



# Solutions to Reduce Packaging for Canadian Food Retailers.



Summary of the study



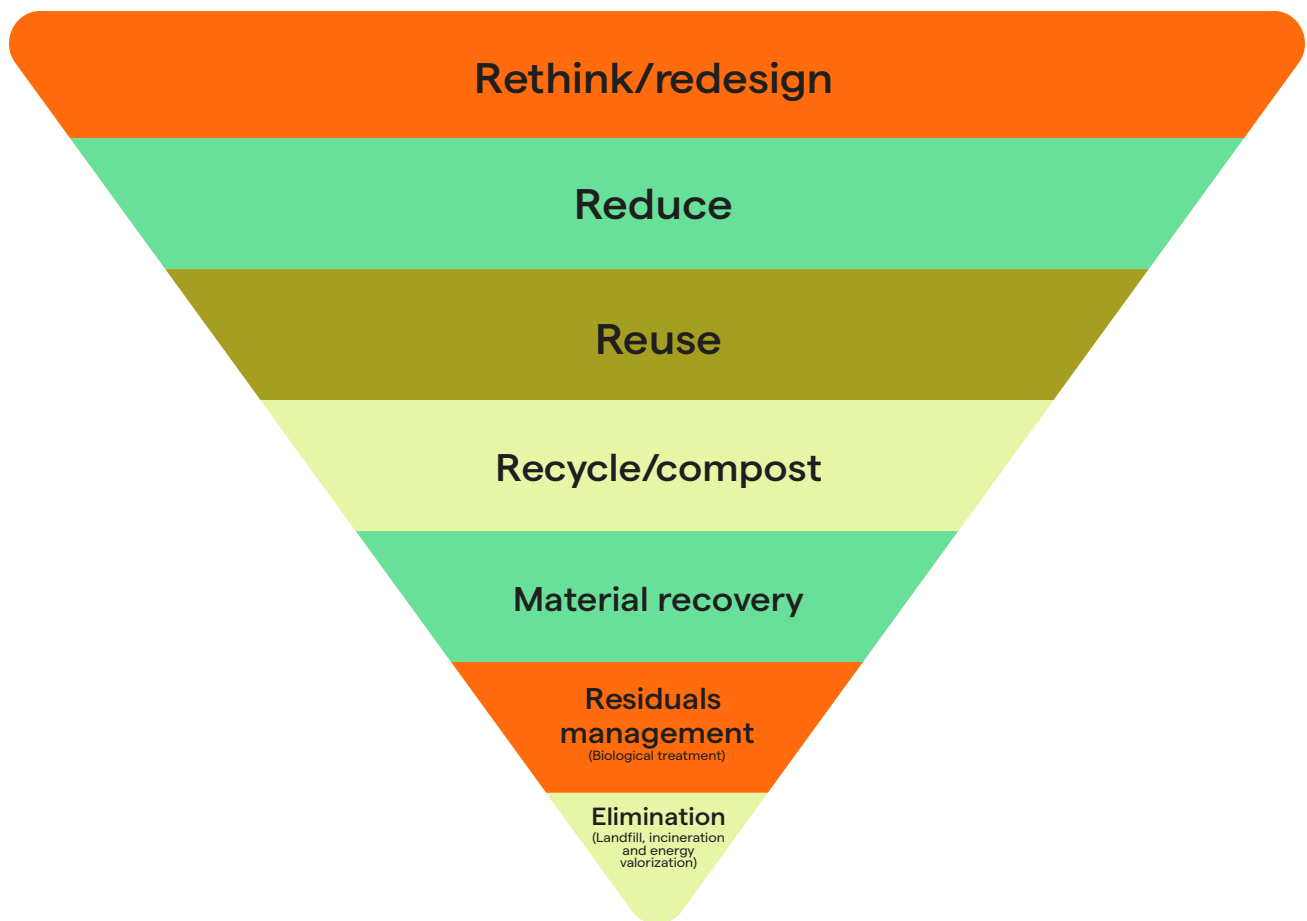
Équiterre

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# Context

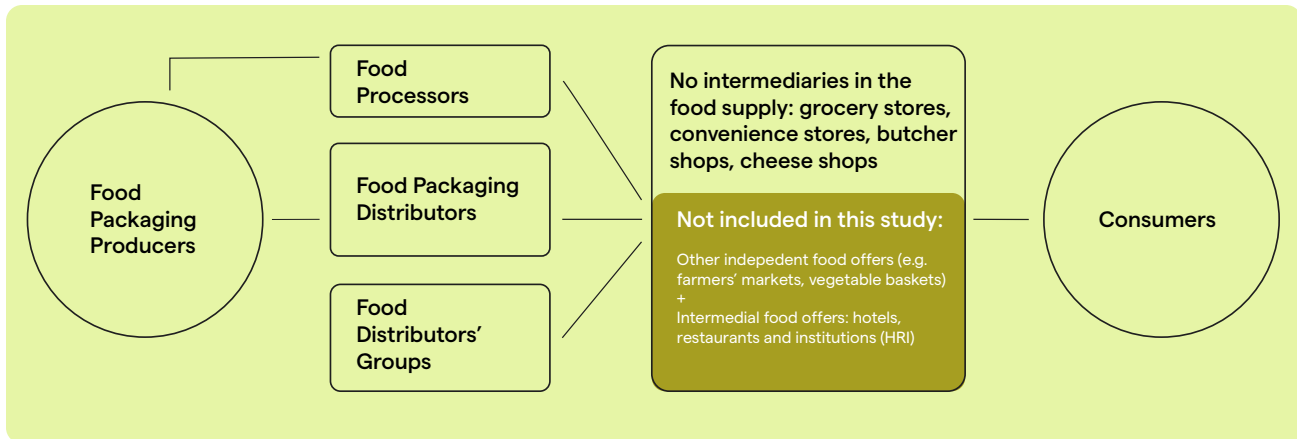
Purpose of the study: to identify and understand the challenges and opportunities faced by Canadian food retailers in moving towards a zero waste (ZW) product offering in order to meet new consumer expectations in terms of environmentally responsible consumption.

## ZERO WASTE HIERARCHY



Source: Adapted from the Zero Waste International Alliance, 2018

## FRAMEWORK FOR THE STUDY



## RESEARCH METHODS USED:

- A review of the literature to identify the obstacles and incentives for reducing the amount of food packaging used throughout the food production and distribution chain;
- An analysis of measures promoting ZW around the world;
- An analysis of provincial, federal and international legislation;
- Interviews (16) with stakeholders in the food packaging value chain;
- Food retailer focus groups (3);
- A pan-Canadian survey of 2,002 consumers.

## WHAT IS A ZERO WASTE FOOD SUPPLY?

The purpose of a zero waste supply is to eliminate as much of the packaging associated with a product as possible. Retailers can offer a zero waste supply that includes:

- Products that require no containers or packaging (e.g. fruits and vegetables).
- Bulk products, which are dispensed into personal reusable containers or returnable and reusable standard size containers provided by the store. Containers can be filled by the customers themselves or by staff, such as those available at refill stations and food counters (e.g., salad bars, cheese shops, butcher shops, etc.).
- Pre-filled products, sold directly in returnable and reusable containers. These types of containers are recovered after the food has been consumed, then sterilized and refilled. In this scenario, food items are marketed in various container formats: multi-fill containers, such as certain standard-size brown beer bottles, private-deposit containers (such as those used for milk and yogurt), and bulk delivery from grocery stores, etc.



# What can be considered as overpackaging?

Packaging that exceeds what's required to protect the product from potential damages or that is added for esthetic reasons. Overpackaging can also occur when products are excessively subdivided (e.g. mini yogurt tubs, mini packs of cookies).

## POSITIVE IMPACTS OF REUSABLE PACKAGING

All too often, overpackaging takes precedence over the packaging needed to preserve the product. One European study that examined the results of 32 life-cycle analysis<sup>1</sup> concluded that **72% of them favor reusable packaging** over single-use options. **The bulk option is also preferred over packaged products.** (Reloop and Zero Waste Europe, 2020) However, many of these analyses did not quantify the amount of food waste, even though it would have provided some interesting nuances in the study.

In fact, packaging can be both:

→ A lever for reducing waste, thanks to its protective function;

→ A cause of food waste when predetermined quantities of fresh produce exceed needs, driving overconsumption (e.g. a pack of six peppers, some of which will be wasted by the person who bought it).

Similarly, buying in bulk can also be a lever to reduce food waste for both consumers and retailers, as it allows the purchase of the exact amount of a product or food item needed.

Both packaging and food waste impact the environment. On the one hand, the loss of certain sensitive foods generates more greenhouse gasses; on the other hand, poor management of used packaging produces litter, including marine pollution, which heavily impacts biodiversity loss and human health.

1. Methodology used to quantify potential environmental impacts during the entirety of a product's life cycle, that is, from resource extraction to product delivery to the client (cradle to gate) or to end of life (cradle to grave) (World Standards Organization, 2006).

## Types of packaging used in the production and distribution chain

There are three main types of supply chain packaging:

- The primary packaging is in direct contact with the product or food and is taken home by the consumer (e.g. cardboard box containing pasta).
- Secondary packaging is composed of several primary packaging materials within a single sales unit. It can consist of cardboard, dividers, plastic film, etc. (e.g. plastic package containing several pasta boxes).
- Tertiary packaging is used for handling secondary packages. This packaging makes it possible to group together a large quantity of products to facilitate their handling, storage and shipping (e.g. pallet containing a number of cases of pasta boxes). (Mes courses pour la planète & ADEME, 2012)



## FINDINGS

- There is an almost complete lack of information on secondary and tertiary packaging.
- The data on primary packaging is limited, but was analyzed in greater detail as part of the study.



# Consumer Habits

Supermarkets are the most frequented food stores - 78% visit them at least once a week - and local stores come in second place (35%).

*41% OF THOSE SURVEYED CLAIM TO MAKE SOME PURCHASES IN BULK.*

Most make these purchases in their **traditional grocery store** which offers products in bulk, and just under a half go to stores specialized in bulk.

Certain food items are more popular than others among those who opt to buy in bulk, as can be seen from the table below:

Product Category	Percentage of shoppers who always or often buy these products in bulk
Fruits and vegetables	54%
Dry goods (e.g. pasta, beans, nuts)	36%
Fresh products (e.g. meat, fish)	35%
Cheeses, juices and drinks	29%

The considerations motivating those who buy in bulk are primarily financial and environmental in nature while the two main barriers to bulk buying are related to hygiene and the lack of nearby options.

The intention to change is also quite high among the public, with over 50% of those

surveyed indicating that they are willing to adopt at least one zero-waste practice.

Making a portion of their grocery purchases in bulk at their traditional grocery store is the option that Canadians are most willing to adopt, while using refundable containers is the least popular.

# Obstacles and levers

## STAKEHOLDERS IN THE FOOD PACKAGING INDUSTRY

### − OBSTACLES

- Perception that consumers are not ready to change their habits
- Doubt of the people interviewed about the positive environmental impacts of the zero waste offer
- Doubt about the feasibility of ZW and potential problems in implementing it in grocery stores
- Limited industry interest in and capacity for change
- Negative sanitary perceptions regarding ZW
- Complexity of enforcing regulations, which differ from province to province and/or municipality to municipality. It should be noted that the legislative levers are seen as both a barrier and a lever, depending on the people interviewed.

### + LEVERS

- Government intervention to establish ZW standards and prohibit the excessive use of packaging
- Financial and technical support for implementing ZW systems
- Involvement in the supply chain to help standardize containers and manage their reuse
- Documentation and dissemination of ZW best practices to raise industry awareness of positive impacts
- Economic benefits linked to ZW offering: positive image helping to build customer loyalty, reduction and reuse of packaging to reduce supply costs.



**FOOD RETAILERS****– OBSTACLES**

- Complex internal management and logistics involved in implementing a ZW offering, especially when it comes to supply chains
- Questions regarding the profitability of the ZW offer, because of the costs associated with changing practices and mobilizing the resources needed to implement it
- Perception that consumer expectations (perfect food, fresh produce, variety, etc.) do not match the current ZW offering
- Complexity of enforcing regulations, which vary from one province and/or municipality to another
- Resistance to changing practices
- Decreased ZW practices seen since the start of the COVID-19 pandemic and negative perceptions of hygiene conditions.

**+ LEVERS**

- Government intervention for financial and technical support to setting up ZW systems
- Positive perception of the ZW offering on the part of the consumer and potential for customer loyalty
- Retailers' environmentally responsible commitment, which has an impact on implementation of a ZW offering
- Local sourcing to reduce the amount of packaging needed to transport food.





# Inspiring legislation and public policies

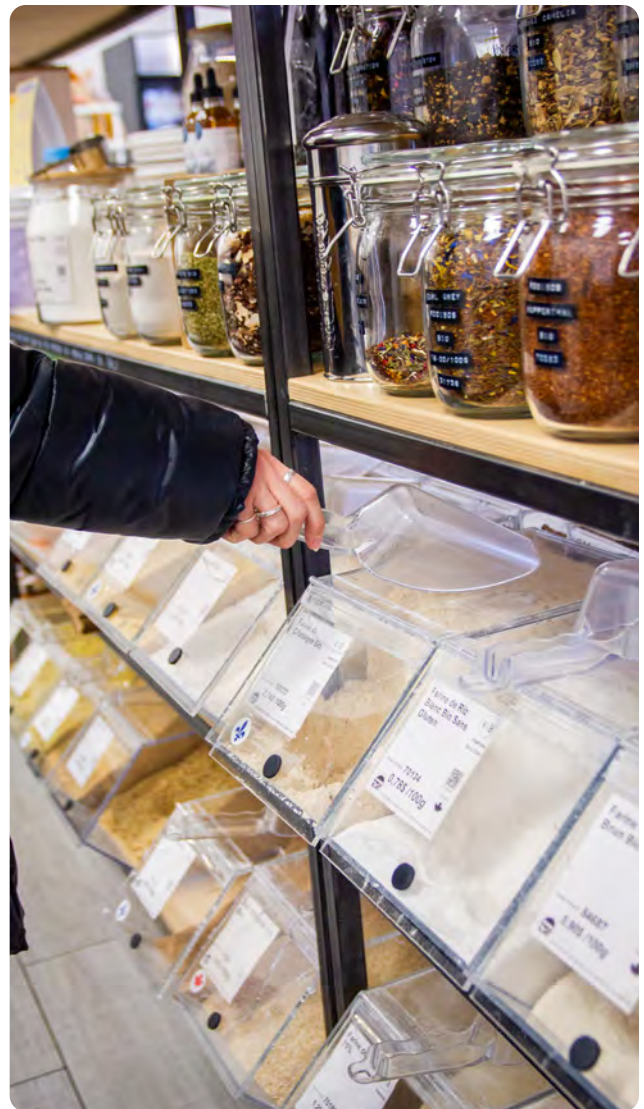
In November 2018, Canada committed to implementing a Zero Plastic Waste Strategy. It is in this context that the Single-use Plastics Prohibition Regulations was passed in 2022. While they send out a strong message against plastic pollution, such bans do not directly impact what is in the grocery basket, since they target items that are more likely to be found in the restaurant sector.

Neither Canada's roadmap for strengthening the management of single-use and disposable plastic products, which was adopted in September 2022, nor the Management Framework for Single-Use Plastics contain any specific targets for reuse or binding measures to accelerate this transition.

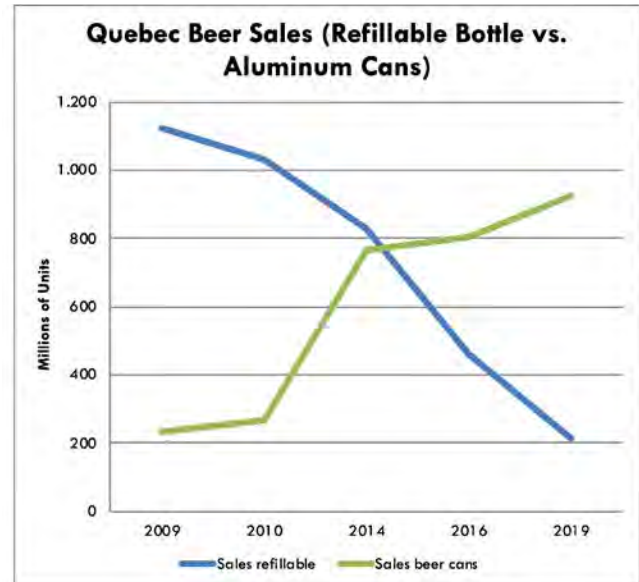
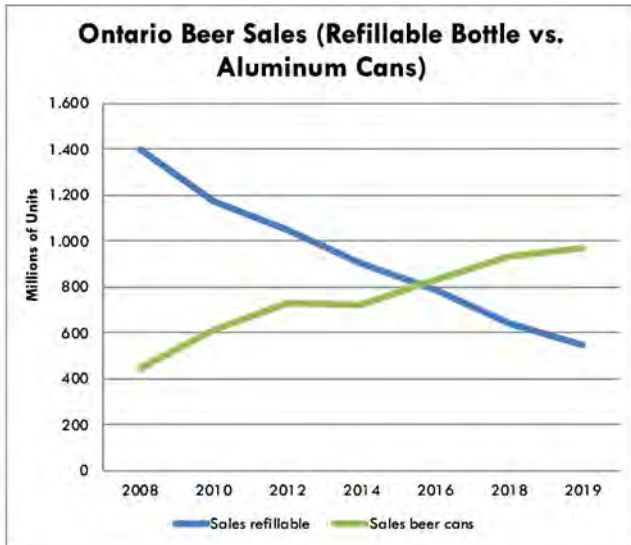
Binding regulations to support the transition to zero waste are beginning to emerge more at the municipal level. For example, the municipality of Prévost in Quebec passed a regulation in 2020 that includes the collection of single-use fees, as well as the requirement to provide certain products in bulk. The funds collected can be used by businesses to implement source reduction measures and reusable alternatives.

It is also worth noting that provinces have the authority to regulate single-use items, including beverage containers. For example, the deposit-refund systems for multiple-use containers, such as those in place for beer bottles in Quebec and Ontario, represent one zero waste option. However, deposit-refund systems are not specifically designed to

support the supply of multiple-use containers, as evidenced by the lack of provincial reuse targets and the significant reduction in the volume of containers marketed over the past few decades.



## TRENDS IN THE VOLUME OF BEER SOLD IN REFILLABLE SINGLE-USE CONTAINERS IN ONTARIO AND QUEBEC



Source: CM Consulting, 2020

### MEASURES AROUND THE WORLD

In France, there are a number of measures in the *Loi anti-gaspillage pour une économie circulaire* [anti-waste law for a circular economy] (AGEC) supporting the rollout of a zero waste offering. The implementation timeline runs from 2021 to 2026 and includes:

- The goal of a packaging reuse rate of 5% by 2023, and 10% by 2027
- A requirement that businesses allow consumers to reuse their own containers
- A requirement that fruits and vegetables be sold unpackaged<sup>2</sup>
- The implementation of a private deposit-refund system (free or paid) for larger businesses

- Lower fees for consumers who bring their own containers. (Ministère de la Transition écologique et de la Cohésion des territoires and Ministère de la Transition énergétique, 2022)

In addition, the *Loi climat et résilience* [climate and resilience law] requires food retailers occupying more than 400 m<sup>2</sup> of space to dedicate 20% of their store to bulk selling by 2030 (Ministère de l'économie, des finances et de la souveraineté industrielle et numérique, 2022).

In the Navarra region of Spain, 80% of beer, 70% of soft drinks and 40% of water must be marketed in reusable containers by 2028 (Upstream, 2022).

2. Certain exceptions may be allowed by decree.

# Recommendations

## LEGEND



Governments



Major retail chains



Industry



Retailers



Public

### Amend the legislative framework to include binding targets



- Make bulk supply mandatory for certain products
- Set reuse targets for containers and packaging

### Provide the industry with logistical and financial support



- Encourage development of the reuse and bulk-supply chains
- Clarify regulatory food-safety requirements for ZW practices and bulk products
- Standardize tax regulations with respect to returnable packaging
- Support the adaptation of industry operations to ZW production and distribution patterns



### Accelerate the supply of zero waste foods



- Allow customers to use their own containers when purchasing fresh and bulk products
- Adjust pricing policies to foster ZW
- Implement a ZW offering, based on prioritized product categories



- Use brands as a lever for the deployment of a ZW offer
- Encourage the use of short supply channels by retailers in order to reduce the volume of secondary and tertiary packaging



- Implement reverse logistics systems that contribute to the establishment of supply chains

### Raise awareness of zero waste among stakeholders



- Publicize and document promising initiatives



- Make unpackaged foods attractive



- Continue to consume ZW or begin the transition to buying in bulk

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## CREDITS

Some of the pictures used in this document were taken at Vrac & Bocaux.

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