Single-Use Item
REDUCTION TOOLKIT

Introduction

Action on single-use item reduction is important to a wide range of stakeholders in Metro Vancouver, for environmental, health and sustainability reasons. Solutions to current challenges require collaboration and innovation from all sectors and initiatives are already underway across civil society, industry and the public sector. The purpose of this toolkit is to provide information and resources that support local governments implementing programs and policies to reduce single-use item use.

This document highlights leading single-use reduction initiatives and provides information on a range of policy options for local governments in Metro Vancouver to consider in the development of their own approaches. The toolkit focuses on priority single-use items identified by the Metro Vancouver Board including, bags, cups, takeout containers, straws and utensils. Additional resources including a jurisdictional scan and an annotated bibliography of leading research are available on our website. The information in this toolkit is to be used as a guiding document and can be modified to fit the requirements of each local government.

This toolkit is a living document and may be updated periodically.

The toolkit is not a legal document and should not be considered a substitute for governing legislation and regulation.

Single-Use Items Disposed

In 2018, 1.1 billion single-use items were diposed in the Metro Vancouver region[1]. Of that, a third were utensils, a quarter bags and a quarter cups. That is equivilent to 440 items per person per year. Approximately 57% of the items are plastic, 22% are plastic-lined paper the the remaining are paper or wood. While these figures are surprisingly high, single-use items are small and light so they only account for 2.4% of garbage in the region.

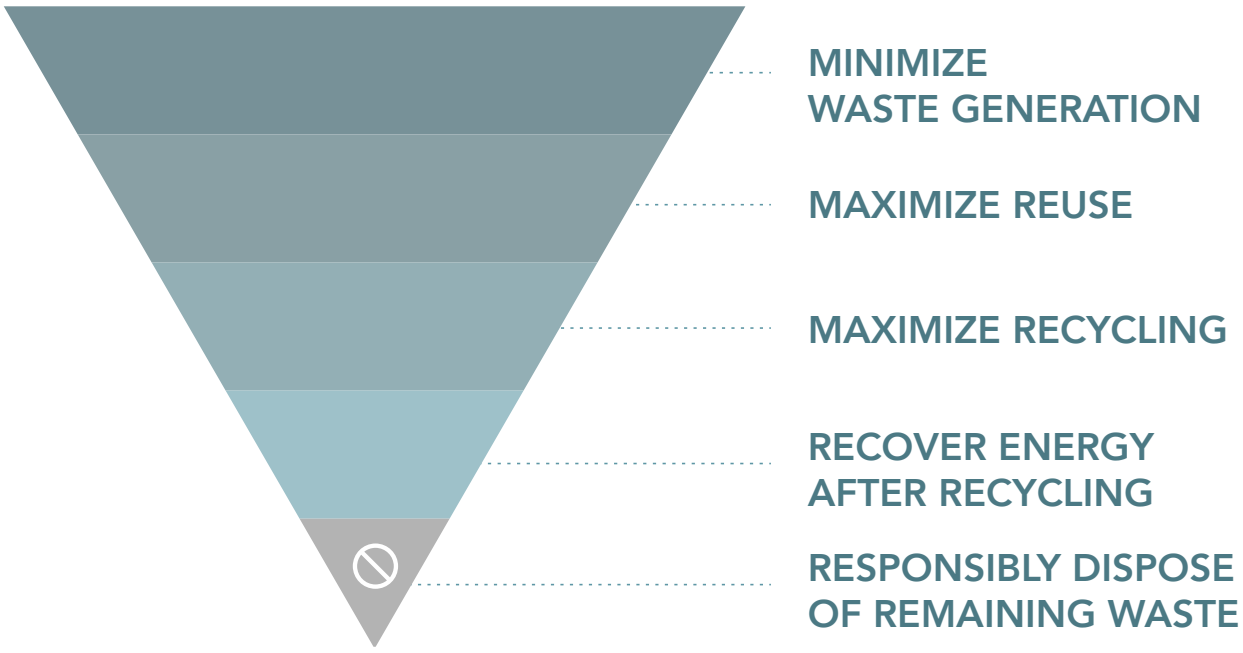
SINGLE-USE ITEM TYPE	ITEM DISPOSED (MILLIONS)	% BY WEIGHT OF OVERALL COMPOSITION
Retail Bags	256	0.9%
Disposable Cups	262	0.6%
Takeout Containers	179	0.7%
Straws	102	<0.1%
Utensils	331	0.1%
TOTAL	1.1 Billion	2.4%

1 2018 Single-Use Item Waste Composition Study

Why Single-Use Item Reduction?

- Single-use items cost taxpayers millions of dollars per year to collect from public waste bins and to clean up as litter in parks, streets and greenspaces;[3]
- Reducing single-use items helps protect oceans from marine litter. Food wrappers, plastic bags, plastic cup lids, straws and stirrers, and foam takeout containers are all listed as part of the top 10 collected items by the Oceans Conservancy organization;[4] and
- Single-use items take a significant amount of resources to produce and consume valuable space in our landfills, for items that are only used once.

This toolkit emphasizes reduction and reuse over recycling and disposal. This approach is most effective at preventing litter, protecting our oceans, reducing street collection costs and reducing resources needed to produce single-use items.



3 City of Vancouver Single-Use Item Reduction Consultation Paper
4 Ocean Conservancy Coastal Cleanup 2017 Report

Existing Regulatory Framework

Work on single-use item and plastics reduction is happening within all orders of government, from regulation and policy, to reduction programs in communities across the country. Coordination and cooperation is critical. Metro Vancouver is working with its member jurisdictions and partners in government and industry to advance common goals. Also, the National Zero Waste Council, an initiative of Metro Vancouver, includes a Plastics Advisory Panel. This panel plays an advisory role to regulatory approaches to plastics that are being advanced nationally.[5]

Current Initiatives

GOVERNMENT OF CANADA	PROVINCE OF BRITISH COLUMBIA	BC MUNICIPALITIES
• Plans to ban harmful single-use plastics by 2021	• Residential single-use packaing including bags, cups and takeout containers included in EPR under the Recycling Regulation • Clean BC Plastics Action Plan	• Several B.C. local governments have or are in the process of introducing policies to reduce problematic single-use items.

5 National Zero Waste Council Plastics Advisory Panel Regulatory Approaches for Priority Plastics Wastes

Recycling and Collection Systems for Single-Use Items:

The best option is always to choose reusable alternatives.[6] For single-use items that cannot be avoided, it's best to select items that are readily accepted in existing recycling infrastructure. Within each item category this toolkit provides an overview of which items are typically accepted within existing recycling and collection systems. This is often a confusing area for businesses to navigate. Many businesses find it frustrating if they invest in new products, only to learn there are currently no options for managing them apart from garbage.

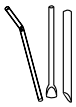
While it is sometimes difficult for local governments to recommend specific products to business, it is possible to provide some guidance and best practices:

- ✓ Durable reusable materials are preferable.
- ✓ Businesses that don't have dishwashing capability, can look into third party services providers of washed reusable food service ware.
- ✓ Businesses looking at new products should confirm they are accepted in typical office recycling programs; on-street recycling bins; and residential recycling programs as this is where items often end up.
- ✓ Check with your recycling and green bin service provider, make sure whatever items you select can be composted or recycled.
- ✓ Provide clear signage on your recycling bins to help customers sort their waste.
- ✓ Provide clear instructions on branded materials so customers know what to do with the items when they are done.
- ✓ Clear rigid PET, HDPE and PP are often high value recyclable materials. Whereas black plastics are often hard to recycle. Work with your supplier and local recyclers to make sure your food service ware is widely accepted for recycling.
- ✓ Support recycling markets by specifying recycled content.
- ✓ Fibre-based products are commonly accepted in green bins. However, some have plastic liners, synthetic waxes or intentionally added per- and poly- flouraolkyl substances (PFASs) which are not safe for composting. Work with your supplier and local composters to find products that don't have these problematic coatings.
- ✓ Wood utensils are commonly accepted in green bin programs.

6 Oregon DEQ Reusable Food Service Ware

Single-Use Item Policy and Regulatory Options

The toolkit focuses on providing information on retail bags, cups, takeout containers, straws and utensils. For each item, it explores by-request, mandatory fees, bans and requiring reusable food service ware.

BAGS	CUPS	TAKEOUT CONTAINERS	 STRAWS	UTENSILS
By-Request Only	By-Request Only	By-Request Only	By-Request Only	By-Request Only
Mandatory Fee	Mandatory Fee	Mandatory Fee	Mandatory Fee	Mandatory Fee
Ban	Ban	Ban	Ban	
	Require Reusable	Require Reusable		Require Reusable

By-Request Only (On-Demand Policies)

By-request bylaws prevent the unnecessary distribution of single-use items. Often food and beverage retailers automatically include straws, stirrers, utensils and condiments in drive-through, on-line, delivery, take-out and dine-in orders. Some customers may not need these items. Requiring them to be only handed out upon customer request reduces single-use items while keeping items available for those that need them. (See City of Portland in the jurisdiction scan.)

Mandatory Fee

Mandatory fees bylaws require businesses to charge for single-use items that they distribute to customers. Most bylaws state that the business keep the fees to avoid creating a tax. Several studies confirm that fees are more effective than discounts in motivating customers to change behavior. (See several examples of fees included as part of bag bans in jurisdiction scan.)

WHAT WE HEARD:

Businesses typically use the fees to offset costs of environmental programs, Extended Producer Responsibility fees and checkout implementation costs. Customers want to know what happens with the fees and appreciate when business are transparent as to how they spend the fees collected.

Ban on Sale or Use

Bans restrict businesses from distributing specific single-use items to customers. Bans typically result in high reduction. To reduce unintended consequences of alternatives materials such as paper bags if plastic bags are banned, many jurisdictions include additional restrictions on the sale and use of alternatives materials including:

- Mandatory fees retained by the business;
- Definition of reusable;
- Recycled content;
- Complete definitions that include plastics labeled biodegradable or compostable; and
- Exemptions to keep items available those that need them for health and safety.

(See jurisdiction scan for several examples of single-use plastics bans on bags and straws.)

Require Reusable

Requiring reusable policies are most commonly applied to dine-in restaurants. While some dine-in restaurants no longer have on-site dishwashing capabilities, the City of Berkley was able to pass a reusable food service ware bylaw for dinning on premises due to the emergence of off-site dishwashing service providers. (See City of Berkley in the jurisdiction scan.)

Enforcement

While voluntary compliance is common for these types of policies; businesses may need support to make sure they understand what they need to do in your community. Many jurisdictions focus on education and only use enforcement as a last resort for businesses that do not comply.

Common approaches to enforcement include:

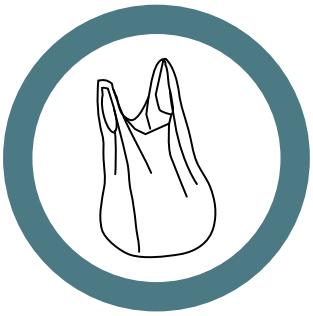
- Sending an education ambassador first to let businesses not in compliance know that there are new rules they must follow and to provide them with resources to comply.
- Official warning by bylaw officers followed by fines for businesses that do not change after being educated of new rules.

Education and enforcement is initiated in either a reactive or proactive way:

- Sending an education or enforcement officer to investigate when cities receive complaints from employees and customers that businesses are not following the new regulations.
- Proactive follow up where an education ambassador targets a manageable number of locations per week based on resource availability to actively confirm businesses are following the new regulations and provide resources to support those who are not yet incompliance. These follow ups can be on the phone, in-person or both.

Communication

All policy or regulation change should be partnered with a robust communications plan or campaign to ensure residents and businesses receive education about updated bylaws. Communications plans can include behavior change supporting collateral, web resources and advertising. There is an opportunity to consult local businesses when creating material to ensure they have the resources needed to educate their customers about the changes. There have been very successful education campaigns in jurisdictions where 'by-request' or bans have been implemented (See jurisdiction scan for examples.)



Bags

256 Million

Retail bags disposed in Metro Vancouver in 2018[7]

- **14 Million** Paper bags[7]
- **155 Million** Re-used plastic retail bags[7]
- **87 Million** Empty plastic retail bags[7]
- **600** Plastic bags labelled compostable[7]

Policy Options and Key Considerations

POLICY	KEY CONSIDERATIONS
BY-REQUEST ONLY: Only distribute if the customer asks.	• Encourages reduction of avoidable bags. • Increases awareness. • Saves businesses money through reduced purchasing. • Good first step in a phased approach. • Challenge to confirm non-compliance. • More common for items such as straws, utensils and condiment packages than bags.
MANDATORY FEE: Charge a minimum fee.	• Encourages reuse. • More effective than discounts.[8,9] • Material agnostic. Fees can be applied to plastic, paper and reusable bags. • Determine who keeps fees. Local governments cannot keep fees without it being considered a tax. • Consider affordability when setting fees. • Set harmonized fees by matching or collaborating with neighboring jurisdictions to reduce impact to business and residents.

DID YOU KNOW?

According to Ireland's litter monitoring study plastic bag litter in Ireland decreased from from 5% to 0.5% after the introduction of a $0.22 mandatory fee on plastic checkout bags.[10]

7 2018 Single-Use Item Waste Composition Study
8 Hubbub Impact Report - Disposable Cup Charge
9 Cardiff University Results of a Field Experiment To Reduce Coffee Cup Waste
10 Ireland 2018 National Litter Pollution Monitoring Study

POLICY	KEY CONSIDERATIONS
BAN: Ban on the distribution of plastic bags.	• Increases reuse. • Result in an overall decrease in plastic consumption despite increase purchase of trash bags.[12] • Include plastic bags labelled compostable or biodegradable. • Minimize environmental tradeoffs from increase in alternatives bags by requiring recycled content and setting minimum fees for alternatives such as paper and reusable bags. • Businesses need time to source alternatives and use up existing stock. • Customers may encounter challenges transporting leaky materials. • Clearly define which materials and which bags are included or excluded. Check out Retail Council of Canada summary of types of bags banned and exemption list summary here.

Government Leadership and Innovation

Several local jurisdictions in B.C. and across Canada have passed regulations to ban bags. Across Canada several jurisdictions including Montreal, Jasper and the Province of PEI have banned plastic bags. Connecticut introduced a statewide fee on bags, and provided clear jurisdiction to local government to implement stricter measures such as bans. Austin Texas monitored the impacts of their Bag Ordinance and found it reduce litter by 75-90%.[11] Click here for details.

Collection

Residents can recycle bags through RecycleBC's curbside program (paper bags) and depot program (plastic bags). Businesses must pay for private recycling pick-up. Plastic bag recycling is often an add-on recycling service. Plastic checkout bags labelled compostable or biodegradable are not readily accepted by composters that process materials from residential and business green bins in Metro Vancouver.

DID YOU KNOW?

Plastics bags labelled compostable or biodegrable:

- Are not accepted in many municipal green bin programs; and
- Do not break down in marine environments.

Business Leadership and Innovation

Several business have implemented fees for bags as a measure to reduce plastic retail bags. RecycleBC and the Retail Council of Canada created a guideline for businesses on how to reduce plastic bags.

WANT TO LEARN MORE?

A jurisdiction scan and an annotated bibliography are available on our single-use item reduction website.

11 Environmental Effects of the Single Use Bag Ordinance in Austin, Texas

12 The Effect of Disposable Carryout Bag Regulations on Unregulated Bags

Containers

179 Million

Cups disposed in Metro Vancouver in 2018[13]

- **71 Million** Rigid Plastic Takeout Containers[13]
- **62 Million** Plastic-Lined Paper Takeout Containers[13]
- **34 Million** Foam Takeout Containers[13]
- **12 Million** Unlined Paper Takeout Containers[13]

Policy Options and Key Considerations

POLICY	KEY CONSIDERATIONS
BY-REQUEST ONLY: Only distribute if the customer asks.	• Encourages reduction of avoidable containers. • Increases awareness of the need for container reduction. • Businesses save money through reduced purchasing. • Good first step in a phased approach. • Challenge to confirm non-compliance. • No readily available data on reduction impact.
MANDATORY FEE: Charge a minimum fee.	• More effective than discounts.[14,15] • Encourages reduction and reuse. • Material agnostic. Fees can be applied to all takeout containers. • Health authority requirements would need to be updated to allow customers to bring their own containers more easily (currently businesses must wash containers first) or business would need develop reusable container share programs to meet current requirements.[16] • Set harmonized fees by matching or collaborating with neighboring jurisdictions to reduce impact to business and residents.
FOAM CONTAINER BAN: Ban on the distribution of foam takeout containers.	• Eliminates use of foam containers which are challenging as they are only collected at depot. • Engage with stakeholders such as hospitals, churches, shelters and small business which commonly use foam containers. • Businesses need time to source alternatives and use up existing stock.
REQUIRE REUSABLES: Require restaurants to provide reusable food service ware for customers.	• Reduces cups disposed. • As phased-in approach starting with dine-in businesses would allow reusable options to develop. • Container-shares would allow the option to be used for to-go. • Some businesses lack dishwashing infrastructure.

13 2018 Single-Use Item Waste Composition Study
14 Hubbub Impact Report - Disposable Cup Charge
15 Cardiff University Results of a Field Experiment To Reduce Coffee Cup Waste
16 Public Health Act Food Premises Regulation

Government Leadership and Innovation

City of Vancouver and City of Richmond are looking to implement foam cup and container bans. City of Portland banned foam cups and containers in 2013. Click here for more details.

Collection

Single-use containers are made out of a number of materials. Rigid plastic containers are typically made out of PET (#1) or PP (#5) plastics and can be readily recycled in residential and commercial recycling programs. Residential foam cups can be recycled at RecycleBC depots; however, they are not readily readily recycled in the commercial and institutional sectors.

Plastic-lined paper containers are accepted in RecycleBC residential blue bins programs; however, they are not readily recyclable in the commercial sector. Some commercial service providers include them in paper recycling which can be problematic as the plastic liners gum up paper pulping machines. Other commercial programs include plastic-lined paper in container recycling which are then made into low grade fuels with other hard-to-recycle plastics and multi-layer products. Rigid plastic containers and plastic-lined paper containers labeled compostable are not readily accepted in green bin programs.

DID YOU KNOW?

Plastics containers labelled compostable or biodegrable:

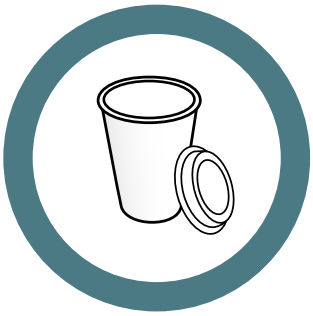
- Are not accepted in all municipal green bin programs; and
- Do not break down in marine environments.

WANT TO LEARN MORE?

A jurisdiction scan and an annotated bibliography are available on our single-use item reduction website.

Business Leadership and Innovation

Retailers are taking voluntary actions to reduce containers in advance of regulations. Some institutions have implemented container share programs. Businesses have started container-deposit return programs.



Cups

262 Million

Cups disposed in Metro Vancouver in 2018[17]

- **122 Million** Plastic-Lined Paper Hot Cups[17]
- **59 Million** Plastic-Lined Paper Cold Cups[17]
- **53 Million** Rigid Plastic Cups[17]
- **28 Million** Foam Cups[17]

Policy Options and Key Considerations

POLICY	KEY CONSIDERATIONS
BY-REQUEST ONLY: Only distribute if the customer asks.	• Encourages reduction of avoidable cups. • Increases awareness of the need for cup reduction. • Businesses save money through reduced purchasing. • Good first step in a phased approach. • Challenge to confirm non-compliance. • No readily available data on reduction impact.
MANDATORY FEE: Charge a minimum fee.	• Encourages reuse. • Material agnostic. Fees can be applied to all types of cups. • More effective than discounts.[18,19] • Determine who keeps fees. Local governments cannot keep fees without it being considered a tax. • Set harmonized fees by matching or collaborating with neighboring jurisdictions to reduce impact to business and residents.
FOAM BAN: Ban on the distribution of foam cups.	• Eliminates use of foam cups which are challenging as they are only collected at depot. • Engage with stakeholders such as hospitals, churches, shelters and small business which commonly use foam cups. • Businesses need time to source alternatives and use up existing stock.
REQUIRE REUSABLES: Require sit down restaurants and for-here options to provide reusable cups.	• Reduces cups disposed. • As phased-in approach starting with dine-in businesses would allow reusable options to develop. • Cup-shares would allow the option to be used for to-go. • Some businesses lack dishwashing infrastructure.

17 2018 Single-Use Item Waste Composition Study
18 Hubbub Impact Report - Disposable Cup Charge
19 Cardiff University Results of a Field Experiment To Reduce Coffee Cup Waste

Government Leadership and Innovation

City of Vancouver and City of Richmond are looking to implement foam cup and container bans. City of Portland banned foam cups and containers in 2013. Click here for more details.

Collection

Single-use cups are made out of a number of materials. The most common takeout cups are plastic-lined paper more commonly known as coffee cups. Paper cups for hot and cold beverages are accepted in RecycleBC residential blue bins programs; however, they are not readily recyclable in the commercial sector. Some commercial programs accept them in paper which can be problematic as the plastic liners gum up paper pulping machines. Some commercial programs include paper cups in containers, which is then made into low grade fuels with other hard-to-recycle plastics and multi-layer products. Residential foam cups can be recycled at RecycleBC depots; however, they are not readily recycled in the commercial and institutional sectors. Rigid plastic cups are typically made out of PET (#1) or PP (#5) plastics and can be readily recycled in residential and commercial recycling programs. Rigid plastic cups and plastic-lined paper cups labeled compostable are not readily accepted in green bin programs.

DID YOU KNOW?

Most paper coffee cups have a plastic liner and shouldn't go in the green bin.

Cups labeled biodegradable or certified compostable:

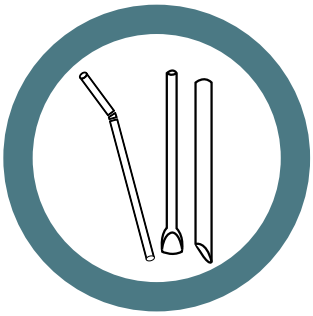
- Are not accepted in all municipal green bin programs; and
- Do not break down in marine environments.

WANT TO LEARN MORE?

A jurisdiction scan and an annotated bibliography are available on our single-use item reduction website.

Business Leadership and Innovation

Retailers are taking voluntary actions to reduce cups in advance of regulations. They are piloting and implementing a variety of tactics including: cup-share programs; skip-the line if you bring your own mug; fees for disposable; discounts if you get a for-here cup or bring your own mug. Some retailers even stopped providing disposable cups for a day to raise awareness.



Straws

102 Million

Straws disposed in Metro Vancouver in 2018[20]

102 Million Plastic Straws[20]

300 Thousand Paper Straws[20]

Policy Options and Key Considerations

POLICY	KEY CONSIDERATIONS
BY REQUEST ONLY: Only distribute if the customer asks.	• Encourages reduction of avoidable straws. • Increases awareness of the need for straw reduction. • Businesses save money through reduced purchasing. • Good first step in a phased approach. • Challenge to confirm non-compliance. • No readily available data on reduction impact.
MANDATORY FEE: Charge a minimum fee.	• Encourages reuse. • Material agnostic. Fees can be applied to plastic and paper straws. • More effective than discounts.[21,22] • Determine who keeps fees. Local governments cannot keep fees without it being considered a tax. • Set harmonized fees by matching or collaborating with neighboring jurisdictions to reduce impact to business and residents.
BAN: Ban on the distribution of plastic straws.	• Effective at reducing straws. • Include plastic straws labelled compostable or biodegradable. • Consider and engage with customers who rely on straws for accessibility. • Could impact on businesses selling frozen blended beverages or bubble tea. • Businesses need time to source alternatives and use up existing stock.

20 2018 Single-Use Item Waste Composition Study

21 Hubbub Impact Report - Disposable Cup Charge

22 Cardiff University Results of a Field Experiment To Reduce Coffee Cup Waste

Government Leadership and Innovation

Several BC communities have included straws in their single-use item reduction bylaws. As of October 1, 2019 the City of Portland requires that business only provide straws to customers if they request them. Click here for details.

Collection

Plastic straws are hard-to-recycle and are not included in residential recycling programs and are rarely included in paid commercial recycling programs. Plastic straws labelled compostable are not readily accepted in compost programs. Paper and edible straws (i.e. pasta-noodles type straws) are commonly accepted in green bin programs provided they don't have any adhesives, coatings or linings that impact the composting process.

DID YOU KNOW?

Plastics straws labelled compostable or biodegrable:

- Are not accepted in all municipal green bin programs; and
- Do not break down in marine environments.

Business Leadership and Innovation

Retailers are taking voluntary actions to reduce straws in advance of regulations. Some retailers have done away with straws completely. Others have switched to reusable straws or provide disposable straws only by-request. Many are now aware of the importance of stocking plastic bendy straws for accessibility.

WANT TO LEARN MORE?

A jurisdiction scan and an annotated bibliography are available on our single-use item reduction website.

Utensils

331 Million

Utensils disposed in Metro Vancouver in 2018[23]

217 Million Wood Utensils[23]

114 Million Plastic Utensils[23]

Policy Options and Key Considerations

POLICY	KEY CONSIDERATIONS
BY-REQUEST ONLY: Only distribute if the customer asks.	• Encourages reduction of avoidable utensils. • Increases awareness of the need for single-use utensil reduction. • Businesses save money through reduced purchasing. • Good first step in a phased approach. • Challenge to confirm non-compliance. • No readily available data on reduction impact.
MANDATORY FEE: Charge a minimum fee.	• Encourages reuse.[1] • Material agnostic. Fees can be applied to wood and plastic utensils. • More effective than discounts.[24,25] • Determine who keeps fees. Local governments cannot keep fees without it being considered a tax. • Set harmonized fees by matching or collaborating with neighboring jurisdictions to reduce impact to business and residents.
BAN: Ban on the distribution of plastic utensils.	• Effective at reducing utensils. • Include plastic utensils labelled compostable or biodegradable. • Business need time to source alternatives and use up existing stock.
REQUIRE REUSABLES: Require sit down restaurants and for-here options to provide reusable cutlery.	• Reduces utensils disposed. • As phased-in approach starting with dine-in businesses would allow reusable options to develop. • Some businesses lack dishwashing infrastructure.

23 2018 Single-Use Item Waste Composition Study
24 Hubbub Impact Report - Disposable Cup Charge
25 Cardiff University Results of a Field Experiment To Reduce Coffee Cup Waste

Government Leadership and Innovation

City of Vancouver included utensils in their Single-Use Item Reduction Strategy. City of Portland requires them to be by-request only - even restaurants that use third party apps to deliver meals to customers. Click here for details.

Collection

Plastic utensils are hard-to-recycle and are not included in residential recycling programs and are rarely included in paid commercial recycling programs. Plastic utensils labelled compostable are not readily accepted in compost programs. Wood utensils, including bamboo chopsticks, are commonly accepted in green bin programs provided they don't have any adhesives or coatings that impact the composting process.

Business Leadership and Innovation

Some food outlets are switching to reusable cutlery for-here and disposables by-request only. Mobile food delivery applications have piloted a required question in the order form to confirm if cutlery is needed by the customer.

DID YOU KNOW?

Plastics utensils labelled compostable or biodegrable:

- Are not accepted in all municipal green bin programs; and
- Do not break down in marine environments.

WANT TO LEARN MORE?

A jurisdiction scan and an annotated bibliography are available on our single-use item reduction website.

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