

Guidance for Selecting Alternatives to Single-use Plastics

as defined in the *Single-use Plastics Prohibition Regulations*



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Environment and Climate Change Canada
Public Inquiries Centre
12th Floor, Fontaine Building
200 Sacré-Coeur Boulevard
Gatineau QC K1A 0H3
Telephone: 819-938-3860
Toll Free: 1-800-668-6767 (in Canada only)
Email: enviroinfo@ec.gc.ca

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TABLE OF CONTENT

Purpose	4
Background	4
Audience	4
How to use this document	5
The Management Framework for Single-use Plastics	5
Applying the waste management hierarchy in decision-making	7
Preventing pollution by reducing plastics	7
Preventing pollution through reuse	8
Preventing pollution by facilitating value recovery of plastics	8
Considerations for alternative single-use plastics	9
External guidance on preferred plastic materials	9
Guidance specific to each single-use plastic subject to the Regulations	10
Single-use Plastic Checkout Bags	10
Single-use Plastic Cutlery	10
Single-use Plastic Foodservice Ware	11
Single-use Plastic Ring Carriers	11
Single-use Plastic Stir Sticks	12
Single-use Plastic Straws	12

PURPOSE

On June 22, 2022, the Government of Canada published the *Single-use Plastics Prohibition Regulations* (the “Regulations”), in the *Canada Gazette*, Part II, that prohibit the manufacture, import, sale and eventually export of six categories of single-use plastic (SUP) items. The categories of items are checkout bags, cutlery, foodservice ware made from or containing problematic plastics, ring carriers, stir sticks and straws. To help businesses and organizations transition away from these products, the Government of Canada has developed this guidance document outlining important considerations to take into account when selecting alternative products or systems that prevent plastic pollution and help Canada transition to a circular economy.

BACKGROUND

The Government of Canada is taking ambitious action to reduce plastic pollution through a comprehensive approach that addresses the entire lifecycle of plastics. This approach seeks to transition Canada away from a linear economy that disposes of plastic as waste, and towards a circular economy that keeps plastic in the economy and out of the environment through activities such as better product design and higher rates of reuse, repair, remanufacture, refurbishment, and recycling.

The Regulations are one part of this broader approach and are enacted using authorities provided by the *Canadian Environmental Protection Act, 1999*, which is an essential federal tool for preventing plastic pollution and supporting the move to a circular economy.

This document reflects comments received during the development of the Regulations and respond, to the need for businesses and organizations to have guidance on switching to available alternative products and systems.


AUDIENCE

The Government has developed this guidance for businesses and organizations that are providing single-use plastics identified in the Regulations to the Canadian market or to the public. This would include, among others, manufacturers, importers, distributors and retailers of single-use plastic items, as well as businesses, like grocery stores, pharmacies, hotels, restaurants and other organizations that provide single-use plastics to the public to eat, drink or carry their purchases.



HOW TO USE THIS DOCUMENT

This guidance document reflects best practices for choosing alternatives to the six categories of single-use plastic items identified in the Regulations. Following the principles outlined in this document will:



- Assist businesses and organizations in choosing alternatives that prevent pollution and reduce waste; and
- Help align businesses' decisions with industry best practices.

This guidance document may be updated from time to time to improve clarity and to address issues with the implementation of the Regulations as they arise.

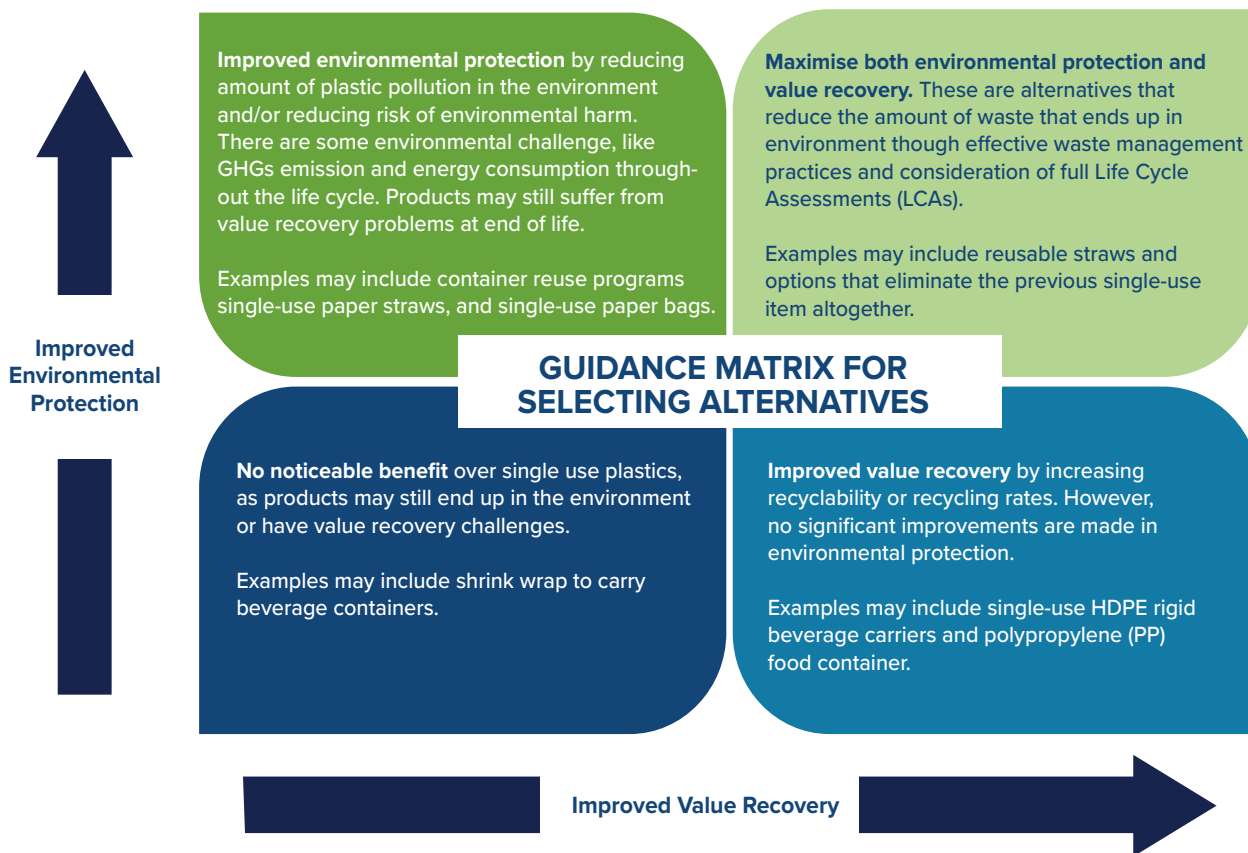
THE MANAGEMENT FRAMEWORK FOR SINGLE-USE PLASTICS

The Government has developed a Management Framework for Single-use Plastics as part of an [integrated management approach](#) to plastic products to prevent waste and pollution. The Framework outlines 3 steps the Government follows in evaluating the environmental impact of a single-use plastic in order to choose appropriate measures to manage those impacts. The first step involves categorizing single-use plastics that are environmentally problematic, value recovery problematic, or both, according to the following criteria:

Category	Criteria
Environmentally problematic	<ul style="list-style-type: none"> • Prevalent in natural and/or urban environments, according to citizen science, civil society or municipal litter audit data • Known or suspected to cause environmental harm (for example, ingestion by wildlife or entanglement risk to wildlife, etc.)
Value-recovery problematic	<ul style="list-style-type: none"> • Hampers recycling systems or wastewater treatment (nutrient or additive contamination, material or size/shape incompatible with recycling technology, etc.) • Low to very low recycling rate (lower than average recycling rate for packaging, from 0-22%) • Barriers to increasing their recycling rate exist

Applying the environmentally problematic and value recovery problematic criteria from the Management Framework, the Guidance Matrix (Figure 1) below can be used to help businesses and organisations situate potential alternatives to the six categories of SUPs in the Regulations:

Figure 1: Decision Matrix to Guide the Selection of Alternatives



The second step of the Management Framework is to set management objectives. The proposed environmental objectives of the Management framework for single-use plastics are to:

- eliminate or significantly reduce single-use plastics entering Canada’s environment
- reduce the environmental impact of plastic products overall
- conserve material resources by increasing the value recovery of plastics

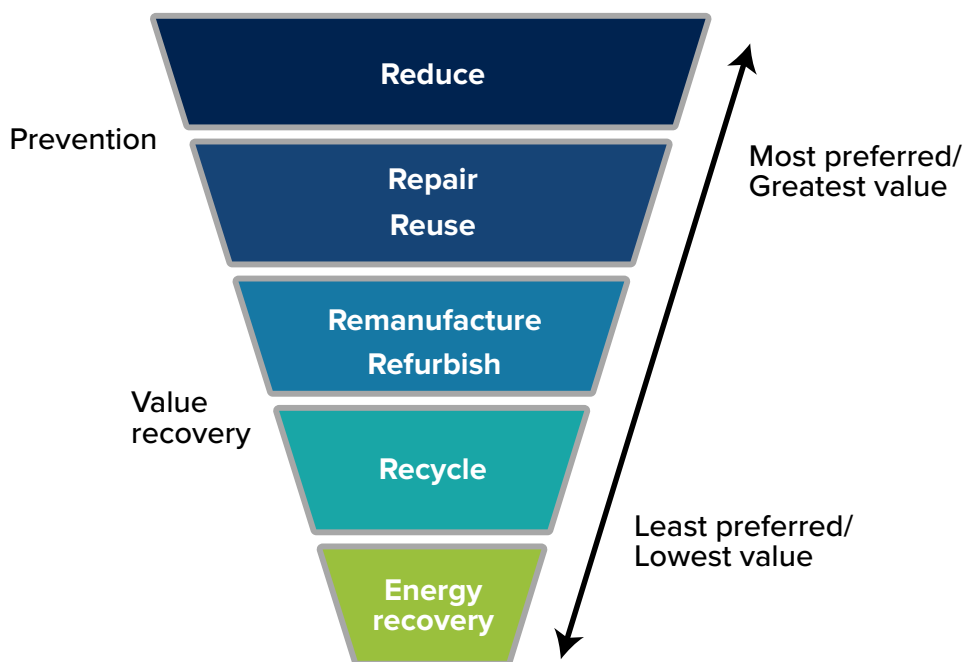
The third and final step of the Management Framework is to choose the appropriate instrument using an Instrument Choice Framework to guide the decision on the instrument that is best suited to achieve the management objectives identified in Step 2.

APPLYING THE WASTE MANAGEMENT HIERARCHY IN DECISION-MAKING

The waste management hierarchy illustrates methods to reduce plastic waste and pollution in order of preference. While recycling often gets a lot of attention, the hierarchy shows that reducing and reusing products are more effective in reducing plastic pollution. This hierarchy is endorsed by the Canadian Council of Ministers of the Environment in its 2018 Strategy on Zero-Plastic Waste (see Figure 2), and is a useful tool for ranking the potential outcome of a particular product or system that could replace single-use plastics. For example, a reusable alternative is preferable to a recyclable alternative, while reducing consumption of single use products is yet a better option.

It is recommended that businesses evaluate opportunities to eliminate unnecessary plastic products. Where a plastic product performs an essential function, businesses and organizations should investigate opportunities to choose or redesign products in a way that reduces the amount of plastic waste at their end of life.

Figure 2: Waste Management Hierarchy



Preventing pollution by reducing plastics

The best form of pollution prevention is through reduction, which means reducing reliance on products that create the waste that leads to pollution in the first place. Businesses may first wish to consider whether a single-use plastic needs to be replaced at all, or whether that product or service can be eliminated. For example, businesses can evaluate products for redundant or unnecessary packaging that can be eliminated without affecting quality.

Reducing plastics by replacing them with non-plastic equivalents may be an option for products with essential functions. In the case of single-use plastic cutlery, stir sticks and straws, options exist that are made from a range of non-plastic materials, such as wood, paper and moulded pulp fibre. When evaluating a replacement, it is important to consider available information on the impacts of the product throughout its lifecycle, including the end-of-life options for the chosen alternative. Businesses can check with local recyclers or composters to ensure that the item can be properly managed once it becomes waste.

Preventing pollution through reuse

Redesigning products and services to provide reusable options is one way to reduce the need for single-use products that will end up in the waste stream. Choosing reusable products and packaging means less waste and pollution. As noted in the Regulatory Impact Analysis Statement that accompanies the Regulations, lifecycle analysis studies indicate that reusable or refillable containers often have higher upstream environmental impacts when compared to single-use items, but when used multiple times, these effects are reduced significantly, resulting in a lower impact per item.

Refillable container programs are another reuse option that businesses can investigate. For example, Scout Environmental's publication, *How to Start and Run a Bulk-Reuse Refillery*, is available for download from their [website](#).

The United Nation's Environmental Program developed a [report on the life cycle environmental impacts of single-use plastic products](#) compared to their alternatives. After conducting a series of meta-analyses of LCA studies on single-use plastic products and their alternatives, the report found that the most sustainable products are those that are reusable. Therefore, businesses are encouraged to select alternatives that lead to keeping resources at their highest value, by replacing single-use plastic products with reusable products.

Preventing pollution by facilitating value recovery of plastics

Applying the waste management hierarchy, products and packaging whose only post-use option is value recovery are less favourable to those that can be reused. Remanufacturing and refurbishing are unlikely to be applicable for single-use products because they are not designed for durability; therefore, in most cases, value recovery for these items would be limited to recycling.

As an example, single-use plastic foodservice ware made from problematic plastics could be replaced by more recyclable alternatives, such as containers made from polyethylene terephthalate (PET) or polypropylene. As mentioned above, businesses and organisations are encouraged to consult local recycling and composting facilities to ensure that any replacement products can be properly managed at their end-of-life.

CONSIDERATIONS FOR ALTERNATIVE SINGLE-USE PLASTICS

Figure 3: Circular Economy for Plastics



External guidance on preferred plastic materials

Organizations from industry, government and elsewhere have developed guidance documents that provide useful tools for businesses to review when choosing alternatives and to assess the impact of the plastic in their products. The Canadian Council of Ministers of the Environment has committed to developing a reference compendium of existing guidelines for recyclability and recommendations for use by jurisdictions and industry. This compendium is scheduled to be released in 2022. Businesses are encouraged to consult this document when it is released to help inform their decision-making.

In order to help their members, some industry associations have also developed their own guides.

However, it is important to note that recycling capability can vary significantly by region, and communicating with local recycling facilities can help ensure products will be successfully processed when they reach their end-of-life. In addition to the environmental impacts of plastic, when it is disposed of in a landfill, or littered, it represents a lost resource in a circular economy (see Figure 3).

Restaurants Canada developed a “Single-use Items Reduction Strategy Guide” in order to help its members choose best practices regarding single-use plastics in their operations.

GUIDANCE SPECIFIC TO EACH SINGLE-USE PLASTIC SUBJECT TO THE REGULATIONS

Single-use plastic checkout bags

Alternatives to single-use plastic checkout bags have become commonplace in Canada. Some large retailers have eliminated single-use plastic bags prior to the Regulations coming into force. Reusable shopping bags and bins are commonly used by customers to carry purchased goods. A 2021 Statistics Canada survey found that 96% of Canadian households use their own bags or containers while grocery shopping. Of those that use their own bags or containers, 43% always did, 36% often did, and 16% sometimes did. Meanwhile, only 4% of Canadians did not own or use their bags or containers when grocery shopping¹. However, reusable bags and bins must be reused several times to maintain an advantage over single-use plastic bags².

Reusable shopping bags must meet the performance requirements in the Regulations. These requirements must be considered when selecting an alternative. [The Technical Guidelines](#) offer more details on the performance requirements for reusable checkout bags.

Some customers have raised concerns about the cleanliness of reusable bags. Advertising and consumer education about the importance of washing reusable bags, especially after being used for non-grocery purposes, is likely to help encourage their continued use.

Other alternatives for customers are the reusable bin, which is often made out of rigid plastic and may have fabric handles that facilitate its transportation, and the cardboard box, which is recyclable at its end-of-life.

Some companies left single-use bags behind prior to the Regulations coming into force. Costco stores do not provide bags of any sort, encouraging customers to reuse their boxes or bring their own bags.

In July 2019, Sobeys announced it would eliminate plastic checkout bags from all locations, removing 225 million plastic bags from circulation each year. Paper and various types of reusable bags are available to customers for a modest fee.

Single-use plastic cutlery

In 2021, McDonalds eliminated plastic stir sticks, straws and cutlery in more than 1,400 restaurants across Canada. These items were replaced by wooden alternatives. By eliminating these items, it is estimated that 840 tonnes of plastic are being removed from landfills annually.

Single-use plastic cutlery is primarily associated with takeout meals. However, when a customer consumes a takeout meal at their residence, single-use cutlery is not required, or often even desired, by the customer. Businesses should consider giving customers the option to specify whether they require single-use cutlery at all. Businesses could also consider providing more meal options that do not require the use of cutlery (e.g., wraps and sandwiches).

When dining in, business should consider offering customers reusable aluminium/stainless steel options versus non-plastic single-use cutlery.

When single-use cutlery is required, alternative materials are available (e.g. pressed and moulded fibre, bamboo, wood). Forests in Canada are managed according to sustainable forest management principles. If replacing single-use plastic cutlery with wooden ones, consider choosing products that are sourced locally, or look for a label that shows the product is third-party certified to an internationally recognized system for sustainable forest management. This will provide assurance that forest products have been sourced legally and sustainably.

1 Statistics Canada. [Table 38-10-0144-01 Single-use plastics](#)

2 UN Environment Programme. [SUPB.pdf \(unep.org\)](#)

New materials are starting to enter the market, like edible cutlery made of cereals (e.g. wheat, oats, corn or rice).

Charging customers a fee for single-use cutlery may also discourage their use.

Single-use plastic foodservice ware

Loop is a company that is testing a deposit and refund system for several grocery items. The products are delivered in durable, returnable packaging that can be collected, cleaned and reused.

In Quebec, the grocery chain Metro allows customers to bring their own re-sealable containers to package items from the deli, ready-to-eat, meat, fish and seafood and pastry counters.

Yum! Brands removed consumer-facing packaging made from extruded polystyrene foam (XPS) and expanded polystyrene (EPS) globally, across all its KFC, Pizza Hut and Taco Bell locations.

In the Regulations, foodservice ware is designed for serving or transporting food or beverage that is ready to be consumed; is shaped as clamshell containers, lidded containers, boxes, cups, plates, or bowls; and contains polystyrene foam, polyvinyl chloride, carbon black or oxo-degradable plastics. The [Technical Guidelines](#) offer further details and guidance on foodservice ware.

Encouraging customers to bring their own containers or developing a deposit and refund system for reusable containers are options that would reduce the amount of single-use plastic food packaging and foodservice ware. Reusable alternatives to single-use plastic foodservice ware include containers made of glass, stainless steel, silicone or rigid recyclable plastic. Another option is to engage with local recycling facilities to determine which plastics are recyclable, thereby reducing the amount sent to landfill. Some alternatives can be plant-based or fibre-based, and if certified compostable, could reduce the quantity of plastic sent to landfill. It is important to remember that in some areas, the company collecting products for recycling or composting, and the company responsible for the recycling or composting process are not the same. Businesses should therefore verify that their products are accepted by local recycling or organics collections programs, otherwise these items will end up being discarded.

Plastic alternatives that contain recycled content, totally or in part, may have some additional considerations, especially if used in contact with food. The use of recycled plastics, as with any other plastic material, in food packaging applications must comply with the safety provisions of the *Food and Drugs Act* and associated regulations. Health Canada requires that the recycled plastic resin, used to produce single-use plastic items that come in contact with food be “food grade”. Health Canada has developed [Guidelines for Determining the Acceptability and Use of Recycled Plastics in Food Packaging Applications](#) to assist business.

Single-use plastic ring carriers

Single-use plastic ring carriers are unique among the list of banned single-use plastic items because they are often applied to products before arriving at retail locations. Alternative products can already be found on the Canadian market, and include cardboard boxes, rigid plastic snap-on carriers or fiber-based carriers, or adhesives that hold beverage containers together. When choosing an alternative to single-use plastic, businesses should try to avoid value recovery problematic options, like plastic film, as these can be difficult to recycle.

In Canada, the E6PR (Eco Six Pack Ring) is made of a non-plastic natural fiber and is available to provide the same function as single-use plastic ring carriers.

Another alternative for the plastic ring carrier is the CanCollar®, a durable, paperboard-based multipack solution for cans.

Single-use plastic stir sticks

In some cases, the need for stir sticks can be eliminated by re-designing how beverages are served, for example, some drinks can be premixed and stirred before reaching the customer. When their use cannot be eliminated, several alternatives to single-use plastic stir sticks are already available and in use in the Canadian market. The principal reusable alternative is a metal spoon. A number of single-use alternatives made of natural materials, such as wood or sugar cane, are also available.

Single-use plastic straws

In many situations, eliminating all single-use straws is the simplest option. Most customers do not require a straw to consume a beverage while seated at a table. Furthermore, some companies have designed lids that make it easier to consume a beverage without a straw.

In 2019, Starbucks and Tim Hortons introduced “strawless” lids for cold drinks, allowing customers to consume cold drinks without a straw.

Other restaurants, like A&W, made the switch from plastic straws to paper straws in 2019.

Red Lobster is sourcing and testing a variety of plastic straw replacements, one of them being red licorice.

Reusable straws made from metal, glass and silicone are available for Canadians to purchase. For customers who want to continue to use a straw to consume a beverage, single-use non-plastic straws (e.g., made from paper) are a viable option.

The Regulations continue to allow Canadians to buy packages of multiple single-use plastic flexible straws in retail stores if they are kept out of public view and offered on request. The intent is to ensure that persons who require a single-use plastic flexible straw will continue to have access at home and can carry them to restaurants and other premises. Hospitals, long-term care facilities and other care institutions will also have continued access to single-use plastic flexible straws to provide to patients or residents who require them.

For more information, please visit Environment and Climate Change Canada’s [website](#).

Tim Horton’s has phased out plastic stir sticks in favour of wood-based stir sticks in their restaurants in Canada and the USA since 2019. This change is expected to eliminate 186 million plastic stir sticks annually.

Airlines are taking steps in using alternatives to single use plastics. Air Canada uses wood stir sticks on their planes, eliminating 35 million plastic stir sticks annually.

REFERENCES

1. Statistic Canada. Table 38-10-0144-01 : Single-use plastics https://www150.statcan.gc.ca/t1/tbl1/fr/tv.action?pid=3810014401&request_locale=fr
2. UN Environment Programme. Single-use plastic bags and their alternatives: Recommendations from Life Cycle Assessments (PDF) <https://www.canada.ca/en/environment-climate-change/services/managing-reducing-waste/reduce-plastic-waste/single-use-plastic-guidance.html>