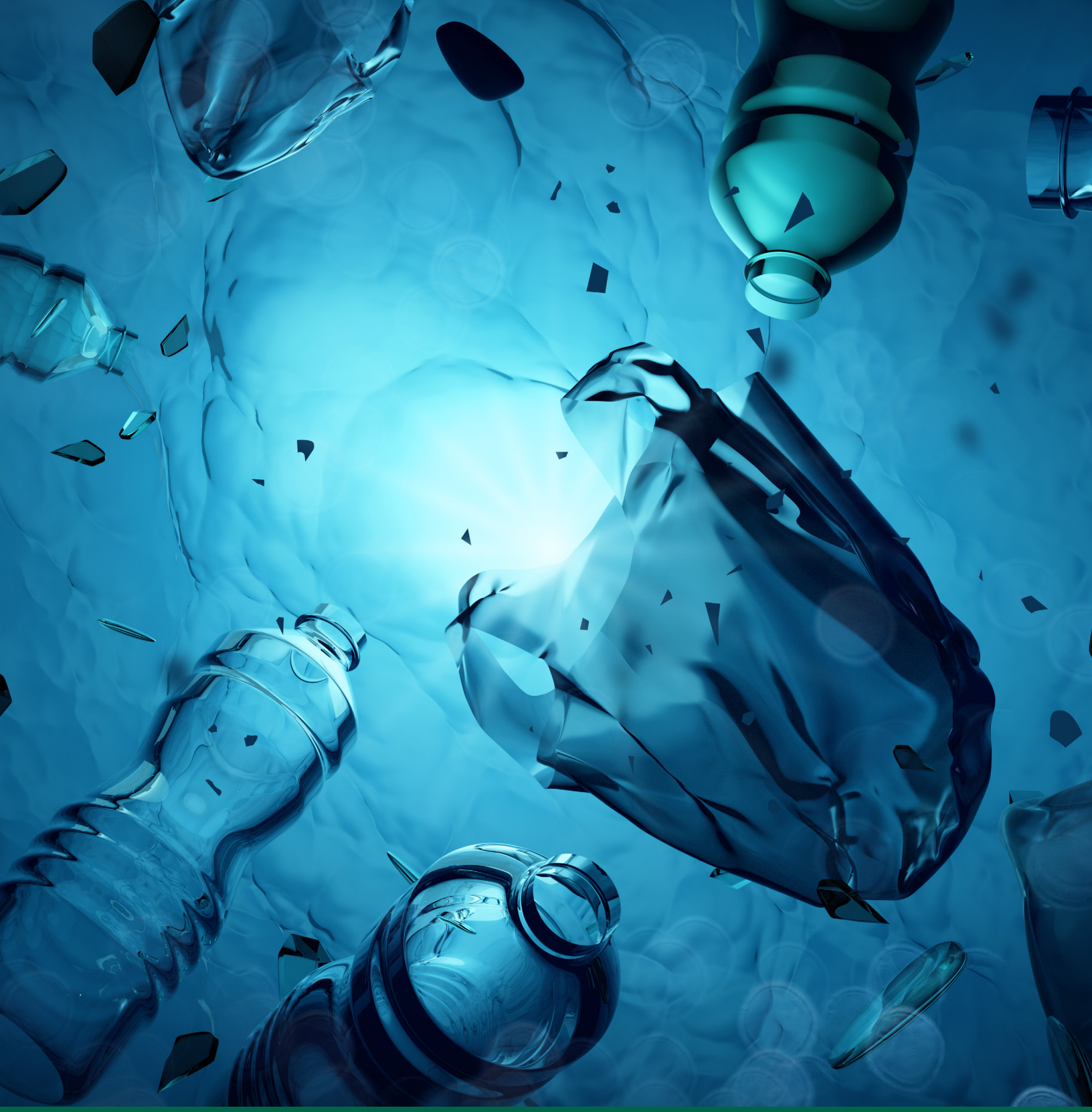
Adapting to Canada's Single-Use Plastics Ban: A Guide to Evaluating Alternative Packaging Solutions

Graphic Packaging INTERNATIONAL



Plastics are prevalent in many of the products we use every day. Over the last several decades, plastic production has increased faster than any other material, thanks to its lightweight durability and low cost. Unfortunately, Canadians throw away more than 3 million tonnes of plastic every year, with a recycling rate of less than 10 percent. Much of this plastic ends up outside the managed waste stream—polluting waterways, harming wildlife, and generating microplastics in our food and drinking water.

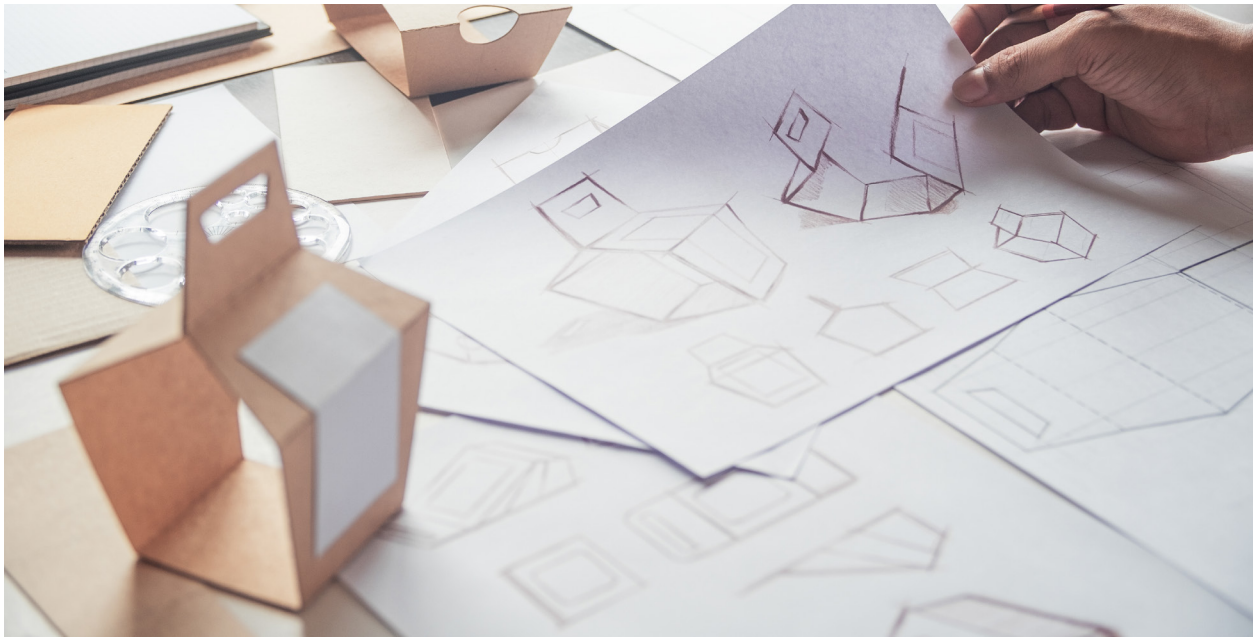
Driven by increasing concerns about the environmental impact of plastic pollution, the Government of Canada recently rolled out a comprehensive plan to ban single-use plastics. Finalized in June 2022, the **Single-use Plastics Prohibition Regulations (SUPPR)** targets six categories of problematic plastics, including foodservice containers and beverage ring carriers.

The regulations will ban the manufacture, import, sale, and eventually export of single-use plastics starting by December 2022. Over the next decade, this ban will eliminate an estimated 1.3 million tonnes of hard-to-recycle plastic waste and more than **22,000 tonnes of plastic pollution**—enough to fill one million garbage bags.

These new regulations force Canadian companies to reconsider their packaging solutions and pivot away from plastics toward more sustainable, easy-to-recycle alternatives. As a leader in fiber-based packaging innovation, Graphic Packaging International is working closely with Canadian food and beverage companies to facilitate a smooth transition to alternative materials without sacrificing functionality.

What to expect in this eBook:

- **Prohibiting single-use plastics**
- **Scope of regulations**
- **Evaluating replacements**
- **Alternative packaging solutions**
- **Adapting to the plastics ban**



Prohibiting single-use plastics

The Government of Canada initially proposed restrictions on certain single-use plastics in 2020 as part of its commitment to achieving **zero plastic waste by 2030**. To inform Canada's policy actions, the government commissioned a study to evaluate the environmental impact of plastic pollution. The resulting **Science Assessment of Plastic Pollution**, published in October 2020, pinpointed consumer packaging as the single most significant contributor of plastic waste—accounting for 33 percent of plastics introduced to the market and 47 percent of plastics discarded.

The study assessed various products based on their environmental impact, recycling rates, and availability of alternative materials. This analysis revealed six specific categories warranting a federal ban:

- Checkout bags
- Cutlery
- Foodservice ware
- Ring carriers
- Stir sticks
- Straws

The final regulations, published in June 2022, will start going into effect by the end of the year—banning the manufacture and import of these plastics by December 2022, the sale of foodservice plastics by December 2023, and plastic ring carriers by June 2024. By the end of 2025, exporting these items will also be prohibited, making a global impact in the fight against plastic pollution.

To help businesses transition away from these items, the government also published its **Guidance for Selecting Alternatives to the Single-use Plastics**, urging companies to adopt non-plastic equivalents like paper and molded pulp fiber.

Scope of regulations

Here's a closer look at two single-use plastics categories impacted by the ban.

Foodservice items
The regulations use three criteria to determine which foodservice items fall under the ban.

1. Form
Banned container shapes in this category include:

- Clamshell containers comprising two hinged halves
- Lidded containers with separate lids not joined by a hinge
- Boxes in direct contact with food or used to transport food in other containers
- Cups, plates, and bowls for hot or cold foods

Plastic cup lids, however, are not banned.

2. Use case
Banned foodservice items are those used for both of the following purposes:

- Serving or transporting food, regardless of whether it is consumed directly from the container
- Contains food that is ready to be consumed without refrigerating, freezing, cooking, microwaving, or otherwise preparing.

3. Plastic resins
Banned foodservice items contain any of these plastic resins:

- Expanded polystyrene (EPS) foam, commonly used for cold cups, plates, and bowls
- Extruded polystyrene (XPS) foam, commonly used for insulated cups, clamshells, and trays
- Polyvinyl chloride (PVC), commonly used for produce, bakery and salad clamshells
- Carbon black, commonly used for black plastic containers with transparent lids
- Any additives that decompose with oxidation or fragment into microplastics, commonly known as 'oxo-degradable' or 'oxo-biodegradable' plastics

These banned foodservice plastics represent approximately half of the current foodservice packaging volume in Canada — leaving half of the country's foodservice providers in need of a replacement.

Plastic ring carriers

Unlike foodservice containers, the ban on plastic ring carriers is based solely on the form factor of the rings, regardless of use case or resins. While these rings are typically used to hold multipacks of beverage containers, they are also common in other categories, including sauces, baby food, pet food, and cleaning products.

Ring carriers, for the purposes of the Regulations, are defined as:

- A plastic manufactured item, made entirely or in part from plastic, that is formed in the shape of a series of deformable rings or bands that are designed to surround beverage containers in order to carry them together

The regulations ban plastic rings, specifically flexible rings, typically made from low-density polyethylene.

Rigid plastic beverage holders are excluded from the definition of single-use plastic ring carriers, as they do not have deformable rings or bands surrounding the beverage container. Rigid plastic beverage holders typically attach to the top of the beverage containers by snapping on or with bendable teeth-like parts.

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Evaluating replacements

Given the tight timeline until these regulations start to take effect, businesses are already evaluating replacement packaging materials that can match or exceed the functionality of plastic.

Here are the main factors to consider when selecting substitutes for banned plastic packaging.

1. Comparative pricing

Cost is often a top concern when evaluating packaging options. Consider the costs of alternatives, including recycled plastics, paper, fiber, and aluminum packaging, but keep in mind that price is not the only deciding factor. Although paper packaging is generally more expensive than these banned plastics, it also offers additional value as an easily recyclable and renewable resource with unique merchandising benefits over plastic.

2. Technical specifications

One of the most important considerations is whether or not replacement packaging can meet the same technical specifications and performance expectations as plastic. In many cases, paper packaging can match and even exceed the utility of plastic when it comes to requirements like vibrant brand graphics, humidity resistance, wet strength, and easy-open convenience.

3. Operational efficiency

Adopting a new packing system can be challenging—from the capital expense of installing new equipment to the changeover of integrating new technology. Companies with manufacturing lines built around plastic may opt for recycled plastics, while more agile manufacturers can flex to embrace different materials, potentially unlocking new operational efficiencies in the process.

4. Availability of materials

The mass exodus from plastics will impact both the demand and supply of alternative materials. Food-grade post-consumer resins (PCR) already have limited availability in Canada. Given the challenges of recycling these materials, industry experts don't expect supplies to increase with demand. This could drive up the price of recycled plastics, posing a serious risk to companies that select these substitutes. Responsibly sourced renewable resources, like paperboard, offer a much more sustainable solution.

Alternative packaging solutions

Here are some examples of fiber-based packaging options already available in the market. These replacements match the durability and functionality of plastic while offering enhanced merchandising benefits that disrupt retail aisles and drive purchase intent. Plus, these materials are much easier to recycle since **96 percent of Canadians** have access to paper and cardboard recycling.

Alternatives to plastic rings

Replace plastic rings with paperboard cartons, wraps or clip-style fasteners that protect cans and bottles through the supply chain while offering unique merchandising benefits.

Fully enclosed multipack cartons deliver maximum coverage to protect canned and bottled beverages, food, or pet food through the supply chain. These cartons are recyclable made from renewable plant-based fiber and can be customized for various configurations, with the addition of features, shapes and finishes.

Read more about Estrella Damm Brewery's multi-award-winning fully enclosed multipack.

Clip-style cartons offer just the right amount of coverage to secure multipacks while maintaining product visibility.

Proprietary clipping systems like **KeelClip™** and **EnviroClip™** use less material than other multipack options to hold cans in place while allowing easy removal. Plus, paperboard's branding potential and printability enhance on-shelf appeal over plastic rings.

See how Liberty Coca-Cola Beverages eliminated plastic packaging with KeelClip™.

Alternatives to plastic clamshells

Eliminate plastic clamshells with sustainable containers made from paperboard.

- **ProducePack™ Punnets** are ideal for applications such as snacking tomatoes. Delivering enhanced on-shelf differentiation, the ProducePack™ Punnet offers equivalent shelf life to traditional trays and clamshells.

- **EconoPaxx™ cartons** are made with paperboard that uses 100 percent recycled fiber with polylaminate materials that provide maximum grease and moisture barrier. Since these containers can be used interchangeably for hot or cold foods, they decrease the number of packaging SKUs that need to be stored and stocked.

Alternatives to foam cups

Swap foam cups for alternatives made from coated paperboard.

- **Hold&Go™ PCF** insulated hot cups use Thermashield™ technology to keep beverages warm on-the-go. The double-wrapped design eliminates the need for an additional sleeve, reducing excess waste. Made from a minimum of 40 percent post-consumer recycled fiber (PCF), these cups serve as a sustainable alternative to foam. In addition, 25 - 60 percent fewer trucks are required to ship this product compared to foam cups, which reduces shipping costs and carbon emissions.

Alternatives to plastic lidded containers and boxes

Trade plastic lidded containers and boxes for lidded paper containers and boxes.

- **ecotainer™ food containers and lids** are part of a full line of single-use, commercially compostable* foodservice packaging.

Alternatives to foam plates and bowls

Trade foam plates and bowls for pressed fiber-based trays and bowls.

- **DesignerWare™ pressed trays** provide a more economical and sustainable replacement for foam or plastic. This line of paper-based trays features a range of functional enhancements over foam, including inside/outside printing capabilities and microwave-active materials that promote oven-quality crisping.

Alternatives to PVC plates and bowls

Replace PVC plates and bowls with innovative paperboard alternatives that offer flexibility across product categories.

- **IntegraFlex™** packaging combines the best features of folding cartons and flexible packages in a more efficient, cost-effective solution. From collapsible cups to versatile pouches, these paper-based packages offer eat-from-the-container convenience and microwavable features for both wet and dry products.

Over the coming months and years, the rollout of Canada's nationwide plastics ban will transform the way many food and beverage companies package their products and deliver their goods. However, for many manufacturers across all industries around the world, sustainability is more than just a compliance issue.

*Compostable in most commercial composting facilities – please check with your local municipality for acceptance or visit **findacomposter.com** to find a composting facility in North America.

Adapting to the plastics ban

Regulators aren't the only ones concerned about plastic pollution's environmental impact. The consumers who buy and use these products are just as committed to protecting the planet by prioritizing sustainability when they shop. Adopting paper-based packaging solutions will position companies to meet these shifting consumer expectations while complying with Canada's tightening regulations.

Comparing all these packaging options can be overwhelming without an expert guide to help you design the best solution for your budget, brand, operations, and product needs. Graphic Packaging collaborates with companies to launch game-changing plastic-free innovations that stand out on the shelf—reducing the environmental impact of your product while also increasing sales.

Contact Graphic Packaging to kick off your transition from plastic to paper.

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