



# Facts About Recycling and Reuse That Might Surprise You

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## Sound Bites

### About Earthware

- Earthware is a return-for-refund and reuse takeout container program
- Earthware has saved over 15,000 containers from the landfill and will be exponentially growing that number monthly with the new return-for-refund takeout container program in 2023.
- The containers are sturdy, leak-proof and do not react to heat. They are made of the safest plastic according to the FDA.
- A typical meal for a **family of three** is delivered as many as 10 single-use containers per order. That is **520 containers a year** if you order once a week.
- Earthware containers need only to be **used 5 times** for it to have less impact on the environment than a single-use container, and that includes pick up, sanitization and delivery.
- We can make a serious difference in the gas emissions coming from our own landfill if we started using a return-for-reuse takeout container program.

### About the Environment and Recycling

- 15% of methane emissions in landfills come from single-use containers.
- Only 9% of plastics in Canada gets recycled.
- We expect over **450 million restaurant takeout containers** to be headed to Alberta landfills this year.
- Most compostable containers in the market don't break down in the amount of time it takes to process them (45 days) so they go to the landfill.
- Any shiny lined paper takeout container product goes into the landfill as it cannot be recycled.

## Compostables

[Compostable single-use plastic containers don't get composted in Canada.](#) If you look closely, many containers say that it takes at least 90 days to commercially compost

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them. Canadian cities that have composting solutions typically work on a 45 day active composting cycle so these compostable containers are [not getting broken down in time](#).

You can put compostable paper containers in your own compost bin but some studies are showing you shouldn't even put them in your own compost because of the [materials](#) used to keep the container together.

## Wish-Cycling

[Only about 9% of plastic in Canada gets recycled](#). On the positive side that is 9% of stuff that would not have been recycled at all. Our containers are repurposed after their lifespan, by an independent contractor.

[Ellen MacArthur Foundation](#) estimates there to be more plastic in the ocean than fish by 2050.

Having the wrong items in the bin costs the City our taxpayers' dollars to sort and sift. It is important to be informed of what goes where. See "[What Goes Where](#)" for specific instructions for takeout containers.

## Use of Single-Use Containers

Replacing conventional single-use packaging with compostable single-use packaging does not reduce litter, overhead costs for restaurants, or hauling costs for Calgary. Replacing one type of single-use material for another does not help Calgary, or the global community, to mitigate climate change.

Sales generated by takeout jumped spectacularly from 15% in April 2019 to 68% in April 2020, while delivery sales surged to 28% of total sales ([Restaurants Canada](#)). In 2023 according to Square, 41% of restaurants are branching out into the retail sector with take home frozen or prepared foods. They need the right container to expand their business.

### [GOVERNMENT OF CANADA](#)

In Canada, up to 15 billion plastic bags are used every year and close to 57 million straws are used daily. In addition, single-use plastics make up most of plastic litter that is found in freshwater environments.

- In 2020, the Government of Canada conducted an analysis of available data to determine which items meet the requirements for the proposed ban. This analysis identified the following six single-use plastic items that the Government banned in 2023:
  - checkout bags
  - cutlery

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- foodservice ware made from or containing problematic plastics
  - ring carriers
  - stir sticks
  - Straws

Over 35 countries around the world have already taken action by banning certain single-use plastics, including the UK, France, and Italy, and Canada's approach is in line with other leading jurisdictions such as the EU.

441,000,000 Million disposable cups and takeout containers end up in the trash each year in the Greater Vancouver area. (Cannot find stats for YYC)

Single-use containers aren't working...

Most single-use containers are made of plastic-lined paper or 'biodegradable' materials that aren't designed for our municipal waste systems, meaning these containers aren't reusable, and most aren't recyclable or compostable, and they end up landfilled or incinerated.

## Environmental Impact of Landfills - [Source](#)

- The most pressing environmental concern regarding landfills is their release of methane gas. As the organic mass in landfills decomposes, methane gas is released. [Methane is 84 times more effective at absorbing the sun's heat than carbon dioxide](#), making it one of the most potent greenhouse gases and a huge contributor to climate change.
- [Along with methane, landfills also produce carbon dioxide and water vapor, and trace amounts of oxygen, nitrogen, hydrogen, and non methane organic compounds](#). These gases can also contribute to climate change and create smog if left uncontrolled.
- While landfills are required to have plastic or clay lining by federal regulation, [these liners tend to have leaks](#). This can result in leachate, a liquid produced by landfill sites, contaminating nearby water sources, further damaging ecosystems.
- [Leachate can contain high levels of ammonia](#). When ammonia makes its way into ecosystems it is nitrified to produce nitrate. This nitrate can then cause eutrophication, or a lack of oxygen due to increased growth of plant life, in nearby water sources. Eutrophication creates "dead zones" where animals cannot survive due to lack of oxygen. Along with ammonia, leachate contains toxins such as mercury due to the presence of hazardous materials in landfills

## Circular vs. Linear Economy

Our economy has been linear, focused on take-make-dispose sequences and highly focused on disposable convenience items. Materials are extracted from natural

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resources, transported, made into products, transported again, used for just a moment, and then landfilled or incinerated.

Our mission is to shift into a circular economy model where products and services are designed for reuse again, and again, and again, to minimize the amount of natural resources extracted and wasted while maintaining city-wide systems of convenience, jobs, and a healthy planet.

Leading experts in the circular economy and the new plastics economy, the [Ellen MacArthur Foundation](#), explains how we can redefine growth and focus on positive society-wide benefits. It focuses on designing waste out of the system and unlinking economic activity with the consumption of finite resources. It's built on the foundation of transitioning to renewable energy sources to build economic, natural and social capital.

The circular economy focuses on three main principles:

- Design out waste and pollution
- Keep products and materials in use
- Regenerate natural systems

5 Years from now...if we have 1200 restaurants participating over those five years we could see:

- \$1 million dollars in savings for YYC in processing
- 6 million square meters of landfill space reduced
  - That's 38 Bow Towers!
- 45 million kg of CO2 of gas emissions from our own backyard

We want to be living in this kind of city!

## “What Goes Where” from the City of Calgary - [Source](#)

Earthware containers are to be [returned to Earthware](#) for 1000 uses.

### [Compostable Takeout Containers and Cups-plastic](#) - SUC's

Though marked "compostable", this cutlery won't break down quickly enough for The City's composting process and [will contaminate the finished compost](#).

We do not accept compostable plastic containers in the blue cart as they are mixed with other additives that are not recyclable. When combined with other regular plastic recyclables, these compostable plastics will reduce the quality of the new materials that can be produced.

### [Foil Containers](#) - SUC's

- Crumble the foil container into a ball before recycling.
- Put the paper/foil lid into the black cart as garbage.

### [Chinese Food Takeout Box Cardboard](#) - SUC's

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- Remove the metal handle and put in the black cart as garbage.
  - Rinse out the container before recycling.

Why can't this be composted?

Takeout food boxes have a plastic lining to prevent the container from becoming soggy. To ensure we are creating the highest quality compost possible, leave this item out of your green cart.

### [Takeout Food Containers and Cups - Paper and Compostable Paper](#)

If the paper container is not labelled as compostable, rinse and empty out to put in your blue cart for recycling instead.

### [Takeout Food Boxes](#)

Recycle paper/cardboard food containers and take out boxes:

- In your blue cart
- At a community recycling depot

### [Special instructions](#)

- Put leftover food in your green cart for composting.
- If the container has a glossy shine to it, it probably has a plastic lining. Rinse out any food residue before recycling the takeout box.
- If you have a container labelled as "compostable", see [Compostable Takeout Containers](#).

Why can't this be composted?

Takeout food boxes have a plastic lining to prevent the container from becoming soggy. To ensure we are creating the highest quality compost possible, leave this item out of your green cart.

### [Plastic Takeout Food Containers](#) -Recycle

Sandwich wedge containers

- Deli containers
- Salad kit containers
- Dessert cups

Special instructions

- Remove any remaining food and rinse the container before recycling.

### [Green Cart no-no's](#)

Remove food from its packaging and put it in your [green cart](#). For packaging disposal options, see [What Goes Where](#).

- Fruit or vegetable stickers
- Coffee cups
- Foam meat trays
- Metal food cans
- Plastic containers and tubs
- Plastic bottles
- Jars
- Plastic bags