



Let's Recycle Better, Together.

**WASTE REDUCTION IN
RESTAURANTS &
TO-GO FOOD SERVICE**

**WEDNESDAY OCTOBER 23RD
1:00 TO 2:00 PM ET.**



Today's Panelists



Kayli Dale

Founder & CEO

Friendlier



Krietta Marley

*Vice President of
Product Development*

Foodprint Group

Join the Discussion

From your toolbar:



Share your experience & opinions

Look for links to resources

Type direct questions for panelists



friendlier

Simplifying the world's transition from
single-use to reusable packaging.

Kayli Dale, CEO
kayli@friendlier.ca

www.friendlier.com



introductions



Kayli Dale
Founder, CEO



The problem with single-use packaging:

- only 9% of plastic is actually recycled - there will be more plastic in the ocean than fish by 2050
- compostable or biodegradable labelled packages often CANNOT be composted in local facilities
- a forest the size of the UK is cut down every year for paper packaging (3 billion trees)



The problem with single-use packaging:

- only 9% of plastic is actually recycled - there will be more plastic in the ocean than fish by 2050
- compostable or biodegradable labelled packages often CANNOT be composted in local facilities
- a forest the size of the UK is cut down every year for paper packaging (3 billion trees)



what is the long-term solution?

transition from single-use to reusable packaging

benefits of reusable packaging:

- ✓ quantifiable reduction in waste, GHG emissions, and water
- ✓ high-quality customer experience, no more soggy paper products
- ✓ reduction in waste handling and disposal fees
- ✓ compliant for all future single-use/EPR regulations
- ✓ connect with your customers on shared values, and keep them coming back for returns



reuse in action

example: Friendlier's reuse system

➔ **Food service team orders reusable packaging by the case**





reuse in action

example: Friendlier's reuse system

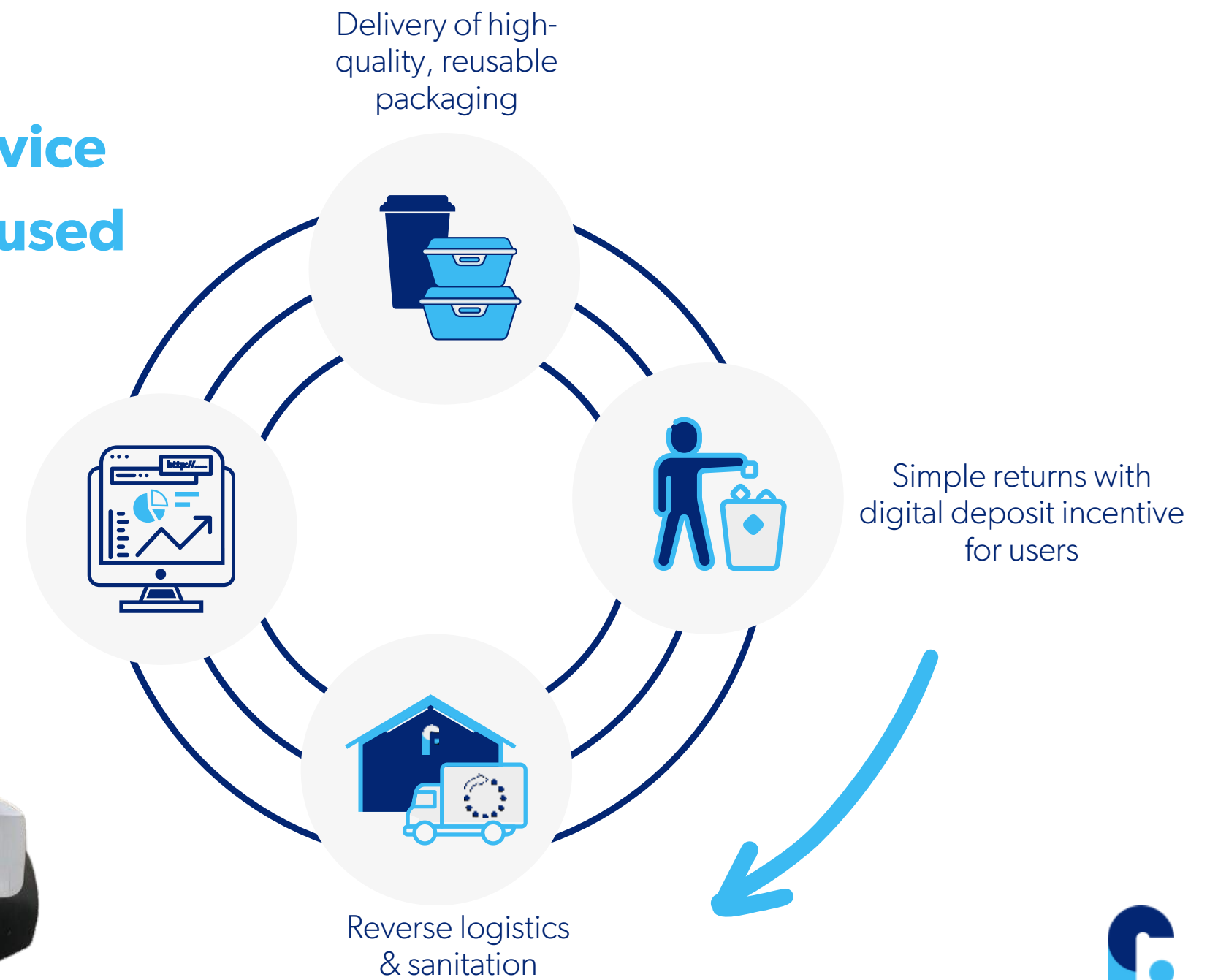
➔ **Customers scan the packaging once they're finished to claim a digital deposit**



reuse in action

example: Friendlier's reuse system

➔ **Friendlier picks up returns from food service site and sanitizes the packaging to be reused**





reuse in action

example: Friendlier's reuse system

 **Food service teams can track their stats and see their environmental impact**



Sustainability impact tracking



where does reuse work?

- restaurants
- college campuses
- corporate office cafeterias
- prepared meal subscription
- event venues & stadiums
- hospital cafeterias
- grocery
- K-12 lunch programs
- cafes & coffee services



restaurant case study

- ▶ Mercer Kitchen replaced all takeout packaging with reusable Friendlier containers
- ▶ Customers can order online or via delivery platform (deposit automatically added to order)
- ▶ At any point, customer can return container to return bin at Mercer or another local business (deposit claimed via app)



"We believe that we get repeat customers and repeat orders because of the [Friendlier Reuse] program. People thank us for using it, they're congratulating us for being part of the program and some are telling us that they're ordering because we use it."

RYAN O'DONNELL

Owner
Mercer Kitchen

Environmental Impact

5,690 containers returned in 2023!



46,057 L
of water



330 kg
of plastic waste



956 kg
of GHG emissions



✓ third party verified

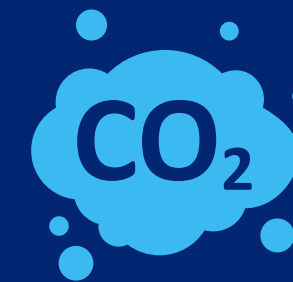
2,190,000 reused



17,500,000 L
of water



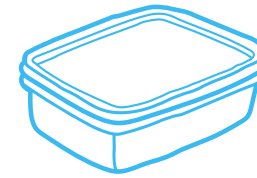
126,900 kg
of plastic waste



367,700 kg
of GHG emissions

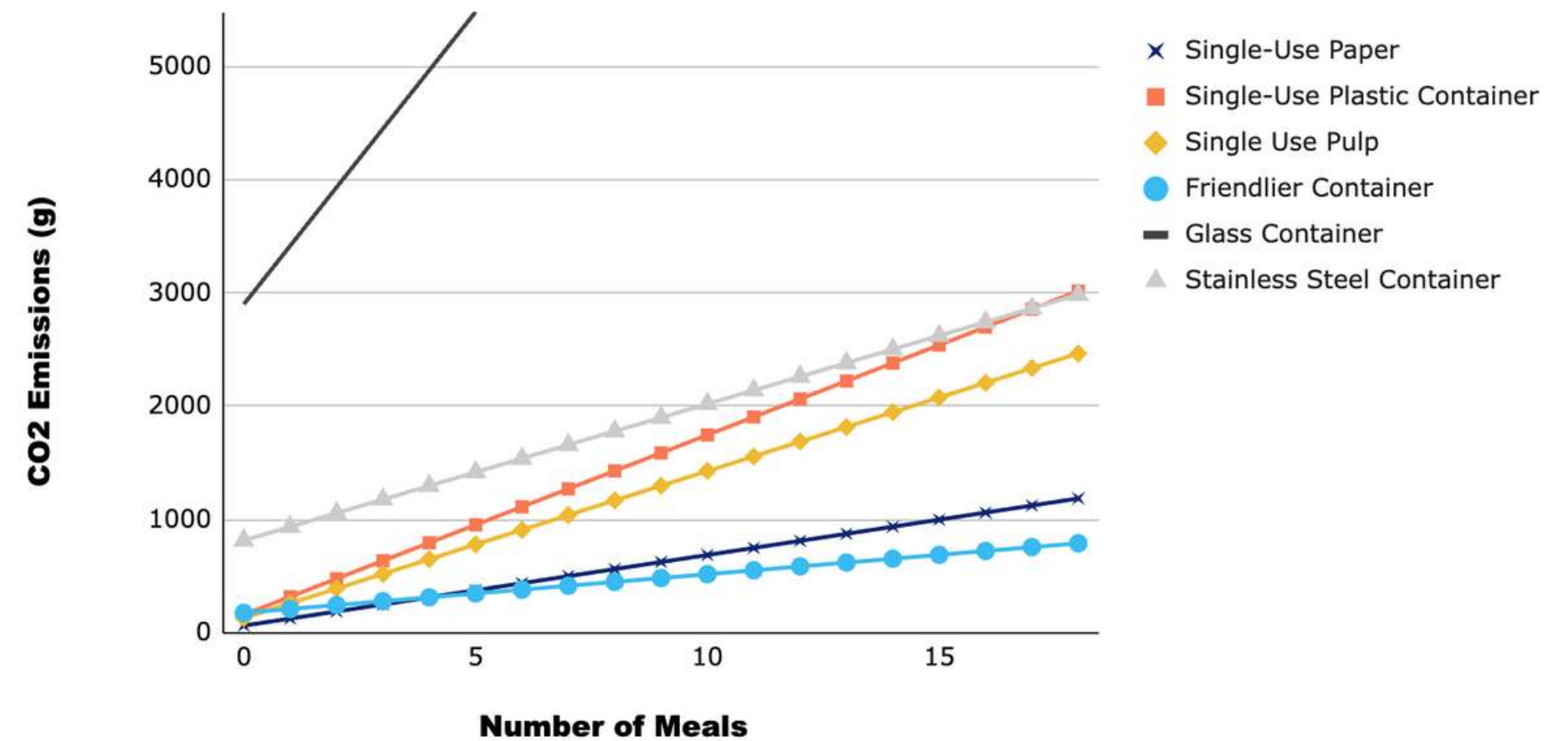


Reuse Best Practices



Lightweight products

Avoid overly thick products or heavy materials, it's important to ensure from a lifecycle analysis that you will hit the reuse breakeven point for GHG emissions.



Reuse Best Practices



Don't leave it to consumer choice

Studies show that consumers want businesses to choose sustainable products for them, but if presented a choice will revert to what they know (status quo).



Reuse Best Practices



Maximize convenience for consumers

Meet consumers where they are - try to minimize behaviour change. Place return bins with garbage and recycling bins, minimize scanning/extra steps as much as possible.





friendlier

BECAUSE THE PLANET ISN'T SINGLE-USE.

contact us

Kayli Dale, CEO

kayli@friendlier.com

www.friendlier.com

Live Poll

Foodprint Group

Food Waste Reduction - Upstream & Downstream Solutions



The background is a solid dark green color. It features three stylized red tomatoes. One is in the top right corner, one is on the left edge, and one is in the bottom right corner. Each tomato has a simple green stem and a small green leaf. The text is centered in the middle of the image.

How Bad is Our Food Waste Problem?

How much food do we waste?



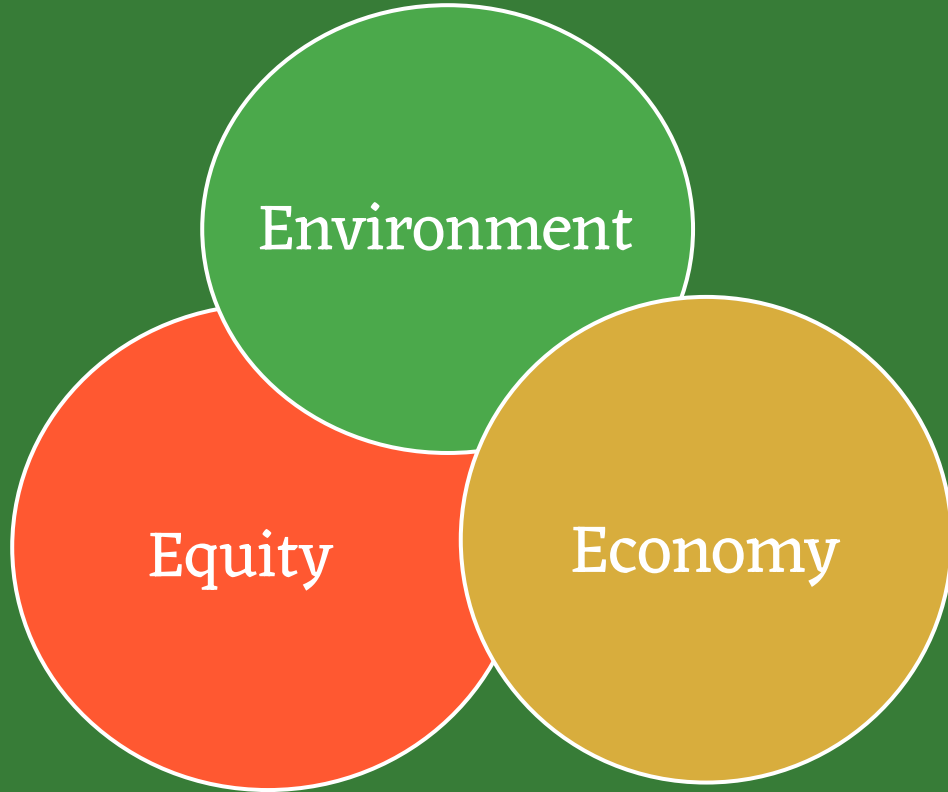
$\frac{1}{3}$ of food is
wasted

From cultivation, harvest, transport, prep, table, we waste...

- 33% globally (UN Environment Programme)
- 38-40% in the US (ReFED and NRDC)
- Food waste takes up 24% of MSW landfill in US (US EPA)

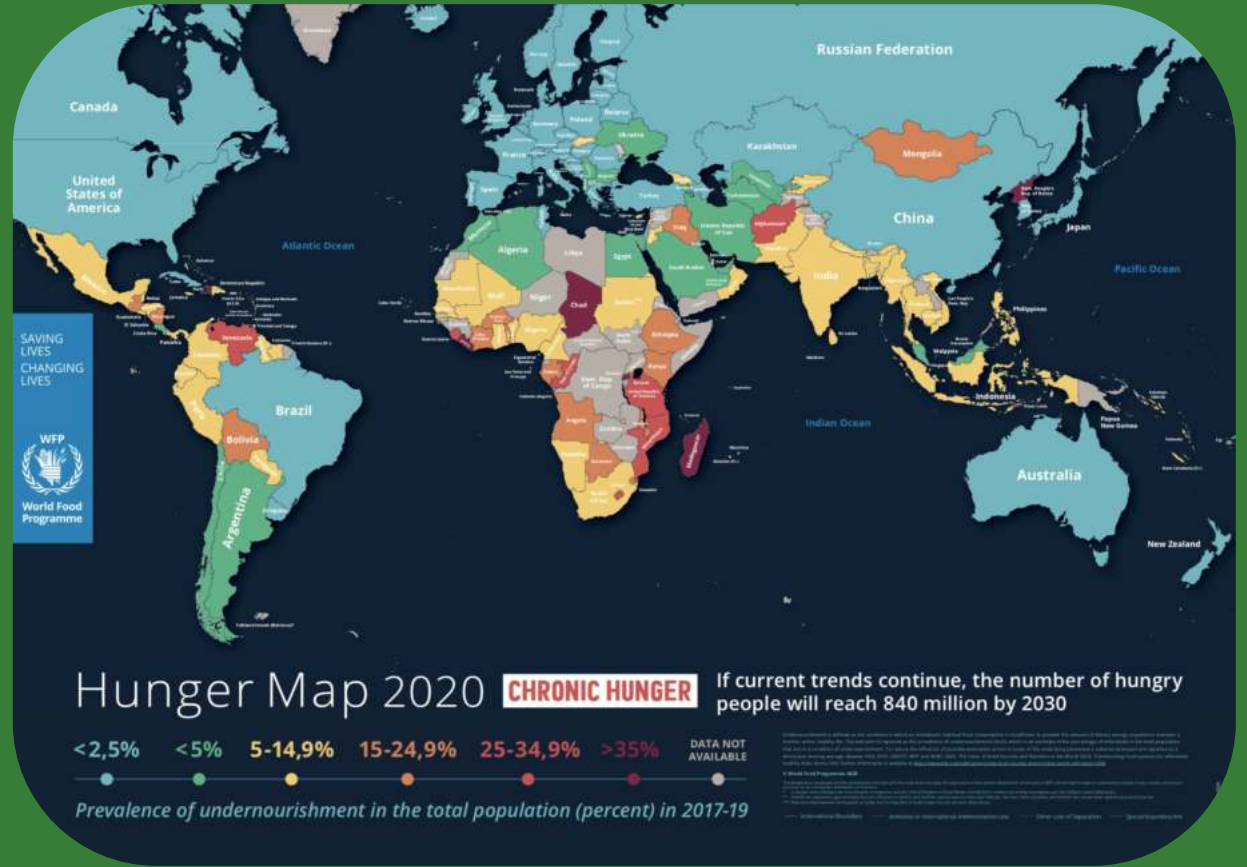
In foodservice establishments, over 90% of food waste is from prepared food, not raw ingredients.

Why food waste matters



Equity

Undernourishment differs among countries. We still have a long way to go to address world hunger.



Equity

Food insecurity means your meal patterns are regularly disrupted from lack of resources and access to nutritious, affordable food.

In the U.S., more than 47 million people face hunger, including **1 in 5 children**.



Over $\frac{1}{8}$
Americans go
hungry

Source: Food Research and Action Center, [Hunger and Poverty in America](#); Facts About Hunger in America, [Feeding America](#)

Economy

The UN's 2024 Food Waste Index Report found that we now waste

\$1T

of food globally every year. And the annual cost is growing.



Environment

- Running out of landfill space - and remaining space is expensive
- What happens when food waste degrades in a landfill?



6.1%
of U.S. GHG
Emissions



22%
of all
Fresh Water Use



16%
of U.S.
Cropland Use
(EPA Estimate)



24%
of Landfill Inputs
(EPA Estimate)

Source: ReFED/2022 Data (Published 11/23)

Sources: US EPA Facts & Figures, Refed.org, Project Drawdown by Paul Hawken

Methane
 CH_4

greenhouse
gas

with 30x
more

warming
power

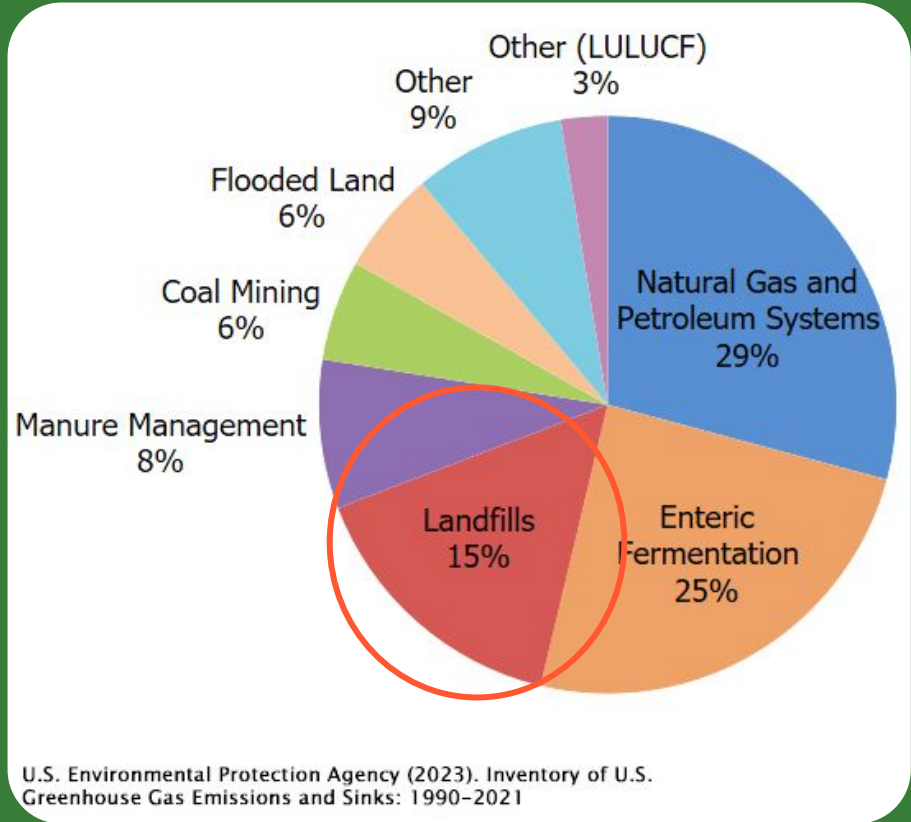
than CO_2



Environment



Landfills are the 3rd
largest source of
methane emissions





Reducing food waste is the **#1** most effective way to combat climate change

Sources: Project Drawdown by Paul Hawken
<https://drawdown.org/solutions/table-of-solutions>

The background is a solid dark green color. It features several large, semi-transparent red circles of varying sizes. Each red circle has a small, solid green oval shape attached to its edge, resembling a leaf or a stem. The text "Food Waste Reduction" is centered in the upper half of the image in a white, serif font.

Food Waste Reduction

We can make easy changes to keep food out of landfills



Food Recovery Hierarchy

Optimal order of implementation depends on your site's infrastructure and program elements.



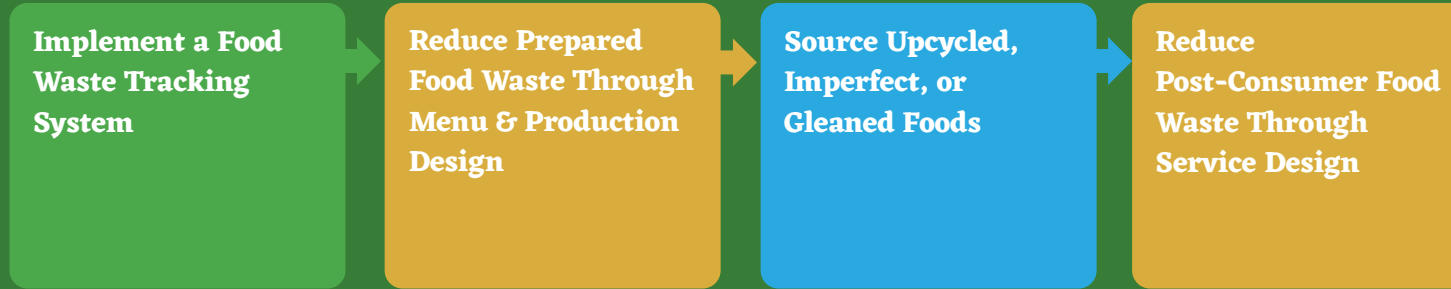
Source: [US EPA, Oct 2023 update](#)



Food Waste Reduction & Mitigation Strategies

Food Waste Reduction Strategies

Upstream: Prevent (and save)



Track Food Waste using Software (and Audits)



Tools like LeanPath (above) and Winnow enable daily detailed food waste tracking and reduction. Inventory management systems already used by food businesses have some food waste tracking functionality.

Audits help you determine how much edible and non-edible food you're wasting, commonly wasted items, and better purchasing practices & menu changes.

Image Credits: left to right, LeanPath, Winnow, Foodprint Group

How Much \$ Can Tracking Waste Save?

Food Waste Tracking Software pays for itself when used accurately.

“A review of 114 restaurants across 12 countries found that nearly every site achieved a positive return:

- With the average restaurant **saving \$7 for every \$1 invested** in reducing kitchen food waste.
- Within just one year, the restaurants reduced food waste from their kitchens by 26% on average, and over 75% recouped their investment. Within two years, 89% recouped their investment.
- Every site was able to keep their total investment below \$20,000.”

Source: EPA, [Champions 12.3 Report](#)



Reduce Waste Through Menu Planning

According to ReFED, around 22% of food wasted in food service establishments is unserved due to overproduction. Overproduction can be curbed or even eliminated through thoughtful menu and production planning.

Menu & Production Planning Strategies:

- A smaller menu
 - Foster culture of “selling out” of items
- More plant-based options
- Cross-utilize ingredients to avoid spoilage
- Limit production buffer %
- Use data and experience to reduce specific foods or meals that often generate more waste, like snacks served shortly after a full meal or pastries.



Source: Breads Bakery

Source Upcycled, Imperfect, or Gleaned Produce

Another way to reduce food waste is to look deeply at your sourcing. Review and map out your entire food supply chain to identify upstream waste and potential new partnerships.

Work with:

- vendors that rescue “ugly” or “imperfect” produce that don’t meet aesthetic retail standards (ex. Imperfect Foods of Misfits Market)
- gleaning organizations who rescue food from fields which would otherwise be tilled under



Reduce Waste Through Service Planning

Meanwhile, plate waste makes up about 70% of food waste at food service establishments. There are many ways to amend service and menus to reduce plate waste:

Service Style Strategies

- High-value items (expensive ingredients like meat and fish, or labor-intensive dishes) are fired only when ordered
- Right-size portions based on waste patterns/data
- No self-serve or buffet style dining - only staff served and individually plated
- If buffet, smaller tray or bowl sizes fired more frequently
- No garnishes (or only edible garnishes) and condiments in small pump dispensers not bowls



Source: Waste 360 “Analyzing Food Waste at the City Level”

How Much \$ Does Reduction Really Save?

According to the National Restaurant Association, on average, a restaurant loses 4-10% percent of food they purchase.

Working to reduce food waste can cut an individual restaurant's costs by 2-6% percent.

Wasting less food means wasting less money on ingredients, labor, and hauling costs.



Source: Waste 360 “Analyzing Food Waste at the City Level”

Biggest Upstream Obstacles

Our foodservice clients have faced challenges in incorporating upstream food waste reduction, including...

Challenge	Solution
The “abundance mentality” in service	Test “selling out” on one or two menu items
Marginal (but growing) interest in plant-based menus	Offer a mix of plant-based items and meat options
Added labor in tracking food waste; difficulty motivating staff to track	Set up a system that makes tracking as easy as possible; start by tracking only highest-value items (prepared food); create incentives for tracking and share insights with team
Added labor for plated service over self-service	Run cost-benefit analysis of extra labor vs. food waste

Food Waste Diversion Strategies

Downstream: Divert (and save)

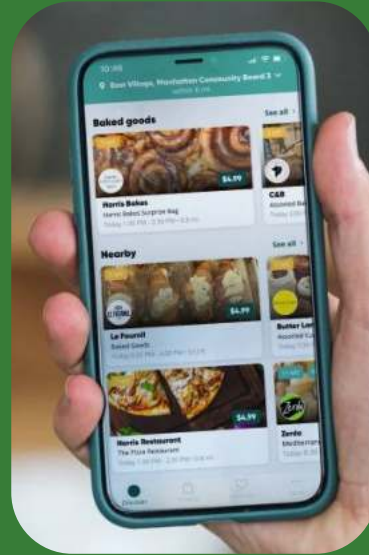


Secondary Market Sales for Surplus Pre-Prepared Goods



Left: Too Good to Go Surprise Bag available from restaurants, cafes and retailers in NYC **Middle:** Too Good to Go App

Image Credit: Too Good to Go



Breads Bakery Sample \$4.99 Surprise Bag

Image Credit: Breads Bakery

Upcycle & Repurpose Food Onsite



Anything that extends or augments the life and value of would be food waste is upcycling and repurposing food. Common methods:

- **processing:** salting, freezing, dehydrating, fermenting, canning, syrups
- **bruised fruit:** smoothies, jams, jellies, pies, gelattos
- **peels:** banana peel BBQ
- **pulps:** into veggie burgers
- **stale bread:** french toast, stuffing, croutons, bread pudding

Donate Excess Edible Food

If after proper inventory management and forecasting, repurposing/upcycling food onsite, you still have surplus edible food - then it's time to find a food rescue partner.



Image Credit: Foodprint Group

There is Financial Incentive to Donate

15%

up to 15% of
taxable income
can be deducted

United States Tax
Law results in more
food donated!

The U.S. offers one of the most generous tax incentives for food donors. U.S. taxpayers who donate food are eligible for two deductions under federal law:

- (1) a general tax deduction of the basis value of the food that applies to all charitable contributions, and
- (2) an enhanced tax deduction for qualified food donations that offers a higher benefit (up to 2x the basis value).



Food Donation Policy Eliminates Donor Liability

The US has a comprehensive law, the Bill Emerson Good Samaritan Food Donation Act, which **extends liability protections for donations made in good faith**. Many countries have promulgated similar legislation.

In addition to donor liability protection, other policy areas to consider when donating food are:

- private grants or federally funded programs
- state tax incentives

Check out the [Harvard Food Law and Policy Clinic's](#) library of Resources on Food Donation Framework in the US or the [Global Food Donation Policy Atlas](#) if you're outside the US.



Mandatory Food Donation Policies are Growing...

Laws like CA's SB 1383 are requiring food businesses (including restaurants, hotels, and caterers) to donate their excess food instead of throwing it out.

In France, grocery stores have been required by law to donate their excess produce since 2016.



Then Recycle Inedible Organics

Animal feed is the optimal option *if available in your region*. Leaving unharvested is an upstream decision out of the control of businesses.



Source: [US EPA, Oct 2023 update](#)

Can I Save By Composting?

The short answer is... it depends!

Some regions in North America (including CA and NYC) are adopting policies to make organics cheaper to get hauled than trash.

The tipping point will happen everywhere as landfill space continues to shrink and as composting and AD facilities continue to be invested in, built, and scaled up.



Biggest Downstream Obstacles

Our foodservice clients have faced challenges in incorporating downstream food waste diversion, including...

Challenge	Solution
Lack of regional haulers/partners and infrastructure	Give leftovers to staff first; search for nearby donation opportunities; look into on-site composting systems
Tendency to start producing overage for secondary market sales or donations	Revisit production pars and food waste tracking data regularly to make sure what's given away/sold at a lower price is true overage AND is decreasing over time
"We don't really waste food so we'd have nothing to donate!"	Start tracking your food waste or audit it! You'll probably be surprised by what you learn
Food waste hauler or processing equipment can only take limited items (no meat or bones, no paper towels, etc.)	Review the food waste hierarchy; see if you can source a secondary hauler to take the materials that your equipment or primary hauler can't take; make purchasing/ops changes to reduce non-accepted items.



Thank you

Today's Panelists



Kayli Dale

Founder & CEO

Friendlier



Krietta Marley

*Vice President of
Product Development*

Foodprint Group

Today's Program Online



- Recording
- Presentation slides
- Resources

Link will be emailed in coming days

Related Past Webinars

Slides, Recordings & Resources for:

October 2022 – Reuse

- r.Cup / r.World: Venues
- Seattle Public Utilities: City-wide strategy
- City of Truckee: Restaurants

January 2022 – Food Waste from Institutional Settings

- North Carolina State University: Higher education
- Center for EcoTechnology: Office locations

September 2023 – Making the Case for Reuse

- Upstream: Resources to support reuse
- Perpetual: Reuse around the world
- Center for Biological Diversity: Public messaging for reuse



Archived Slides & Recordings

- Centralized office collections
 - Special events
 - Rebuilding confidence in recycling
 - Healthcare waste reduction
- + More**



Visit: <https://www.buschsystems.com> > Resources > Webinars

Report & Upcoming Webinar:

Indoor Diversion Practices at Colleges & Universities

Survey of Campus Trends, Impacts & Lessons Learned

- Bin & signage design
- Centralized Collections from offices & classrooms



Thursday, November 7 Webinar

2:00 to 3:00 pm EST

- Present findings from survey project
- Details & register at www.curc3r.org



Partnership with:



Let's Recycle Better, Together.



Please Share Feedback to Presenters

Post-Webinar Survey:

- Prompt at end of program, or
- Look for Email tomorrow