globally (Moss *et al.*, 2022).



The Business Case for Reusable Food Service Ware

Overall, the literature review shows that businesses adopting reusable food service ware experience substantial positive impacts across various dimensions. Reusable food service ware not only provides cost savings but also enhances consumer experiences, offers valuable user insights, improves business efficiency, and fosters brand loyalty.

For instance, the Clean Water Fund's *ReThink Disposable* program, initiated in 2012, has collaborated with nearly 300 food service operators in the U.S. (Gordon, 2021). Their findings indicate that small businesses can achieve cost savings ranging from \$3,000 to \$22,000 USD. Moreover, these initiatives contribute to substantial environmental benefits by eliminating between 110,000 to 225,000 packaging items and reducing waste by 1,300 to 2,200 pounds per business. Although initial investments are required for purchasing reusable products, businesses typically recover these costs within a few months, and invariably within a year (Gordon, 2021).

The Sustainable Packaging Coalition (SPC) highlights that reusable food service ware can address various strategic and operational considerations for businesses. Strategically, reusable systems provide valuable data on consumer behavior and usage patterns, fosters brand loyalty and demonstrates a company's commitment to sustainability. Operationally, reusables can solve issues such as safety and sanitation in self-serve areas, reduce costs associated with disposable packaging, and offer better protection for contents during delivery (Kachook & GreenBlue, 2023).

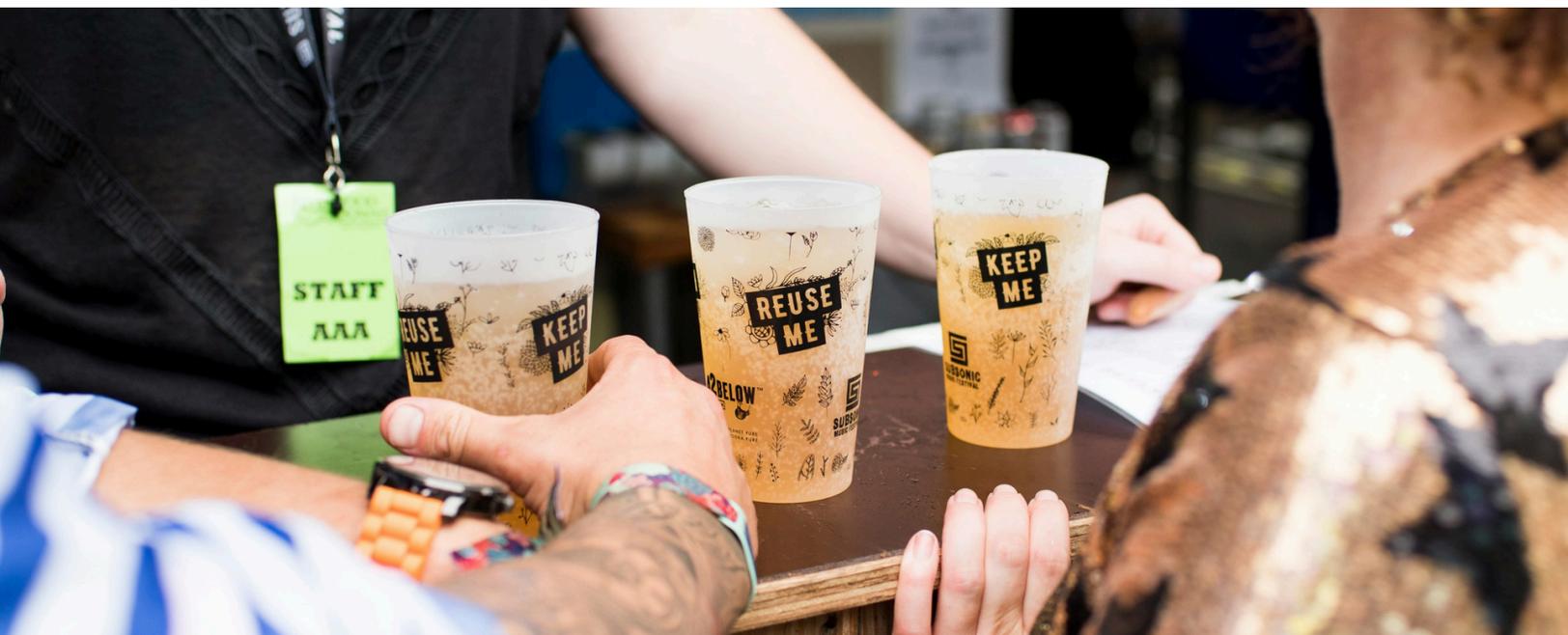
Beyond operational efficiencies, reusable solutions significantly enhance the customer experience. They elevate dining experiences and improve food presentation. Moreover, businesses can gain insights into their environmental impact, as many reusable service providers track metrics such as the number of single-use items diverted, emissions saved, waste reduced, and water conserved. Additionally, these solutions create new opportunities for entrepreneurs and investors, fostering the growth of reuse businesses and generating jobs within the emerging reuse service economy.

From our interviews with reusable service providers, businesses are primarily motivated to implement reusable systems due to a mix of social, environmental, and trending factors. Many are driven by the need to stay ahead of future regulations, align with social and environmental goals, or act on personal passion. High-end restaurants and sustainability-focused establishments are more inclined to invest in reusables.

The implementation of reusable containers is generally quick, often taking under two weeks, sometimes as quick as one day, though the exact duration varies by business type and event. For coffee shops and restaurants, the process is typically very straightforward and easily integrates into day-to-day operations. Additionally, many reusable service providers offer employee training, check-in meetings with the owner and manager, and regular site visits to ensure smooth operations.

After implementing reusable containers, businesses report several key benefits. Events and attendees appreciate the reduced waste and superior performance of the containers compared to paper and compostable options, noting fewer leaks and less deterioration. Complaints from customers tend to decrease. Businesses also enjoy positive press and rewards for participating, which enhances their reputation.

While cost savings are not as prominent as hoped, businesses value being part of a network and community. Many are preparing for potential bans from city or government regulations, allowing them to gradually transition and stay ahead of future requirements.



Key Business Concerns and Challenges

The literature review presented key business concerns that are important to consider. Through interviews conducted by Moss et al. (2022), key concerns by business owners revealed apprehensions that adopting reusable food service ware would slow down transactions and be met with consumer resistance. The lack of consumer awareness about reuse solutions, restrictive policies, and lack of funding were also top of mind.

Many businesses are looking for better collaboration within supply chains or communities and are still seeking clear demonstrations of the scalability and viability of reuse solutions. The comparative costs of reusables versus disposables are also still not enough to sway owners. Overcoming operational and logistical challenges, economic uncertainties, and entrenched consumer habits tied to disposability remains a collective endeavor (Moss et al, 2022).

Perez Becker et al. (2024) note that managing reusable container inventory presents a significant challenge. Restaurants must determine appropriate stock levels amidst varying customer behaviors—some only take clean containers, reducing stock, while others return dirty containers and take new ones, complicating inventory management post-cleaning. Some systems allow customers to return only dirty containers, increasing the inventory of soiled items. This demand-return variability creates uncertainty, making it challenging for restaurants to maintain optimal inventory levels (Perez Becker et al., 2024).

Furthermore, in service settings, the cost of losing a sale typically outweighs the cost of holding extra inventory. Strict policies against single-use containers may lead to lost sales if clean reusable containers are unavailable, potentially forcing the use of single-use alternatives or resulting in lost business altogether if such items are banned (Perez Becker et al., 2024).

Effective inventory management hinges on monitoring the number of dirty containers during supplier visits rather than focusing solely on clean container availability. Cost-effective practices involve optimizing supplier visit frequency based on business fluctuations, underscoring the importance of strategic container inventory management for restaurant operations (Perez Becker et al., 2024).

From our interviews with reusable service providers, businesses considering the switch to reusable containers often express concerns about customer acceptance of deposits, fearing that even a minor price increase could deter customers. There is also a perception that reusable containers add to staff workload, although this is generally not the case.

Concerns also extend to a lack of customer demand, particularly in regions where sustainability initiatives are not yet mainstream. Misconceptions about cleanliness further exacerbate these concerns, as consumers and businesses alike may worry about the hygiene of reused containers, despite industry standards that ensure safety. Businesses also face logistical challenges related to cup storage and inventory management, such as handling excess or insufficient stock. These issues require careful planning and efficient inventory systems, which can be a significant adjustment for businesses used to the simplicity of single-use items.

Early adopters that stick with the program find that reusables are more expensive than single-use items. While they anticipate cost benefits over time as policies are implemented and economies of scale are realized, many businesses continue to offer single-use items due to customer preferences. With only a small portion of customers opting for reusables, this limited uptake makes reusable systems a higher-cost investment compared to single-use options in the short term.

Unexpected challenges in implementing reusable containers often include the need for effective messaging and training sessions, as well as having a dedicated champion to support the initiative. Accurate assessment of packaging needs before events is crucial, as is obtaining buy-in from vendors. Creative solutions, like using a wine cup for soft serve ice cream, may be necessary. However, due to a lack of customer uptake—often caused by poor promotion—some restaurants may revert to single-use options after initial trials.

In summary, while businesses recognize the long-term potential of reusable food service ware, widespread adoption is hindered by operational challenges, economic uncertainties, and the need for greater consumer engagement and supportive policies.



Measuring Successful Reusable Systems

According to the Sustainable Packaging Coalition (SPC), businesses considering implementing a reusable system should realistically assess consumer participation and prioritize strategies to optimize behavior change and reduce friction for greater effectiveness (Kachook & GreenBlue, 2023). It is crucial to recognize that while reuse models may require more materials and transportation, their sustainability depends on robust reuse practices by committed consumers. SPC suggests that the performance of reusable systems should be measured across three main aspects:

- 1. Getting high return rates in practice,**
- 2. Long-term consumer engagement,**
- 3. Lower environmental footprint.**

SPC defines high return rates as achieving at least 80%, with closer to 90% being optimal, particularly in food service settings where building repeat orders can be effective. They caution against using short-term sales data as the primary metric for success, noting that shifts in consumer shopping behavior take time to manifest in purchase patterns (Kachook & GreenBlue, 2023).

SPC provides comprehensive recommendations for successful program implementation which focus on three key areas, return-rate, consumer engagement and reducing the environmental footprint.

Achieving High Return Rates:

- Measure actual reuse rates by consumers as a key metric.
- Set deposit amounts, if charged, sufficiently high to ensure high return rates.
- Clearly labeled containers for reuse and return

Long-term Consumer Engagement:

- Incentivize participation through rewards.
- Minimize behavior change and inconvenience by making the experience similar to getting a single-use item
- Remove friction for participation by reducing steps
- Reduce “new experience anxiety” with clear instructions
- Integrate technology such as apps to facilitate payments, returns, and deposits.

Reducing Environmental Footprint:

- Measure the reduction in emissions and water from reducing single-use packaging.
- Use durable yet lightweight reusable packaging.
- Optimize transport logistics to reduce miles and explore sustainable transport modes.

SPC has provided five-pages of questions designed to help businesses explore the myriad of considerations surrounding reusable systems (see pages 44-48 of Kachook & GreenBlue (2023)). They recommend that addressing as many of these questions as possible before launching a pilot program can significantly enhance the likelihood of achieving the three key objectives of reusable systems.

Consumer Incentives and Adoption Barriers for Reusable Systems

There is growing evidence that consumers are increasingly receptive to reusable packaging. A 2021 report by IGD, titled *How to Help Consumers Adopt Reusable Packaging*, found that 83% of consumers in the UK are open to embracing reusable systems.

This positive shift is further supported by the Sustainable Packaging Coalition (SPC), which highlights several lifestyle benefits of reusable systems. These benefits include alleviating guilt about consumption, reducing decision fatigue through simpler choices, allowing consumers to explore new trends and products, and offering potential savings or discounts. The SPC emphasizes that while convenience plays a crucial role, tackling climate change and plastic pollution requires both consumers and companies to embrace new behaviors.

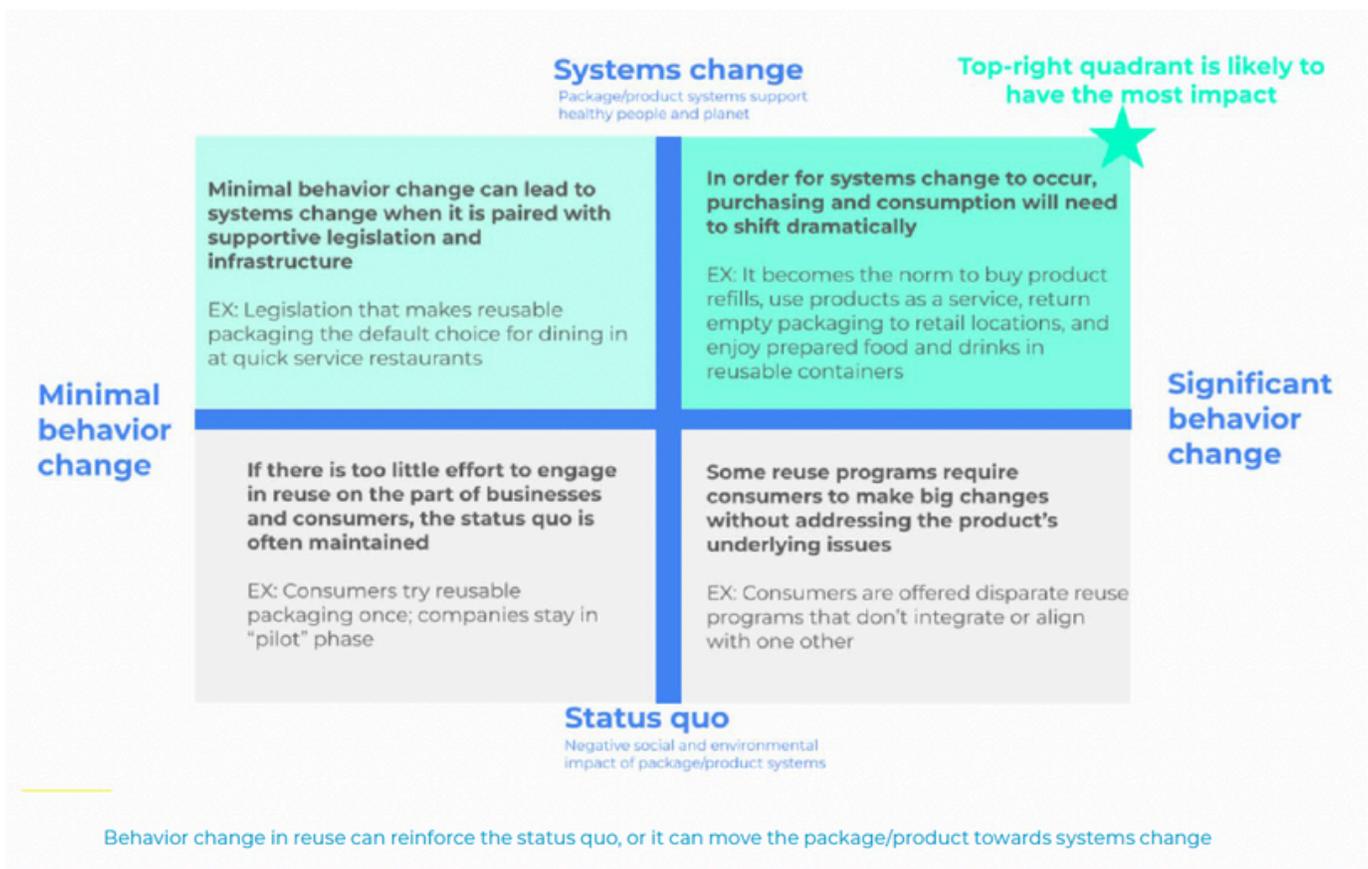


Illustration from Sustainable Packaging Coalition (Kachook & GreenBlue, 2023, p. 26).

For the successful adoption of reusable systems, both systems change and behavior change are necessary. The SPC's graph illustrates how these changes interrelate, particularly emphasizing that the most impactful shift occurs in the top-right quadrant, when using reusable containers, buying product refills, and returning empty packaging to retail locations becomes the norm.

While supportive legislation and infrastructure can facilitate some behavior change, it is essential to provide companies with the resources and support needed to transition beyond the "pilot" phase and implement reusable systems effectively and sustainably (Kachook & GreenBlue, 2023).

The SPC advocates for companies and solution providers to leverage this behavioral shift by minimizing friction associated with reusable options. Friction refers to the barriers—whether real or perceived—that hinder participation in reusable food service ware programs, such as financial costs, procedural differences at checkout, and general convenience issues. As the use of reusable systems becomes more widespread, these barriers are expected to lessen, making sustainable practices more accessible (Kachook & GreenBlue, 2023).

In line with the SPC's recommendations for reducing friction, Nicolau et al.'s "Explaining the Willingness of Consumers to Bring Their Own Reusable Coffee Cups Under the Condition of Monetary Incentive" (2022) investigated specific incentives to address consumer barriers and enhance the adoption of reusable coffee cups (RCC). By analyzing a sample of 1,371 individuals with a Heckit model, the researchers determined the minimum discount required to motivate RCC usage.

The study revealed that increasing awareness about the environmental impact of disposable cups enhanced consumers' willingness to use RCCs. However, barriers such as lack of RCC ownership and discomfort with carrying them hindered adoption. Overall, 92.61% of consumers were willing to bring an RCC for an average minimum discount of 26.50 cents. Environmentally conscious individuals were more responsive to lower discounts (Nicolau et al., 2022).

Beyond these theoretical insights, Nicolau et al. (2022) provided practical recommendations for coffee shops and restaurants to boost RCC usage. They suggested three key measures:

- 1. Educate customers on the sustainability issues related to disposable coffee cups.**
- 2. Increase the availability of RCCs and enhance their convenience, such as by selling RCCs at venues or implementing a cross-location borrowing program.**
- 3. Offer rewards and incentives for using RCCs, tailored to the characteristics of each establishment's customer base, such as discounts, gift cards or coupons (Nicolau et al., 2022).**

Our interviews with businesses and reusable service providers highlight the critical role of incentives in encouraging consumer adoption of reusable containers. In their experience, a discount of \$0.50 has been found to be significantly more effective than a \$0.20 discount. Many consumers who are already conscious of the environmental impact of disposable products are driven by these financial incentives, as well as the positive reinforcement of contributing to sustainability. This motivation often leads them to share their experiences on social media.

However, several barriers to adoption remain. Convenience issues, such as the need for supportive infrastructure, and a lack of awareness or motivation pose challenges. Some consumers prefer glass or ceramic alternatives over plastic reusable cups and find the return process cumbersome. Additionally, misconceptions that recycling or compostable containers are sufficient can deter participation. Increasing the number of participating businesses could help address these challenges and facilitate broader adoption of reusable systems.

Emerging Trends and Strategies for Advancing Reusable Systems

Emerging trends in the reusable industry highlight growing municipal efforts to address waste issues, with many local governments targeting reusable solutions as an accessible starting point. Regions are adopting bottle depot systems to integrate with existing collection networks, reducing the need for new infrastructure (e.g., Earthware in Calgary, Alberta). Anticipation is rising for larger franchises and national networks to embrace reusables, along with festivals and stadiums adopting these practices. The European market is also showing substantial interest, with discussions on national wash networks and treating washing facilities as essential utilities. High-profile endorsements, such as from Coldplay, are driving more requests for reusable requirements.

However, having multiple companies offering reusable cup and container programs in Metro Vancouver could create confusion among users and limit widespread adoption. While competition fosters innovation, fragmentation may create barriers and complicate efforts to establish a seamless regional system. A potential solution is a cooperative model where providers collaborate under a unified framework, allowing for standardization, shared infrastructure, and unified marketing while maintaining unique innovations. Establishing regional networks within this cooperative could address local needs and tailor services to different communities. To further enhance convenience, companies should position drop-off bins at frequently visited locations such as SkyTrain stations, grocery stores, and community centers. By combining the strengths of multiple providers and focusing on a collaborative, standardized approach, this model could streamline operations and improve the effectiveness of reusable food service ware programs across Metro Vancouver.

Metro Vancouver's Head Office Cafeteria Waste Reduction: A Procurement Guide for Reusable Food Service Ware

Metro Vancouver pilots a number of waste reduction and reuse programs, and are working on further increasing reuse and scaling projects within the region. In 2023, Metro Vancouver engaged the non-profit organization Ocean Ambassadors Canada to work with 40-60 workplaces and 12-16 events per year on single-use item reduction. Among other waste reduction recommendations, Ocean Ambassadors provides information to organizations interested in transitioning from single-use to reusable cups and containers.

Metro Vancouver is leading by example and is in the process of launching a reusable cup and container platform pilot within the Metro Tower III Head Office Cafeteria. Both employees and the public are able to participate in the food service ware reuse network and neighboring offices and frequently visited businesses are encouraged to follow Metro Vancouver's lead in promoting reusable products.

Metro Vancouver's Current Cafeteria Food Service Ware Offerings

The current offerings at the Metro Vancouver Head Office Cafeteria are quite varied. For dine-in entrées, ceramic plates are used, while dine-out meals are provided in compostable paper clamshell containers. Soups are served in either ceramic or compostable paper bowls. Coffee is served in compostable paper cups and while personal reusable cups are accepted, no other reusable option is available. Cutlery includes metal options (which are prone to frequent loss and therefore are only provided based on the order), wood, and plastics labeled compostable, which are readily available for self-serve. Under the new system, users will be able to take reusable containers with them to their offices and ceramics will remain a dine-in option.

Procurement Process

In the procurement process for reusable food service ware, the initial step involved market sounding, during which organizations specializing in reusable cups and container-sharing were contacted to gain a deeper understanding of their capabilities and the overall market landscape.

While the basic services were well-understood, market sounding revealed a variety of models for loaning materials, including different approaches for payment and return. This process also provided valuable insights into evolving trends in reusable food service ware systems.

Emerging technologies, such as Radio Frequency Identification (RFID) for tracking, and rapidly advancing platforms offering various incentives and advanced reporting features, were identified as key considerations. At the time of the market sounding, new and emerging service features discovered included expanded and customizable data insights, as well as opportunities for advertisements and pop-ups within apps.

Insights from market sounding informed the next step of creating a Scope and Services document, which outlined the requirements for potential suppliers. This document was incorporated into the Request for Proposal (RFP) which was posted on multiple websites, including BC Bids and Tenders.

In the final step, once the bids were received, they underwent an evaluation process with clear scoring criteria, including technical, financial, and demonstration components. Proposals were scored out of 100%, and the successful proponent was determined based on the highest score.

Metro Vancouver's Requirements and Criteria

Metro Vancouver's requirements for the reusable cup and container network included several key criteria. The respondent needed to provide an open-network solution accessible by other parties within the Metro Vancouver region. This meant that the network's cups, containers, and bins would need to be owned and maintained by the platform owner, rather than by the Corporation.

Additionally, the respondent was required to demonstrate previous successful trials or implementations of their open-network sharing platform at businesses or offices. The provided cups and containers also needed to be free of Perfluoroalkoxy alkane (PFA).

The successful respondent would be responsible for several key tasks. During the start-up phase, they would supply all necessary materials for the reusable network, including reusable cups and containers with lids, collection bins, platform software and hardware, and point of sale integration. For washing services, they would provide pick-up, washing, and delivery of reusable cups and containers from collection bins as frequently as daily, and collaborate with Metro Vancouver to implement an on-site washing model if required.

In terms of software, they would integrate the Metro Vancouver head office building (Metro Tower III) into their existing reusable platform service area and software applications, ensuring it operated within the open network. Employee-only bins would need to be visible to employees but hidden from the general public, as some staff-only drop-off bins would not be accessible to others. Additionally, they would offer technical support for any software issues that disrupted the platform's use or service. Administratively, they would provide Metro Vancouver with ongoing metrics from the pilot, including data on cup and container usage, CO₂e savings, and the quantity of displaced single-use items.

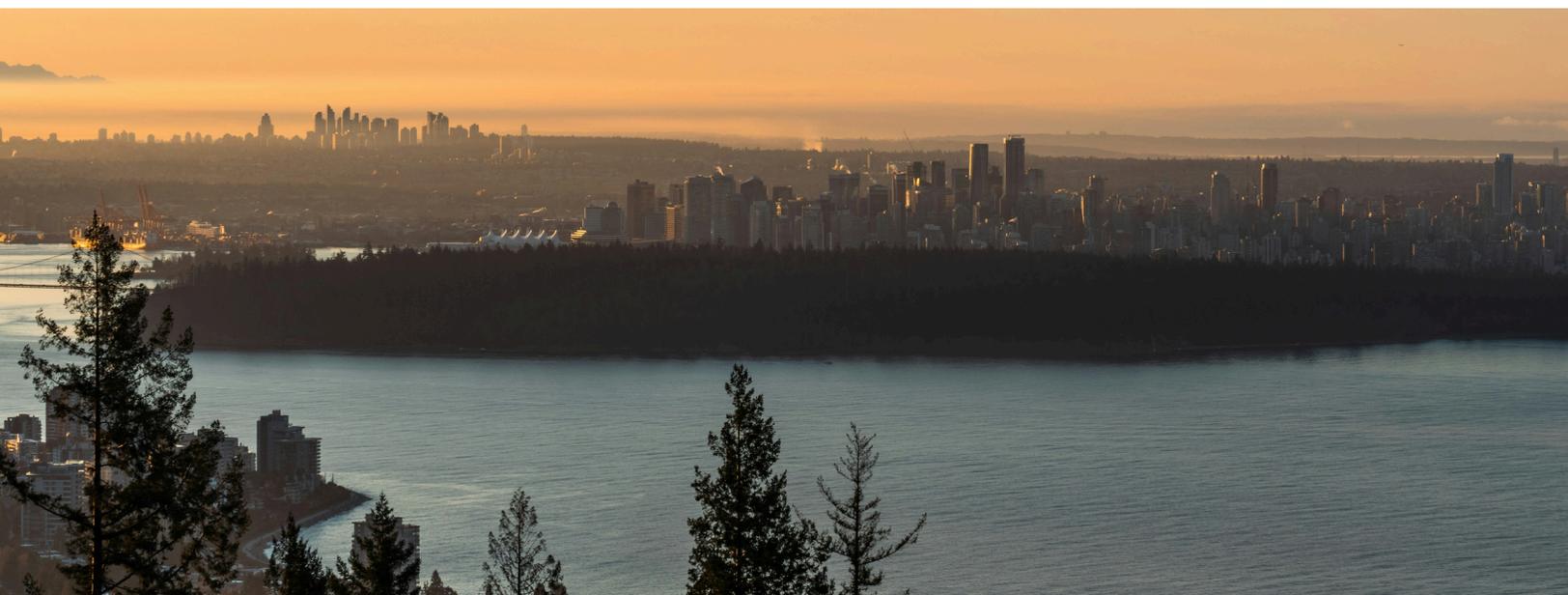
Collaboration across departments was key, Metro Vancouver facilities management team, solid waste staff and external relations staff worked together to put in criteria that would meet the needs of the cafeteria operator, reduce waste and be clear and easy for employees to participate in.

Engagement and Success Metrics

At the time of writing, the reusable food service ware program has yet to be implemented. However, in preparation for engaging and educating cafeteria staff and users about the switch to reusable food service ware, a comprehensive communications plan has been developed, which includes multiple phases. On the soft launch day, representatives from the successful proponent will be on-site to provide direct education. Additional strategies will involve placing signage, posting information on the internal internet, and hosting a presentation by one of the contractors, along with distributing materials from the proponent.

Feedback mechanisms for gathering input from cafeteria users will be integrated into the communications plan. A baseline survey has already been conducted, and a second survey will follow to assess behavior change and gather further insights. The success of the reusable food service ware program will be evaluated through several measures. This includes analyzing survey results from before and after the program's implementation to assess behavior changes. Additionally, tracking data from the proponent, along with monitoring the number of uses and return rate of the reusable items, will be used to gauge the program's impact.

Once the program is operational, there are plans to share insights and collaborate with other municipalities and provincial authorities based on the experience and outcomes of this initiative. In addition to the Scholars project, the insights will be shared with Ocean Ambassadors Canada and reported to several committees, including the Regional Waste Reduction Coordinators Committee (RWRCC), the Zero Waste Committee (ZWC), and the Regional Engineers Advisory Committee Solid Waste Subcommittee (REAC SWS).



Opportunities for Improvements to Corporate Policies and Provincewide Regulation to Advance Reusable Food Service Ware

Phasing in the use of reusable food service ware across different sectors can support the growth of reuse, socialize the behavior, and effectively manage the transition from single-use items to sustainable alternatives.

Events & Festivals

Policy Opportunity: Require the use of reusable food service ware for all on-site catering, food trucks, and food services at events and festivals.

Events and festivals often generate significant amounts of single-use waste. Partnering with local reusable service providers to supply food service ware, and including the requirement of food vendors to use reusable cups and containers in the agreement from the beginning is recommended. Organizers can also implement a deposit system where attendees pay a small fee for reusable items, which is refunded upon return. Additionally, integrating educational initiatives that promote waste reduction and the environmental benefits of using reusable items at events is important for promoting understanding and encouraging adoption.

Restaurants

Policy Opportunity: Require the use of reusable foodware for dine-in services to start and require the use of reusables for takeout, with a phased approach to gradually eliminate single-use plastics.

Restaurants play a central role in food consumption and waste generation. Encouraging or mandating the use of reusables can lead to significant waste reductions, particularly in high-traffic urban areas. Implementing a phased approach—starting with dine-in services and gradually extending to takeout—allows businesses time to adapt. Encouraging restaurants to offer discounts or rewards for customers who bring their own reusable containers or participate in the restaurant's reusable container program will further support the transition.

Offices

Policy Opportunity: Require the elimination of single-use items in all office settings, and require the exclusive use of reusable dishware, cutlery, and containers for both individual and catered meals.

Offices provide a controlled environment ideal for transitioning to reusables, given the frequent use of food service items. Establishing a program that provides employees with reusable containers, utensils, and drinkware—either through a local service provider or by installing dishwashers—can facilitate this shift. Additionally, offering incentives, such as discounts at office cafeterias or recognition programs for employees who consistently use reusables, will further encourage adoption.

Catering

Policy Opportunity: Require catering services to offer reusable foodware as a default option and eliminate the use of single-use items unless explicitly requested by clients.

Catering services are positioned to make a significant impact on waste reduction by prioritizing reusable options, especially for recurring events and meetings. Catering services should be equipped with proper cleaning facilities or partnered with local cleaning services to handle the increased demand for cleaning and sanitizing reusable items. Clear guidelines and training for caterers on the logistics of handling, cleaning, and returning reusable items will be essential to address any operational concerns.

Meal Delivery

Policy Opportunity: Require meal delivery services to utilize reusable containers for all deliveries.

Meal delivery services, popular for convenience, contribute significantly to single-use waste through disposable packaging. To address this, they should partner with container providers to create a system for distributing, collecting, and cleaning reusable containers. Delivery platforms can offer incentives, such as discounts or loyalty rewards, to encourage prompt returns. Charging a fee for single-use items can also promote the use of reusables and help offset initial costs. Educating customers about the environmental benefits and providing clear return instructions will be crucial for success.



Conclusion

The transition from single-use to reusable food service ware in Metro Vancouver represents a pivotal step toward achieving the region's broader sustainability goals. As this report has demonstrated, the environmental benefits of reducing reliance on single-use items are substantial, with significant potential to mitigate plastic pollution, decrease greenhouse gas emissions, and preserve natural resources. However, the path forward is not without its challenges, particularly in terms of the initial investment required, changes in operational practices, and the need for widespread behavioral shifts among consumers and businesses.

Despite these challenges, the case for adopting reusable food service ware is compelling. The economic analysis within this report suggests that, over time, reusable systems can lead to considerable cost savings by reducing the need for constant replenishment of disposable items and lowering waste management expenses. Furthermore, the long-term environmental gains will not only benefit the local community but also contribute to global efforts to combat climate change and protect biodiversity.

The six case studies included in this report offer valuable insights into how businesses and institutions across British Columbia have navigated the transition to reusable food service ware. These examples highlight the importance of strong leadership, clear communication, and strategic planning in overcoming obstacles and achieving sustainable outcomes. They also demonstrate that while the transition may be complex, it is feasible and yields significant rewards for those who commit to it.

Looking ahead, it is clear that Metro Vancouver has the opportunity to lead by example, not only within the region but also on a broader scale. By leveraging its purchasing power, influencing policy, and engaging the community, Metro Vancouver can accelerate the adoption of reusable food service ware and drive meaningful change. The region's proactive approach to sustainability, as outlined in this report, positions it as a model for other cities and regions striving to reduce waste and promote environmental stewardship.

In conclusion, the shift to reusable food service ware is both a necessary and achievable goal for Metro Vancouver. The findings of this report provide a roadmap for how this transition can be successfully implemented, with a focus on collaboration, innovation, and long-term thinking. As Metro Vancouver continues to advance its sustainability agenda, the adoption of reusable systems will play a critical role in reducing the region's environmental footprint and fostering a more resilient and sustainable future for all its residents.

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BARD ON THE BEACH

Vancouver, BC
Sector: Festival & Events

FESTIVAL OVERVIEW

Bard on the Beach is Western Canada's largest not-for-profit, professional Shakespeare Festival, running from June to September and attracting over 90,000 attendees annually. On any given night, up to 1,000 people can be found on-site. The festival, which began in 1990, presents four different shows each season. Additionally, it hosts special events such as community days, family days, relaxed performances, Pride Day, National Indigenous Day, and is committed to Equity, Diversity, Inclusion, and Accessibility (EDIA). Presented in Vancouver's Señákw/Vanier Park, Bard on the Beach emphasizes its connection to the land, starting each season with a blessing ceremony and continuously remaining conscious of its environmental impact, particularly regarding waste and consumption.

HOW IT WORKS

Bard on the Beach has worked with Recycling Alternative for ten years. Through their waste audits, they identified a significant amount of plastic waste from wine and beer cups. They attempted to use compostable cups, but when they found out they can not actually be composted, they started looking for other options. In 2022, Recycling Alternative recommended ShareWares, leading to the festival's switch to ShareWare cups for wine and simply serving beer in their original cans, eliminating the need for single-use plastic cups.

IMPLEMENTATION PROCESS

- **Timeline:** In total, the implementation process took about six months but the transition was seamless.
- **Adaptations:** The transition was straightforward; they only had to adjust the pouring amounts to accommodate the wine cups. Additionally, because the cups do not stack, they had to find a new place to store them.



REUSABLE PARTNER

Bard on the Beach has partnered with ShareWares to provide reusable wine glasses for their patrons.

“Spend time in the trash! It might seem daunting, but it's not complicated. Understanding what you're throwing away is the first step to making impactful changes.”
- Ava Forsyth, Director of Operations

IMPLEMENTATION PROCESS

- **Cost and Pricing Considerations:** Implementing the reuse program required careful consideration of costs and integration into pricing. To make it easier for patrons, they decided to cover the deposit costs, instead including it internally within the total price of the wine. The liquor license also needed to approve the price increase.
- **Training and Resource Allocation:** While no additional resources were needed, they did need to add extra training for the volunteers and they began regularly checking the garbage bins to make sure no cups accidentally ended up in the landfill.

BENEFITS

Enhanced Customer Experience

The ShareWares reusable cups resemble wine glasses which has resulted in an elevated customer experience. They have received a lot of positive feedback with no pushback from patrons. Patrons love the cups so much that they had a small issue with people taking the cups home the first year!

Volunteer Satisfaction

The volunteers who serve the drinks really like the cups and have even been able to work with ShareWares team to choose the right cup. They have noted that they find it easier to pour the wine into the wine shaped cup compared to the previous disposable cup and that, as a result, overall wait times have decreased.

Operational Integration

The integration of the reusable cups into their operations was seamless. When ShareWares comes twice a week to pick up containers and restock supplies, they are very self-sufficient and easy to work with.

Environmental Impact

The reusable cups have resulted in a cleaner venue with less plastic waste and garbage, reducing the number of cups used by 14,000 in a season.



CONSIDERATIONS FOR IMPLEMENTATION

- **Messaging on Cups:** Originally, the ShareWares cups said 'Scan here for a refund', and this confused a lot of patrons who wanted to keep the cup and then return it. Since Bard was covering the deposit, they actually ended up asking ShareWares to remove the message.
- **Inventory Management:** The first year, the festival occasionally ran out of cups so they needed to adjust their inventory levels.
- **Unexpected Obstacles:** Their primary unexpected obstacle was patrons taking the cups home with them.

METRICS FOR SUCCESS

The festival tracks wine sales and they found that they had an increase in wine sales in 2022. They also measure their environmental impact by counting the number of single-use items avoided, reductions in water usage and overall waste savings. In 2022, by using 22,420 reusable cups, they were able to save 0.85 tonnes of waste, 2.4 tonnes of CO2 emissions and 80,000 litres of water (data provided by ShareWares).

POLICY CONSIDERATIONS

Financial support, such as grants for non-profits and events, would greatly facilitate implementation. Additionally, creating a central resource hub for information would be highly beneficial. When they began their implementation process, they found it difficult to locate any resources and felt there was a lack of community conversation on the topic. Their usual sources for recycling information, such as government and Product Steward websites, lacked the necessary information to help them get started.

LESSONS LEARNED

Their advice for other businesses is to start small, ensure whole team buy-in, and to designate a dedicated champion for the program. The program requires a bit of patience for training and getting everyone on board but it is highly rewarding.



FUTURE PLANS

Bard on the Beach plans to expand the program to include reusable coffee cups in the future.

“You need a champion that really believes in the cause and will dedicate their time and effort to get everyone on board and ensure the switch is a success.”

- Ava Forsyth, Director of Operations

FIELD & SOCIAL

Vancouver, BC
Sector: Restaurant

BUSINESS OVERVIEW

Field & Social is a healthy fast-food restaurant chain in Vancouver, focused on providing nutritious meals for people on the go. With four locations, the business emphasizes thoughtful design and sustainability, creating intentional spaces for fueling the body, and fostering community. Their mission is to transform the perception of salads from dull and bland to exciting and satisfying, using fresh, locally sourced ingredients and expert culinary techniques.

HOW IT WORKS

Field & Social was approached by Reusables.com to participate in a pilot program in 2021 at their Mount Pleasant location. They have since expanded the program to their Mount Pleasant, Yaletown and Dunsmuir locations. They are also a drop off location for other Reusable containers.

IMPLEMENTATION PROCESS

- **Timeline:** Implementation took about a month from the first conversation to full execution, and involved minimal resources—primarily staff training and initial free containers from Reusables.com.
- **Initial Setup:** Initially, without an app, when Field & Social offered reusable containers to customers, they used their phone numbers as customer IDs, scanned QR codes on the containers and tracked usage manually via email to Reusables.com. Staff training, putting up signage and creating space for inventory were key steps.
- **Program Evolution:** As the program evolved, the introduction of an app required additional training and the purchase of more containers.



REUSABLE PARTNER

Field & Social has partnered with Reusables.com to provide reusable containers for their salad bowls.



BENEFITS

Primary Benefits

The primary benefits include reducing the number of disposable bowls, cost savings, and enhancing the business's sustainability image. Over the past three years, they have established a regular customer base that uses the program.

Customer Feedback

Customer feedback has been very positive, with customers appreciating the sustainable and reusable container option.

Promotion Strategies

While uptake has varied over time, promotions such as offering free first containers and free cookies have helped increase participation. Reusable representatives visiting the restaurant to talk to customers and promote the program have also been very successful.

Profitability Impact

The program has had a minimal impact on profitability; although it has not brought in much profit, it has never been enough of a loss to stop using the program. Once they found the right system that works for them, the program has been able to be fully integrated into day-to-day operations.

CONSIDERATIONS FOR IMPLEMENTATION

- **Technology:** Some issues have arisen with the app and QR codes, but these have been addressed by simply contacting Reusables directly.
- **Operational Integration:** Other initial challenges included integrating the program with the till system and ensuring a consistent supply of containers. Field & Social overcame these challenges by using a separate order device for Reusable orders and maintaining regular, open communication with Reusables, customers, and staff.

LESSONS LEARNED

Field & Social emphasizes the importance of staff training, frequent communication to customers about the program, and maintaining a regular supply of containers. Really putting time and effort into promoting and selling the program to customers is very important. They also recommend holding a slightly higher number of inventory so you never have to worry about running out of containers. Open communication and trust with their partner, Reusables.com has also been vital to ensure smooth and effective program operations.



METRICS FOR SUCCESS

Field & Social tracks environmental metrics like carbon emissions and waste saved. They note that receiving their monthly summary reports from Reusables on their impact is rewarding and makes them proud of the program's impact.

POLICY CONSIDERATIONS

Field & Social would like to see the government promote and support the use of reusables more and provide more assistance to restaurants wanting to implement reusable programs. They also advocate for more support for companies providing reusable solutions.

FUTURE PLANS

While expanding the program is not currently a priority, Field & Social is open to enhancing and promoting it more in the future, potentially increasing their focus on reusables over the next few years.

Sustainability Report

1200+

**disposable containers
displaced**

60.8 kg

**waste
diverted**

126 kg

**CO2 emissions
avoided**



GROUNDS & GREENS

White Rock, BC
Sector: Cafe

BUSINESS OVERVIEW

Grounds & Greens Cafe is a plant-based cafe that started in White Rock, BC. The owner, who has been a chef for 20 years and had experience with veganism, founded the cafe in March 2020, with the official opening in June 2020. Despite the challenges posed by the pandemic, the cafe thrived and opened a second location in June 2024 in Fort Langley. Their mission in opening a plant-based cafe was to build a community of people and families who value kindness, and are committed to improving themselves, the community and the environment. All dishes are made in-house with high-quality, often locally sourced ingredients. Sustainability is also a core value, driving their goal of becoming zero waste in 10 years.

IMPLEMENTATION PROCESS

- **Timeline:** Implementation took about a month, with the first two weeks being the most challenging due to QR code issues.
- **Initial Attempt:** Reusables.com provided initial training and support, but the first year was difficult and the cafe initially struggled with commitment and proper communication. In 2024, they fully committed to the program, incorporating marketing efforts, posters, statistics, and social media promotions to educate and engage customers.
- **Resources Needed:** Resources included increased marketing efforts, staff training, and integrating a new system to identify reusable orders.

METRICS FOR SUCCESS

Grounds & Greens Cafe have experienced significant benefits, including reducing takeout container waste by 20-25% over six months, cutting spending on takeout containers by 40%, and enhancing community and team satisfaction with the program.



REUSABLE PARTNER

Grounds & Greens has partnered with Reusables.com to supply reusable cups and containers.



BENEFITS

Promotion Strategies

They participated in “Veganuary” in January 2024 and heavily promoted their reusable container program. As part of their strategy, they cut their prices significantly and served all their meals in reusable containers. During this month, they saw a substantial increase in reusable container usage, from 20 to over 400 in one month. Since then, they have continued to see uptake increase to 1200-1400 per month.

Customer Feedback

Customer feedback has been overwhelmingly positive and the staff are fully committed to seeing the program succeed.

Program Expansion

They have recently tried to engage takeout customers by including written notes in orders coming through delivery providers such as DoorDash, SkipTheDishes, and Uber Eats, encouraging them to request reusable containers on their next order, although uptake remains around 20%.

CONSIDERATIONS FOR IMPLEMENTATION

- **Initial Challenges:** They faced significant challenges in their first year which they attribute to not putting in the time and effort it required to be successful. Their main challenge was not having the right verbiage to onboard customers and they were also not educating customers or training staff enough.
 - **Lesson Learned:** They overcame these challenges by really committing to full implementation, changing their incentives and being more transparent to customers about their goals and efforts. With their goal of being zero waste, Grounds & Greens no longer offers single-use take out cups or containers, and any orders that require take out containers that are not reusable are subject to a \$0.50 charge per single-use item.
- **Operational Integration:** The program initially disrupted daily operations but soon became normalized. They needed to find space and also educate customers on proper cleaning procedures when returning containers to their location.
- **Tourist Areas:** Both their locations are located in popular tourist areas and they note that tourists unfamiliar with the system and who may not be returning to the location present an ongoing challenge.



LESSONS LEARNED

Their core advice to other businesses is to ensure that the reusable program aligns with their core business values and to ensure full buy-in from the entire team. Understand your 'why' for implementing the program and invest the necessary time and training for it to be successful. As a small business with a tight community, they have been very intentional and transparent with their customers, explaining past and current waste levels, their company goals, and the cost of single-use items, which they believe has significantly increased program buy-in.

POLICY CONSIDERATIONS

Grounds & Greens believe that because reusable container programs aim to reduce waste, widespread implementation of these containers could significantly decrease overall waste and recycling needs. Therefore, the funds currently allocated for garbage and recycling pickup should be redirected towards developing a circular reusable container system. They also advocate for a stronger push and full-steam-ahead approach with this initiative, with more signage needed to educate people, citing Banff as a great example.

FUTURE PLANS

Their recently opened Fort Langley location was launched with reusable containers fully implemented. They plan on opening five locations in the next 10 years and intend to expand the program to all locations. They have also incorporated many other sustainable practices, such as air dryers in the washrooms and replacing all napkins with linens, which is supported by in-house laundry facilities.



In a Reel posted on their Instagram, Grounds & Greens received almost 400,000 views for their video where they shared that in the previous 18 months, they had produced nearly 2 million pounds of waste through takeout containers (@groundsandgreenscafe posted on August 23, 2023).



HYACK FESTIVAL

New Westminster, BC
Sector: Festival & Events

FESTIVAL OVERVIEW

For more than 50 years, the Hyack International Parade & Festival has hosted free entertainment, music and activities for people of all ages, while supporting local vendors, food trucks and other artisan creators to display and sell their creations. Over five thousand people attended the 2024 festival and for the first time, the festival implemented reusable food service ware at 10 of their food trucks.

HOW IT WORKS

The Hyack Festival Association purchased the containers from ShareWares. These containers were distributed to all participating food trucks and festival attendees used the containers for their food purchases. After use, attendees returned the containers to Ocean Ambassador booths, who handled waste sorting and container collection.

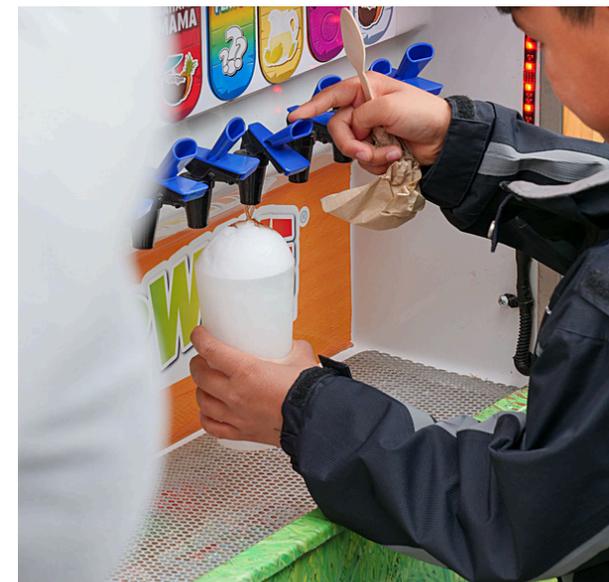
IMPLEMENTATION PROCESS

- **Timeline:** The initiative took one month to implement, with multiple meetings between partners to plan and coordinate the details. The festival started with a booth for Ocean Ambassadors but soon expanded their involvement.
 - **Lesson learned:** For future events, they plan to allocate more time for planning and coordinating their efforts.
- **Resources Needed:** Additional social media promotions were used to raise awareness for festival attendees prior to the festival. Informative signs were created and placed above waste stations to guide attendees on proper waste sorting and container return procedures.



REUSABLE PARTNER

Hyack Festival Association partnered with ShareWares to supply reusable containers. Ocean Ambassadors collaborated with the Hyack to support the reusable initiative.



IMPLEMENTATION PROCESS

- **Changes to registration process:** By the time they had decided to switch to reusable containers, the food trucks had already paid their deposits. To make it easier and more accessible, the festival decided to cover the costs of the reusable containers for the food trucks and cover the deposits of the containers to make the transition seamless for festival attendees.
- **Lesson Learned:** In 2024, they only had two staff members and while it was manageable, next year, Hyack plans to create a closed loop area for the food trucks and to hire more staff. They hope to hire one person to help coordinate the program, and they will aim to have 5 volunteers per sorting station and 4 volunteers at the exit to remind attendees to return their containers.

BENEFITS

Customer Benefits

Festival attendees provided positive feedback and appreciated the festival's efforts to reduce waste. Many attendees reflected on their personal waste habits and the broader issue of plastic pollution in the ocean. The City of New Westminster was also very happy with the event. The event was a significant success because attendees seamlessly transitioned to a more sustainable option without needing to change their habits or exert extra effort. This ease of adoption is crucial for achieving rapid behavior change.

Positive Brand Image

Implementing the reuse program enhanced the festival's image, showing their strong commitment to environmental responsibility.

Lower Waste

The use of reusable food service ware significantly reduced the amount of waste produced by the festival.

Future collaborations

Festival organizers believe this initiative will help them attract more sponsors in the future to help cover the costs of the program.

CONSIDERATIONS FOR IMPLEMENTATION

- **Customer Awareness:** The open nature of the festival and the novelty of the initiative led to festival attendees not realizing they needed to return the containers.
- **Logistics:** Hyack was responsible for ordering and distributing the containers. Ocean Ambassadors hired three additional staff members to support the waste sorting process. These staff were primarily stationed at the waste stations and exits to assist with the collection of reusable cups and proper waste sorting. Additionally, ShareWares supported the container distribution, which was very helpful for Hyack, as they did not have enough staff to dedicate one person to this task for the entire event.

CONSIDERATIONS FOR IMPLEMENTATION

- **Food Vendors:** Around 80% of vendors had positive feedback despite the short notice of the switch to reusable containers. However, vendors reported challenges with space planning in their trucks and finding suitable containers. Out of their 12 food trucks, two were not able to participate because they could not find a container that fit their needs.
 - **Lesson learned:** Ensure that all food vendors receive training on the festival's system so they can effectively plan for reusable containers. This will also allow the service provider to source containers that work for all vendors. For future events, Hyack plans to reduce the number of containers ordered based on vendors' sales experiences.
- **Covering costs:** While Hyack was able to cover the costs of the containers to make the pilot work, Ocean Ambassadors had to provide their services on a voluntary basis. They were also not able to cover the costs of the remaining waste and recycling. Now that the organizers have a better understanding of the costs, they will more effectively incorporate them into future event budgets.

METRICS FOR SUCCESS

Next year, the festival plans to weigh the garbage to compare and track environmental metrics. They hope to achieve zero waste in the next 5 years.

POLICY CONSIDERATIONS

They believe that governments should provide more support such as grants and should aim to make reusables the norm rather than the exception at all festivals and events.

LESSONS LEARNED

For other festivals and events considering a similar program, the festival organizers recommend budgeting for a company to handle waste sorting, providing thorough training for vendors, and including reuse requirements in vendor agreements.

FUTURE PLANS

Despite initial doubts about the feasibility of reuse at an open festival, the organizers are committed to improving their sustainability efforts and plan to use reusable containers at next year's festival.



“Festival and event organizers: get on board! These initiatives not only make a positive environmental impact but also enhance attendees' perception of your event. We are likely to see more of these programs in the future, so partnering with a reusable container and cup platform now is a great move.”
- Max Abu-Laban, Ocean Ambassadors

KOFFIE

Vancouver, BC
Sector: Cafe

BUSINESS OVERVIEW

Koffie is an independent coffee shop located right in the heart of Vancouver's business district and close to major downtown hotels. They offer quick, casual brunch and a selection of locally roasted coffees, complemented by a variety of baked goods and sandwiches, all made in-house from scratch. Although 70% of their business is takeout, the cafe space is designed to provide a welcoming, homey feel for customers taking a break from the office. Currently they offer disposable, ceramic and Reusables.com cups for their customers.

IMPLEMENTATION PROCESS

- **Timeline:** Implementation was very quick, taking about two weeks from initial planning to full execution.
- **Initial Implementation:** There were no issues with finding storage for the cups, and no financial resources were used as Reusables.com provided the necessary technology. They had to train staff on how the system worked but from the business side, they found the app and user interface to be very easy and intuitive.

BENEFITS

New Customers

The primary business benefit has been attracting new customers from the Reusables.com website, either to return containers or to try out the program for the first time.

Enhanced Brand Image

The program has enhanced their brand image and from a moral standpoint, it makes them feel good to be able to offer this sustainable alternative to their customers.



REUSABLE PARTNER

Koffie partnered with Reusables.com in 2021 to offer reusable coffee cups to their customers.



CONSIDERATIONS FOR IMPLEMENTATION

- **Initial Challenges:** Initially, the main challenges included understanding how the program worked, integrating it into their system, keeping track of stock, and scheduling pickups or drop-offs with Reusables.com.
- **Customer Demographics:** They note that their location's demographic has made it challenging for the program to gain significant traction. They identified three types of customers: those who know about Reusables and are excited about it, those who become interested after learning about it, and those not interested at all. Many customers already bring their own mugs.
- **Operational Impact:** While the program has not significantly impacted daily operations, explaining it to unfamiliar customers adds 2-3 minutes to the order process, which can add up during busy times.
 - They have not offered any promotions for the program and currently rely entirely on staff to inform customers about the reusable cup option.
- **Sanitization Procedures:** They modified their sanitizing procedures to accommodate reusable containers. This extra step added only 30 seconds to a minute to their cleaning process, so it was not significant. Apart from modifying their sanitization procedures and slightly adjusting their customer service script, no other specific policies or procedures were needed.
- **Staff Momentum:** Maintaining momentum among staff when uptake is low is an ongoing challenge.

LESSONS LEARNED

Their advice to other businesses considering a similar program is to ensure the entire team is on board and motivated. In coffee shops, maintaining flow is crucial because customers have established expectations for their interactions. Adding this extra step can be tough to overcome, but sticking with the program and getting people excited about it is important. Put simply, if staff are excited about the program, then customer will be too.



POLICY CONSIDERATIONS

Financial support and community hubs would be beneficial, along with increased public awareness campaigns, such as advertisements on buses and in public spaces. They believe that initiatives aimed at integrating reusable container programs into daily life are crucial for overcoming the challenge of changing consumer behavior.

FUTURE PLANS

Currently, they do not have plans to expand the program. They would like to do more to engage their staff in promoting it, but with a small team of only seven, they do not have the staffing capacity at this time.

CAFÉ AMI

Vancouver, BC
Sector: Cafe

BUSINESS OVERVIEW

Café Ami is a locally owned and operated cafe that has three locations in Vancouver: Vancouver General Hospital, UBC Hospital, and Granville Island Public Market (Petit Ami). They serve specialty coffees, food, and beverages. Two of their locations are to-go only, while the UBC location offers dine-in ceramic cups. Located in two major hospitals, hygiene and space constraints are significant factors that influence their day-to-day operations. Café Ami has offered a “bring-your-own mug” discount for 30 years.

IMPLEMENTATION PROCESS

- **Timeline:** The implementation process took only a few weeks.
- **Lowered Financial Risk:** Café Ami chose ShareWares due to its convenience—no need to wash the cups and no sign-up required at the cash register. ShareWares provided free initial cups and signage, minimizing financial risk.
- **Motivation:** The primary motivator was the City of Vancouver's cup fee and associated reporting requirements, with environmental benefits being a secondary consideration.
- **Promotion:** Signage promoting the program was added to their rotating digital menu.

BENEFITS

Positive Customer Feedback

The program has received positive feedback from both staff and customers. Customers have expressed that they find the ShareWares program easy to participate in, with a low barrier to entry (\$1.50). They note that in their experience, customers who are 60+ are more likely to need help with the QR codes but staff are happy to assist them. The program has also attracted media attention, such as an article by BC Green Care.



REUSABLE PARTNER

In September 2021, Café Ami partnered with ShareWares to provide reusable cups at their cafes.



CONSIDERATIONS FOR IMPLEMENTATION

- **Staff Training and Operations Integration:** The main challenges they have faced include staff training, cash register changes, and finding space for cup storage. They have also faced issues with housekeeping staff mistakenly emptying return bins and customers placing garbage in the bins. They are working on these challenges by continuously training staff and customers, double-checking bins and adding lids to the bins to encourage proper use.
- **Operational Adjustments:** At the beginning, the program required updating the cash register to separate the reusable cup deposit from other charges, as there is no tax on the deposit. Other operational adjustments included staff training to ask customers about participating in the program and creating processes for pouring the correct amounts into the new cups. Since the cups were 16 ounces but lacked lines for 8 or 12-ounce pours, this complicated quality control.
- **Disposable Cup Usage:** Café Ami still offers disposable cups and they note that the uptake of customers using the reusable option is minimal compared to overall sales. The convenience of disposable cups remains a significant factor for many customers.
- **Financial Considerations:** Financially, the initial incentive provided by ShareWares and the City's single-use cup fee helped offset program costs. However, with the fee now removed and the additional costs such as wash fees and credit card interchange fees on the deposit, at this time there is no clear financial benefit. While the program is currently more expensive than using disposable cups, it is seen as an investment and they continue to participate because they feel it is the right thing to do.



LESSONS LEARNED

Café Ami advises other businesses to find a provider willing to meet their individual needs. They emphasize the importance of understanding the program's operational impacts and being patient with staff training and customer adoption. Ensuring whole team buy-in is very important. Additionally, customer awareness and belief in the program is essential; it must be customer driven. In their experience, once customers understand the program, there is no extra time at the till, everything runs smoothly and efficiently.



POLICY CONSIDERATIONS

Their main motivation for implementation was in response to the single-use cup fee in Vancouver. Having the fee only in the City of Vancouver was challenging for businesses, as it created inconsistency by imposing a cup fee in one city and not in others. They would have preferred a provincial single-use cup fee rollout, or simply a province-wide program supporting the transition to reusable programs instead by providing financial assistance to help cover the initial setup costs and ongoing expenses like wash fees. While the policy was repealed, they believe the one positive outcome was that businesses like ShareWares had the opportunity to scale their operations.

FUTURE PLANS

As their food is primarily take-out, Cafe Ami is considering expanding the program to include reusable containers, but they are cautious about the potential increase in wash fees and the need to increase prices to accommodate the cost of the containers.

“While Café Ami has offered a “bring-your-own mug” discount for 30 years, because of the importance of infection prevention and control (IPAC) in the hospital during the height of the pandemic, [their] team was not allowed to handle customer’s personal mugs in 2020 and 2021. [...]

There is often a perception that waste reduction initiatives will be more expensive, more work and won’t have the support needed to succeed. The ShareWares reusable cup program at Café Ami has shown that the complete opposite is true. With strong support from infection prevention and control (IPAC), cost neutrality for customers and hands-off operations, it is a great example of sustainability at VGH and some clever thinking.”

– BC Green Care (30 May 2022).

