

Reducing Single-use Foodware on Toronto's Waterfront

Understanding the challenges and opportunities for local businesses and customers



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In 2022, the University of Toronto Trash Team (U of T Trash Team) in partnership with the Toronto Environmental Alliance (TEA) conducted research to understand the challenges and opportunities local businesses experience in reducing single-use foodware and switching to reusable alternatives. Observational data were collected from 90 businesses and surveys were conducted with 45 businesses from the Waterfront Business Improvement Area (WBIA), including sit-down restaurants, quick-service restaurants, and coffee shops. Surveys were also conducted with 100 customers from the same area. Businesses and customers were asked about their current practices, perceptions, and support for regulations on single-use and reusable foodware.

This study is complementary to our previous study with food service businesses across Toronto in 2021. **The data from both studies show that both customers and businesses are interested in reducing waste, and that there is a need for more education and promotion of reusable foodware for takeout.**



Introduction

In Canada, single-use packaging accounts for almost 50% of the plastic waste generated and only 9% of plastic waste is recycled ([Environment and Climate Change Canada, 2020](#)).

In response, as in other jurisdictions around the world, Canadian national and local governments have committed to reducing plastic waste and are advancing policies and strategies focused on reducing single-use foodware. The Canadian national regulation on [single-use plastic items](#) bans the use of commonly used plastic foodware as of December 2023, including utensils, straws and some containers (e.g. foam, black plastic).

In addition, the City of Toronto is developing regulations to restrict both plastic and non-plastic single-use foodware at the municipality level through their Single-Use and Takeaway Items Reduction Strategy, currently in a voluntary phase. Regulations being considered by the City of Toronto, and a number of Canadian municipalities, include policies such as requiring that accessories (utensils, condiments, straws) only be distributed upon request, that restaurants charge fees on single-use items, and that restaurants allow customers to supply their own cup or container (Bring-Your-Own).

Increasingly, to reduce waste, governments are going beyond just discouraging or restricting some single-use items, and using regulations to require the adoption of reusable foodware and packaging.

For example, since January 2023, restaurants and events in France are required to only use reusable foodware for on-site food and drink ([CMS, 2021](#)). The municipalities of Edmonton and Banff, Alberta have passed similar requirements for restaurants to only use reusable cups ([Edmonton, 2022](#)) and reusable foodware (Banff) for dine-in orders ([Banff, 2022](#)). Since January 2023, restaurants in Germany have been required to offer reusable, returnable takeout cup or container options at the same or lower cost than single-use for all food and drink orders ([News in Germany, 2022](#)).

In Canada, though not widely required, reusable takeout foodware services are a growing green sector - this includes local enterprises in Toronto providing reusable items such as stainless-steel containers or cups, plastic clamshell containers and plastic takeout containers. These programs are now at a small and local scale, or in pilot phases for larger institutions and chains. To truly replace single-use foodware, deliberate efforts will be needed to scale these up ([Reuse Refill Canada](#)).

To inform effective policies and strategies to reduce single-use items, it is critical to gather data and insights on how food service businesses are planning to, and are currently, taking steps to reduce single-use items in response to consumer demand and new regulations. In addition, it is valuable to assess customer perceptions of business efforts and regulations to reduce single-use items and provide reusable alternatives.

Research goals

Our research goal was to evaluate the readiness of Toronto businesses and customers for these types of policies passed locally: to discourage unnecessary single-use (ask-first regulations), to adopt reusables for dine-in, and to use reusables for takeout (bring-your-own, or reusable services).

Our research focused on the [Waterfront Business Improvement Area \(WBIA\)](#) - a busy pedestrian area that includes dense residential, employment and recreation (tourist) areas and around 100 food service businesses selling ready-to-eat food. The WBIA represents businesses along the Queens Quay corridor between Bathurst and Cherry Street including the Toronto Island Park. Our study focused on businesses in this region, excluding Toronto Island (Figure 1).

Our study evaluated the attitudes and how ready the food service businesses and their customers are to both reduce single-use foodware, and to adopt reusable alternatives.

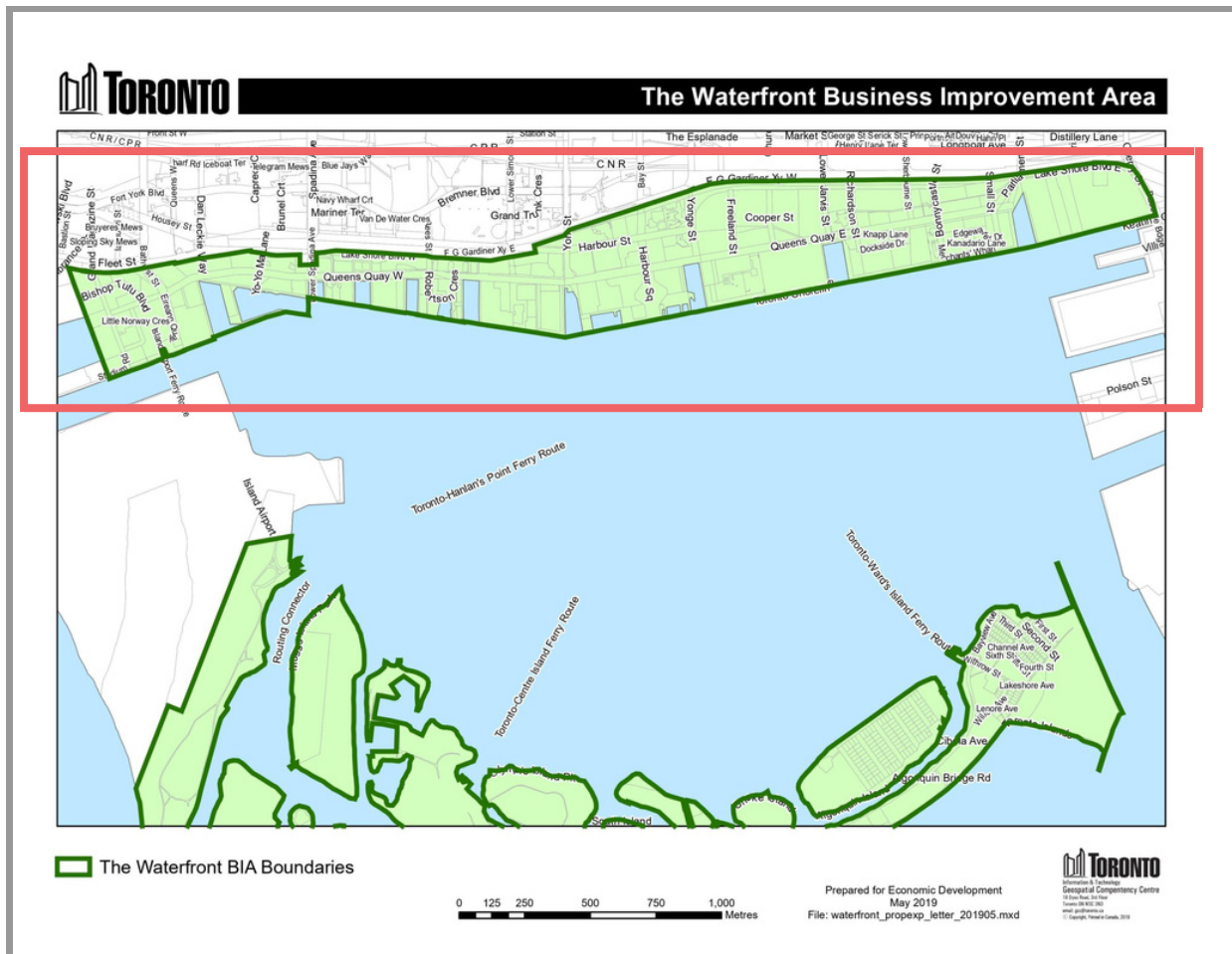


Figure 1: Area of the research with food service businesses and customers.

Methods

Research was conducted during the summer of 2022 (from June to September). Customers and food service businesses which sell ready-to-eat food (i.e., coffee shops, dine-in and takeout restaurants) in the WBIA were the focus of the investigation. Ethical approval for this research was obtained from the University of Toronto Research Ethics Board (protocol number 41272). The research included different steps for collecting data from businesses:

1. We mapped and gathered a preliminary list of local food service businesses in the area selected. We then walked door to door to observe and collect preliminary data about single-use foodware and dine-in options from all the businesses identified in our list (90 businesses in total).
2. Next, we conducted a closed-ended survey with 100 customers on their perceptions and attitudes to the use of single-use and reusable foodware by local food service businesses, and their support for programs and regulations to reduce single-use items.
3. Later, we recruited businesses to conduct an in-person survey to supplement the observational data. Through both observation and a semi-structured questionnaire, we assessed the businesses' practices and perceptions about waste and single-use foodware, including their perceptions and planned response to forthcoming single-use regulations. We also assessed baseline data about their single-use foodware inventory and use.



Customers

100 customers were randomly approached in public spaces entering or leaving food service businesses in the WBIA. They were surveyed about whether they live or work in the area, how often they visit local restaurants and asked about their thoughts on local businesses efforts and regulations to reduce single-use items and provide reusable alternatives. Most respondents (63%) live and/or work in the WBIA.

Key Takeaways

1. Customers want businesses to reduce waste and support policy requiring businesses to provide reusables

When asked about single-use foodware at restaurants for dine-in and takeout, the vast majority (92%) of customers said restaurants should do more to reduce single-use foodware. The majority (89%) also support a law that requires restaurants and coffee shops to serve customers with reusable cups and dishes for dine-in.

2. Customers are interested in reusable takeout services, and are looking for systems that are free and convenient ¹

When asked about whether they would use a reusable takeout cup or container service, 55% of customers reported they would use it. Conversely, 16% and 26% of the participants reported they would almost never use or never use reusables, respectively.

We also assessed what factors would help customers use a reusable takeout service (Figure 2). The top selected answers were about convenience. Most (63%) wanted many locations for the service and drop-off. Most customers (63%) also noted they wanted the service to be free. Relevant to this, 24% of customers reported that being charged a fee on disposables would motivate them to use reusable takeout services. Other answers were about being reminded about and offered the service.

¹ The reusable deposit-return takeout system is a reusable foodware for customers to borrow or rent. After use, the foodware is returned, either to the same location or another participating restaurant or drop-off location. Restaurants may offer this directly or subscribe to an external reusable takeout service that is offered in more than one restaurant. Some require the customer to join a free or paid subscription for the service and others require a refundable deposit at point of sale. Examples in Toronto include: Muuse and Reego for hot drink cups, Suppli, Inwit and Ozzi for food containers.

3. Customers say that businesses can do more to promote reusables and help them choose reusable foodware for takeout

Customers also noted that restaurants could play a key role in helping them to choose reusables by posting signs at the restaurant with reminders, and having staff offer or ask about reusable options when ordering. This applied to both bringing their own cup or container for the order, or if the restaurant offers a reusable and returnable takeout container or cup service. For example, 88% of customers think restaurants and coffee shops should let customers bring their own cups/containers.

At the same time, when asked what would help them to bring their own cup or container to restaurants or coffee shops, the most common answer was that a discount would help (84%), followed by all restaurants/coffee shops accepting their cup or container (70%), staff asking the customers if they have their own cup or container (59%), signs at the restaurants/coffee shops to remind them (54%), and businesses offering reusable for rent/buy (38%).

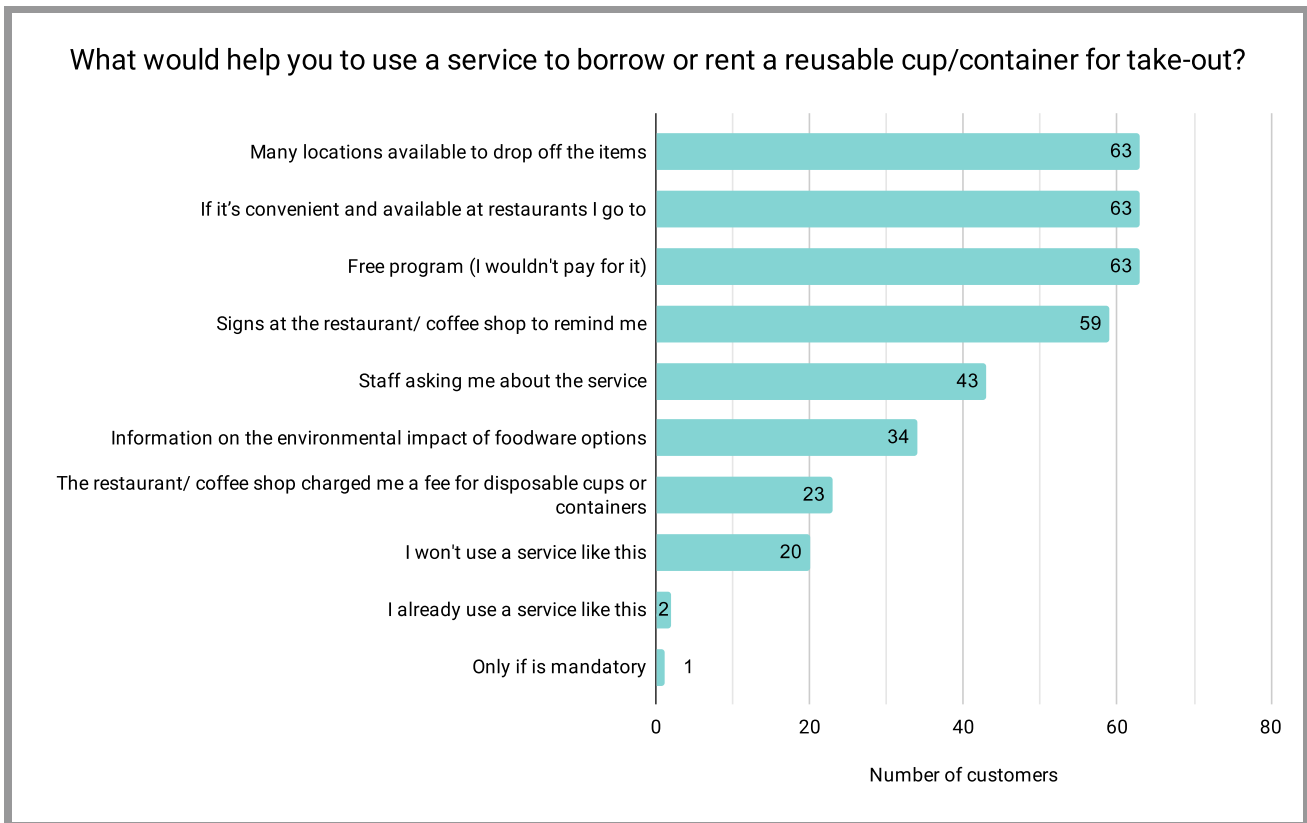


Figure 2: Types of help customers need to use a service to borrow or rent a reusable cup/container for takeout (n = 100).

Food Service Business

A total of ninety food service businesses were observed and categorized based on their business type and single-use items used. Fifty percent of the businesses, participated in an interview about their current practices and challenges to reducing single-use items, to shifting to reusable options, and to the [federal plastic ban](#).


The food service businesses in the WBIA included a mix of quick-service (fast-food) restaurants, fast casual restaurants with some on-site dining, coffee shops, and full-service bars and restaurants. These included both national chain (40%) and independent restaurants (60%). While serving food for takeout was the primary reason for using single-use foodware, it is important to note that a significant portion of businesses (42%) are quick-service businesses that use single-use items for dine-in as well. Fast casual restaurants are those that use a combination of single-use foodware for takeout and have some, or all, reusable foodware for dine-in, with wide variation among them. Full-service restaurants and bars are primarily dine-in with reusable foodware, with minimal single-use items (such as straws) used on-site or for takeout orders.

The businesses ranged from providing 100% takeout service (15 businesses), to 70 – 90% takeout (10 businesses), 40 – 60% (6 businesses), 10% – 30% (5 businesses) to less than 10% takeout (8 businesses). Takeout was the primary reason for the consumption of single-use foodware items, including taking leftovers home. However, it's important to note that a good portion of fast food and fast casual businesses use single-use foodware for dine-in.

Key Takeaways

4. Businesses are taking some steps to reduce waste and single-use foodware

When asked about their current practices to reduce waste, 90% of surveyed businesses reported they are taking some steps to reduce waste and single-use foodware. Actions range from not offering and/or reducing the amount of single-use foodware provided, to shifting away from plastic-based materials, and providing reusable alternatives to single-use. Thirty (60%) out of 45 businesses report that they ask customers first before giving out accessories (cutlery, condiments, etc), 18 businesses (40%) have changed foodware to a recyclable option, 18 businesses (40%) allowed customers to bring their own reusable item, four (9%) already offer a reusable takeout cup or container program and 12 (27%) provided compostable options (under the assumption that it is a more sustainable option). These results are similar to findings from our [study in 2021](#), where the majority of businesses were taking steps to reduce waste.



5. Most businesses expect the federal single-use plastic ban will have minimal impact on their business, however they will need guidance to transition towards sustainable, reusable options

We asked businesses about the forthcoming federal plastic ban on some types of single-use plastic foodware and how it might affect their business. The vast majority (84% – 38 businesses) expect the impact would be minimal as they use few single-use plastic items that will be banned. The rest (16% – 7 businesses) believe the ban will have a significant impact.


When asked what action they plan to take in response to the ban, most (62%) reported they will look for non-plastic options, 17% said they will look into reusable takeout options, and 17% said they will look into reusable dishes for dine-in.

6. Businesses want more information about reusable options, how to reduce waste and how to handle reusables

We asked businesses what support they needed to reduce single-use foodware and adopt reusable foodware (Figure 3). The most common answers were relevant to information to help them understand their options. For example, information about the costs and savings (56%), public health guidelines regarding reusables (53%) and tips on how to reduce waste (47%).

7. Businesses also want practical help and guidance to choose and purchase reusables, train staff and educate customers

Other frequently mentioned topics were related to more practical support to adopt reusables, such as funding and additional support to buy reusable foodware (51%), training for staff on waste and safe handling of reusable (49%), a list of suppliers with more sustainable options (42%), and signs to promote and educate customers about reducing waste (40%).



8. Businesses will benefit from increased literacy on single-use foodware among their customers

We asked businesses if they allow customers to bring their own foodware, and 58% of the businesses do, however 69% of businesses do not proactively encourage their customers to bring their own foodware for dine-in or takeout. This likely leads to less participation among customers (i.e. few people bring in refillable cups, or ask about reusable takeout foodware services).

Public education campaigns about the benefits of reducing single-use foodware can help businesses grow participation and become more comfortable encouraging customers to bring their own containers. Both customers and businesses identified that signs to inform and promote this option to customers would be beneficial.

Notably, to help encourage the choice of reusables over single-use foodware, information about the environmental impact of various foodware options was not a top priority for businesses (36%) or customers (34%). Factors such as cost, convenience and ease of use were noted as more important factors in their decision to choose reusable options. This suggests that the availability and scale of reusable systems need to be addressed.

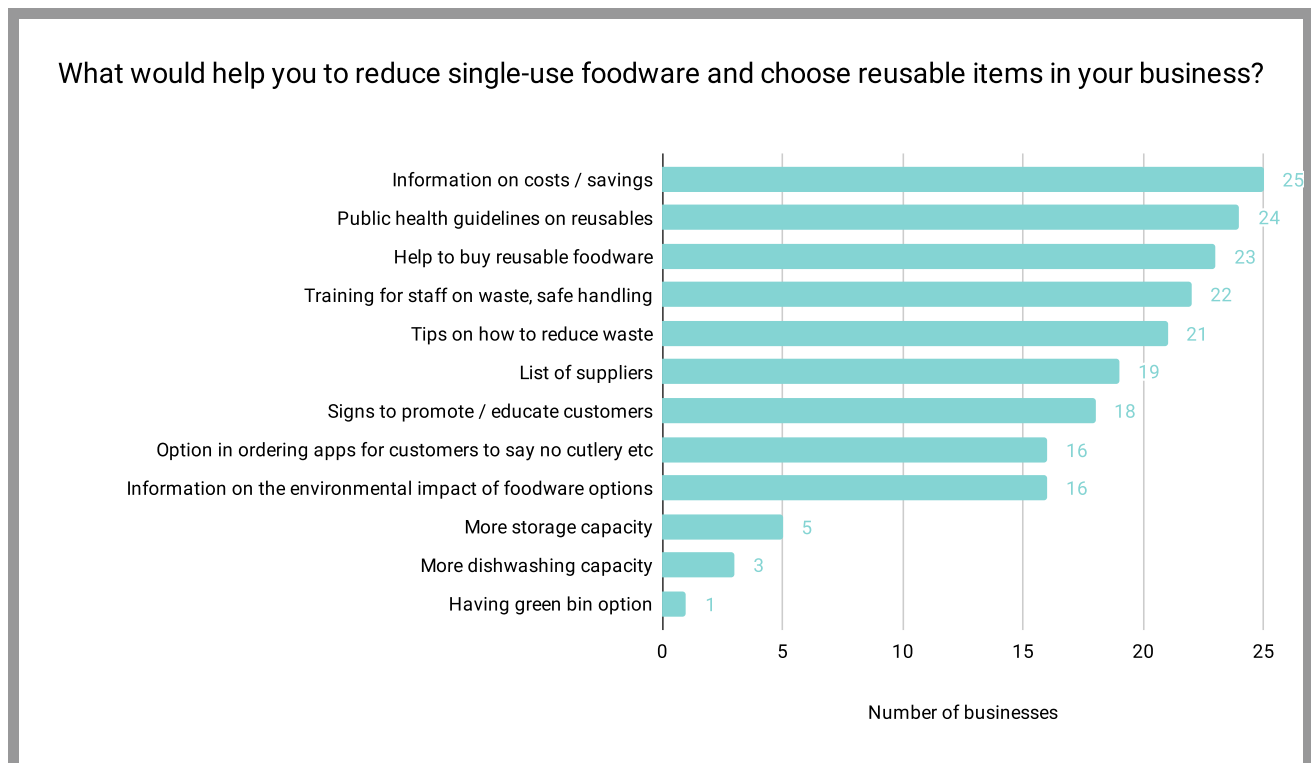


Figure 3: Types of help businesses need to reduce single-use foodware and choose reusable items (n = 45).

Discussion

The majority of businesses are already prepared for and taking actions to reduce waste and are interested in taking further action.

Notably, many of these reported actions are in congruence with forthcoming federal single-use plastic prohibitions and proposed municipal single-use regulations, for example, many have already sought out single-use plastic alternatives, allowed customers to bring their own cups and containers, and a number of businesses reported they offer accessories upon request / that they ask before giving out accessories (utensils, condiments, etc.) with takeout orders.

Most businesses expected the impact of the federal plastic ban to be minimal for them, as they use few single-use plastic items listed in the ban. However, switching from single-use plastic options to non-plastic single-use items was the action mostly reported by businesses that have taken or plan to take in response to the federal ban on plastics regulation. Unfortunately, efforts to reduce single-use plastic can have unintended consequences. Many non-plastic single-use items, marketed as ‘compostable’ or ‘bioplastics’ fail to meet biodegradation standards and need special facilities to allow them to degrade ([Haider et al., 2019](#)), they are not actually composted in most parts of Canada ([Environment and Climate Change Canada, 2020](#)), they can cost the business more than plastic ones ([U of T Trash Team, 2022](#)) and still generate the same amount of waste as regular single-use plastic.

This reflects a gap in the regulation, as the single-use plastic ban alone can incentivize substitution with other single-use items, each with its own environmental impacts, and therefore not result in a reduction of waste and resource use overall. Therefore, more guidance is needed to help businesses understand reusable alternatives and seize this opportunity to move away from single-use items.

Businesses were open to shifting to reusable foodware and customers support more actions to reduce single-use foodware for both dine-in and takeout, however there is currently a low level of experience with reusable takeout services, and adoption of these services is currently quite low. This suggests that there is a need for more guidance and information on reuse options, not only for businesses but for customers as well. In addition, opportunities to demonstrate and share reusable options with businesses will increase familiarity and may help adoption. Convenience with many food service businesses offering and accepting reusable takeout foodware was a top priority for customers to use this program. At the same time, help to purchase reusables was a top necessity for businesses to adopt more reusable foodware options. These suggest that supporting businesses to adopt reusable takeout services will improve access for customers and help scaling up reusable programs across the city.

Finally, most customers support policies that require businesses to reduce single-use foodware. This indicates that there is a support for policies to require more reusable programs in food service businesses.

Conclusions and Recommendations

In summary, local businesses in the WBIA want and are already taking some steps to reduce waste and single-use foodware – in particular, by adopting reusable foodware alternatives for dine-in and takeout. Businesses also expressed a need for and benefits from access to information and guidance on public health, and costs/savings on reusable foodware. Access to this type of information can help businesses more confidently choose and promote reusable options to their customers.

At the same time, customers feel that businesses should do more to reduce waste. Convenience, incentives, and information were the customers' priorities, both regarding bringing their own cups/containers and using reusable programs. Moreover, policies that require or incentivize the use of reusables on-site are widely supported by customers.

Our research suggests that nationwide and local policies and programs will be accepted and adopted by businesses and that customers support regulations and policies that reduce waste. Considering the forthcoming federal single-use plastic ban coming into force later this year, education and guidance on single-use plastic alternatives is a high priority to support businesses.

To encourage widespread adoption of reusables to reduce single-use, efforts should focus on supporting businesses to scale up reuse options by providing guidance and education campaigns, internal staff procedures and how best to promote them to customers. Giving support to businesses in scaling up reusable options will also ensure convenience and ease of use for customers.

Based on our findings, below are some recommendations for municipalities/governments to support local food service businesses to reduce single-use and takeaway items, especially as small businesses look to comply with the federal single-use plastic ban.

- **Provide promotion and education to the public and businesses on the problems with single-use foodware, especially single-use items marketed as ‘compostable’, to combat misguided substitution.**
- **Provide promotion and education on the benefits of reuse and the range of waste-free reusable options including reusables for dine-in, BYO, and reusable returnable foodware for take-out.**
- **Provide guidance and tools to help businesses incorporate prompts into the sales process to reduce waste (accessories on request) and to offer reusables (BYO, reusables on-site or take-out).**
- **Support the adoption of reusable, returnable takeout foodware through demonstration projects to build familiarity, funding, and targeted support to achieve the scale of availability needed to improve customer adoption.**

Acknowledgements

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References

City of Banff. "Single-Use Items Reduction Strategy." Banff, AB - Official Website. (2022). <https://banff.ca/1273/Single-Use-Items-Reduction-Strategy>

City of Edmonton. "Single-use Item Reduction." (2022, October). https://www.edmonton.ca/programs_services/garbage_waste/single-use-items

Environment and Climate Change Canada. Science assessment of plastic pollution. Canada, (2020), <https://www.canada.ca/en/environment-climate-change/services/evaluating-existing-substances/science-assessment-plastic-pollution.html#toc14>

Haider, T.P., Völker, C., Kramm, J., Landfester, K., Wurm, F.R. "Plastics of the future? The impact of biodegradable polymers on the environment and on society." Angew. Chem. Int. Ed Engl., 58 (1) (2019), pp. 50-62, [10.1002/anie.201805766](https://doi.org/10.1002/anie.201805766)

"Plastic and packaging laws in France." (2021, 30 June), CMS. <https://cms.law/en/int/expert-guides/plastics-and-packaging-laws/france>

Reuse Refill Canada. "Barriers and Opportunities for Driving Reuse in Canada" (2022, April) https://www.reuserefill.ca/s/rcc_driving-reuse-refill-canada-report.pdf

"Takeaway: Customers are now entitled to Reusable Packaging - economy." (2022, December 29). News in Germany. <https://newsin germany.com/takeaway-customers-are-now-entitled-to-reusable-packaging-economy/>