



2024 National Pollution Prevention Training
and Conference

Supporting the American Food Service Industry with Reusable Food Ware Procurement

December 11, 2024

1:15 – 2:30PM ET

Moderated by Allison Thompson, EPA, EPP Branch

Speakers:

- **Allison Thompson, EPA, Environmentally Preferable Purchasing Branch**
- **Mark Rossi, Clean Production Action**
- **Will Grassle, Product Stewardship Institute**
- **Marie Davis, Aramark**

Supporting the American Food Service Industry with Reusable Food Ware Procurement

Allison Thompson

EPA Environmentally Preferable Purchasing Program



EPA's Recommendations of Specifications, Standards & Ecolabels for Federal Purchasing

Global Marketplace



460+ standards and ecolabels

EPA Analysis

- 1. Based on review and use by another federal agency
- 2. Based on an assessment against EPA's Framework for Environmental Performance Standards and Ecolabels

The Recommendations

<input checked="" type="checkbox"/> Plastics Criteria <input checked="" type="checkbox"/> PFAS Criteria				
Logo	Standard/Ecolabel Name	Product or Service Category(ies)	Product or Service Sub-category(ies)	Multi-Attribute or Single-Attribute
	BIFMA e3 2019 - Furniture Sustainability Standard - level® certified (additional specification required)	Office/Furniture	Furniture	Multi-Attribute
	Association for Contract Textiles NSF/ANSI 336: Sustainability Assessment for Commercial Furnishings Fabric (additional specification required)	Office/Furniture	Furnishings Fabric	Multi-Attribute
	Cradle to Cradle Certified® Product Standard	Construction	Flooring: tile, resilient, and other non-carpeted	Multi-Attribute

40+ product/service categories, 60+ private sector standards/ecolabels, 6 specifications

Framework for Assessment of Environmental Performance Standards and Ecolabels

Section I: Standards development process

Section II: Effectiveness in addressing human and environmental health

Section III: Conformity assessment procedures

US ENVIRONMENTAL PROTECTION AGENCY - FRAMEWORK FOR THE ASSESSMENT OF ENVIRONMENTAL PERFORMANCE STANDARDS AND ECOLABELS FOR FEDERAL PURCHASING – 2022

EPA Environmentally Preferable Purchasing Program

Framework for the Assessment of Environmental Performance Standards and Ecolabels for Federal Purchasing

(Updated 2022)

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Updates to Food Service Ware Category

Three new sub-categories:

Reusable Food Service Ware



- GreenScreen Certified for Reusable Food Packaging, Service Ware, & Cookware
- Cradle to Cradle Certified Product Standard

Certified Commercially Compostable Food Service Ware



- GreenScreen Certified Single-Use Food Service Ware & Thermal Paper
- Cradle to Cradle Certified Product Standard (Platinum Level in Product Circularity)
- Biodegradable Products Institute (BPI)

Certified Recyclable Food Service Ware



- GreenScreen Certified Single-Use Food Service Ware & Thermal Paper
- Cradle to Cradle Certified Product Standard (Platinum Level in Product Circularity)

Food Service Ware Specifications

First Choice: Reusable Food Service Ware



Second Choice: Certified Commercially Compostable Food Service Ware



Third Choice: Certified Recyclable Food Service Ware

First Choice: Reusable Food Service Ware

Reusable food service ware is the preferred choice because it will use less energy and fewer resources over its lifespan if an effective reuse system is developed and operated. Procurement of reusable food service ware can also save money over time compared to single-use options.

Purchase reusable food service ware certified to:

- GreenScreen Certified® Standard for Reusable Food Packaging, Food Service Ware, & Cookware
- Cradle to Cradle Certified® Product Standard

Reusable food service ware should be used in a system that enables repeated collection, washing, and return.

If there is limited availability of certified reusables, purchase products made from ceramic, porcelain, glass, metal, or other durable, less toxic materials.

Second Choice: Certified Commercially Compostable Food Service Ware

Certified commercially compostable food service ware is less preferred than reusables but preferred over certified recyclable options because they reduce conventional plastic waste and can support food scraps diversion from landfills if collected separately from other waste streams and sent to an appropriate facility. However, these products are designed to only be composted in commercial composting facilities, and availability of such facilities across the country is limited. Additionally, some commercial composting facilities do not accept compostable products.

If reusables cannot be procured for all needed food service ware:

Purchase certified commercially compostable food service ware certified to:

- GreenScreen Certified®
- Cradle to Cradle Certified® (Platinum Level in Product Circularity)
- BPI Certified

Purchase certified commercially compostable food service ware only if a commercial composting program is locally available, accepts the product types being purchased, and collection or hauling services are procured. Three stream waste sorting (composting, recycling, and landfill) should be provided where products are used, and collection bins should be clearly labeled with exact product types to ensure only the acceptable items are placed in each bin, thus preventing contamination of the various waste streams.

When certified commercially compostable food service ware are provided at a specific location, no other types of single-use food service ware (i.e. recyclable or non-recyclable bowls, lids, utensils, condiment cups, etc.) should be provided in order to prevent contamination of the various waste streams. All food service ware should be reusable or certified commercially compostable.

Third Choice: Certified Recyclable Food Service Ware

Certified recyclable food service ware is the last preferred choice due to low recycling rates of the products caused by food contamination or small size (i.e., utensils).

If reusables cannot be procured for all needed food service ware:

<p>Purchase certified recyclable food service ware certified to:</p> <ul style="list-style-type: none">- GreenScreen Certified®- Cradle to Cradle Certified® (Platinum Level in Product Circularity)	<p>Purchase certified recyclable food service ware if reusables cannot be procured and if organics collection program is not locally available or does not accept compostable food service ware products, and if the local recycling program accepts the items for recycling.</p> <p>A minimum of two stream waste sorting (recycling and landfill) should be provided where products are used, and collection bins must be clearly labeled with exact product types to avoid compromising the quality of the waste stream/feedstock.</p> <p>Prioritize purchasing products made with recycled content materials that are accepted in the local recycling program.</p> <p>Products should be added to the collection bins clean (i.e. without food or beverage remains). Suppliers can provide washing and/or instructions for consumers to achieve this.</p>
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Sustainable Food Service

https://www.epa.gov/greenerproducts/identifying_sustainable_food_service_and_food_service_ware

Reduction of single-use plastic in beverage offerings (refill stations with reusables or single-use aluminum)

Energy & water efficient equipment operations (ENERGYSTAR, WaterSense)

Waste diversion programs (i.e. waste reduction, materials recycling, composting and food donation)

Bulk servicing (i.e. bulk condiments rather than individual packets)

Green cleaning practices (Safer Choice)

Integrated pest management/green pest control alternatives.

Products certified to one of EPA's recommended standards and ecolabels in categories including food service ware, cleaning products, trash bags, and paper towels.

Resources

View Guidance on Sustainable Food Service and Food Service Ware



<https://www.epa.gov/greenerproducts/identifying-sustainable-food-service-and-food-service-ware>

View EPA Recommendations of Specifications, Standards, and Ecolabels



<https://www.epa.gov/greenerproducts/recommendations-specifications-standards-and-ecolabels-federal-purchasing>

Stay Connected & Sign Up for EPP Listserv



<https://www.epa.gov/greenerproducts/forms/contact-us-about-greener-products-and-services>



GreenScreen Certified® Reusable and Single-use Food Ware Standards

Mark S. Rossi, PhD, Executive Director

Clean Production Action

December 11, 2024

2024 US EPA National P2 Training & Conference



Solutions for a safer & healthier tomorrow



BIZNGO FOR
SAFER CHEMICALS &
SUSTAINABLE MATERIALS



INVESTOR
ENVIRONMENTAL
HEALTH NETWORK



GREENSCREEN
FOR SAFER
CHEMICALS



CHEMICAL
FOOTPRINT
PROJECT

Procurement Pain Points

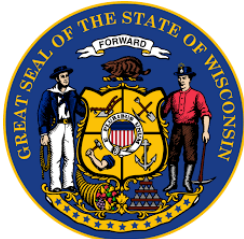
Challenge to ...

- Know ALL chemical ingredients in products -- lack of supply chain transparency
- Know what impurities/residuals might be in products
- Know hazard profile of the chemical ingredients and contaminants
- Have the time and expertise to evaluate the toxicity of chemicals in products





Globally Recognized & Used





Standard for Reusable Food Packaging, Food Service Ware, & Cookware



Standard for Single-Use Food Service Ware & Thermal Paper



GreenScreen Certified® Creation Process – Technical Peer Review



Reusable Food Packaging, Food Service Ware, & Cookware



Technical Peer Reviewers

Erika Schreder, Science Director,
Toxic-Free Future

Jen Jackson, Formerly Toxics Reduction &
Healthy Ecosystems Program Manager,
San Francisco Department of the
Environment

Joel Sigler, Director, National Environmental
Health and Safety, Kaiser Permanente

Johanna Anderson, Director of Learning
& Member Engagement, Sustainable
Purchasing Leadership Council

John Lively, COO, Preserve

Julia Wolfe, Director, Environmental
Purchasing, State of Massachusetts

Laura Tirkkonen-Rajasalo, Ph.D.,
Co-Founder, Director Quality Assurance
and Regulatory Affairs, Sulapac

Manasa Mantravadi, Founder/CEO,
Ahimsa LLC

Martin Mulvihill, Ph.D., Managing Partner
and Co-Founder, Safer Made

Miriam Gordon, Story of Stuff Project

Roopa Krithivasan, Ph.D., Director
of Research, Defend Our Health

GreenScreen Certified Standards for Food Ware

1. Scope
2. Terms and Definitions
3. Product Inventory
4. Restricted Substances List (RSL)
5. Chemical Hazard Evaluation
6. Analytical Testing
7. End of Life Criteria (recyclability, compostability, reusability)
8. Recycled Content





1. Scope: What can be certified?



- **Products:** Reusable food service ware, food storage, food packaging (i.e., primary and secondary packaging), and/or cookware
- **Materials** used to make reusable food service ware, food storage, food packaging, or cookware including but not limited to substrates, coatings, films, liners, printing inks, adhesives, glues, waxes, and oils.



Products:

- Single-use food service ware designed to be compostable or recyclable; and
- Thermal paper (e.g., receipts)

Materials (e.g., coated paperboard, or coatings) used in either single-use food service ware designed to be compostable or recyclable and/or thermal paper.



2. Definitions: Compostable, Recyclable, Reusable, PFAS

Compostable

“A material that can undergo near-complete biological decomposition into carbon dioxide, water, inorganic compounds, and biomass in the intended municipal composting facility or facilities within the time period and to the extent specified by a recognized ASTM, ISO, CEN, or DIN compostability standard (e.g., ASTM D6400-19 for plastics)”

Recyclable

“Any material that can be sorted and reconstituted, for the purpose of using the altered form in the manufacture of a new product. Recycling does not include burning, incinerating, converting, or otherwise thermally destroying solid waste.”

Reusable

“A product that meets the GreenScreen Certified Reusability Criteria in Section 10, which requires the product to be durable and suitable for repeated use over an extended period of time.”

PFAS

“A class of fluorinated organic chemicals containing at least one fully fluorinated carbon atom.”

Source: SB 5135, Safer Products for WA ACT; <http://lawfilesexternal.wa.gov/biennium/2019-20/Pdf/Bills/Senate%20Passed%20Legislature/5135-S.PL.pdf?q=20210811124919>, accessed 4/17/23



3. Product Inventory: Review *all* chemicals in the product

All **chemicals** present in all materials must be disclosed (under confidentiality) if:

- Intentionally added and present at or above 1 part per million (ppm) in material
- Impurity or residual and present at or above 100 ppm in material





4. Restricted Substances List (RSL) [reusables]

- 
1. Alkylphenols and Alkylphenol Ethoxylates
 2. Antimicrobials
 3. Benzophenones
 4. Bisphenol A (BPA) Analogs
 5. Compounds of Cadmium, Chromium VI, Lead, Mercury, Arsenic, Antimony, and Nickel
 6. Diglycidyl ethers of bisphenols
 7. Halogenated Flame Retardants
 8. Mineral Oil Saturated Hydrocarbons (MOSH) and Mineral Oil Aromatic Hydrocarbons (MOAH)
 9. Nanomaterials
 10. Organohalogens (including chlorinated plastic)
 11. Organotin Compounds
 12. Ortho-Phthalates
 13. Parabens
 14. Per- and Polyfluoroalkyl Substances (PFAS)
 15. Polycyclic Aromatic Amines
 16. Siloxanes: Cyclic Volatile Methyl Siloxanes (VMS)
 17. Other Chemicals of Concern (*49 other chemicals/polymers including melamine*)
 18. Food Packaging Forum Priority Substances List

5. Chemical Hazard Evaluation



GreenScreen
List Translator



GreenScreen
Hazard
Assessment



GreenScreen List Translator-1 Lists include ...

- **California Proposition 65**
- **European Union (EU) lists:** CLP GHS and H-Statements; SVHC Candidate List; SVHC Prioritisation List; & SVHCs Subject to Authorization
- **International Agency for Research on Cancer (IARC)**
- **UN Stockholm Convention Secretariat Stockholm Convention on Persistent Organic Pollutants (POPs)**
- **National Institute of Occupational Safety and Health (NIOSH) Carcinogen List**
- **US EPA:** Toxics Release Inventory (TRI) Program, TRI PBT Chemical List
- **US National Institutes of Health,** National Institute of Environmental Health Sciences, National Toxicology Program (NTP): Report on Carcinogens (RoC) and Studies on Reproductive and Developmental Toxicity



TM



6. Analytical Testing

- Total Fluorine (single use + reusable)
- Bisphenols (single use + reusable)
- Phthalates (single use + reusable)
- Heavy Metals (single use + reusable)
- Solvents (printed products and products with recycled content only) (single use + reusable)
- Migration Testing: Polymeric Materials and Coatings, Metal Alloys, Ceramics & Glass (reusable)



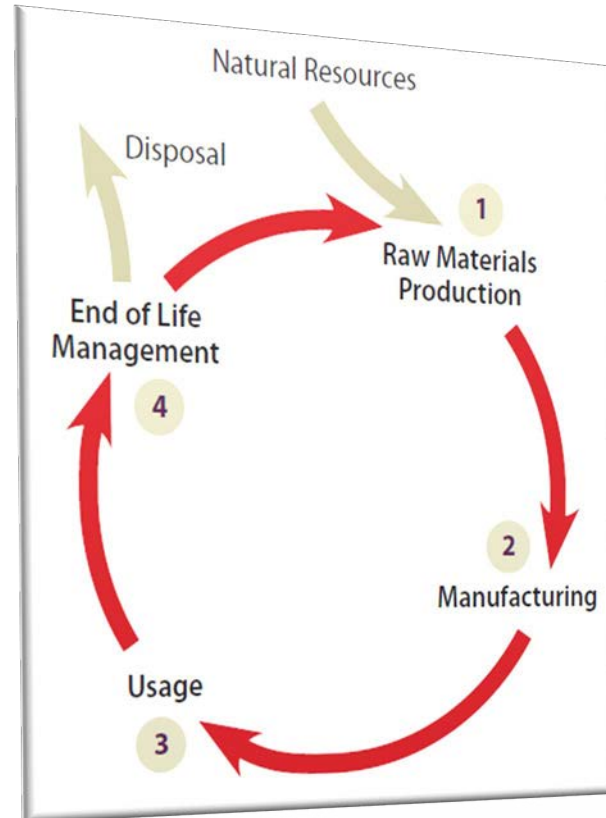
7. End of Life Criteria

Single use standard: Recyclability and/or Compostability criteria

- Certified products must be recyclable and/or compostable according to either of the following requirements:
 - **Recyclable products must** meet the definition in Section 4 and **be identified as recyclable either on- or off-pack** (i.e., How2Recycle labeled as “Widely Recycled” or “Limited Recycling” or equivalent).
 - **Compostable products must** meet the **definition in Section 4**. Compostability may be demonstrated through **certification** to a recognized program such as being certified by the Biodegradable Products Institute (**BPI**) or listed by the Compost Manufacturing Alliance (**CMA**).

Reusable standard: Reusability criteria – Section 10

- The product must maintain its shape, structure, and function after **780 cycles in a cleaning and sanitizing process** as defined in California Health and Safety Code Section 114101 and 114099.7, respectively, as demonstrated by test results from an ISO/IEC 17025:2017 accredited laboratory; **or**
- The product manufacturer must **provide an express, written warranty to purchasers of the item that it will remain reusable for its intended purpose for a minimum of one year** or the manufacturer will take back and replace the product at the manufacturer’s expense.





8. Recycled Content

Post-Industrial Recycled Content (Pre-Consumer)

- All materials: allowed in certified products if the materials are well-defined, fully characterized, and meet all other certification requirements. (*single use + reusable*)

Post-Consumer Recycled Content

- **Polymeric Materials & Biological Materials:** materials are evaluated on a case-by-case basis. Use of post-consumer recycled content in products is not preferred in food contact applications, but may be allowed if the material is well-defined, fully characterized, and meet all other certification requirements. (*single use + reusable*)
- **Glass:** any amount is allowed in certified products. For glass, recycling processes occur at temperatures that volatilize contaminants. (*reusable*)
- **Metal:** any amount allowed. For metal, recycling processes occur at temperatures that volatilize contaminants, and metal alloys are engineered to meet specific composition standards (i.e., metal grades). (*reusable*)
- **Ceramic:** not allowed due to lack of recycling of ceramics. (*reusable*)



GreenScreen Certified®



You are here: Home / Certified

GreenScreen Certified® Products > Reusable Food Service Ware (FSW), Food Packaging (FP), & Cookware (CW)

Company ▾	Product Type ▾	Product ▾	Level ▾	Version & Certificate# ▾	Expires ▾
We ReUse	Reusable FSW	Spork	Platinum	v1.0 #20241017	2028-08-31
We ReUse	Reusable FSW	Spoon	Platinum	v1.0 #20241019	2028-08-31
We ReUse	Reusable FSW	Fork	Platinum	v1.0 #20241018	2028-08-31
Ahimsa LLC	Reusable FSW	Commercial Child Spoon, Classic	Platinum	v1.0 #20241009	2028-08-31
Ahimsa LLC	Reusable FSW	Commercial Child Fork, Classic	Platinum	v1.0 #20241008	2028-08-31
Ahimsa LLC	Reusable FSW	Commercial / Retail Purposeful Plate, Classic	Platinum	v1.0 #20241007	2028-08-31
Ahimsa LLC	Reusable FSW	Commercial / Retail Balanced Bites Plate - 3 compartment, Classic	Platinum	v1.0 #20241010	2028-08-31
Ahimsa LLC	Reusable FSW	Cafeteria Tray Grade 304	Platinum	v1.0 #20231021	2028-08-31
Ahimsa LLC	Reusable FSW	10 oz Commercial Cup, Classic, rolled edge	Platinum	v1.0 #20241006	2028-08-31

Certified reusable products: <https://www.greenscreenchemicals.org/certified/products/category/reusable-food-packaging-food-service-ware-cookware>



Thank you!

Mark S. Rossi, PhD
Executive Director
Clean Production Action

GreenScreen Certified® for Reusable Food Packaging, Service Ware, & Cookware

Nonprofit organizations Center for Environmental Health (CEH) and Clean Production Action (CPA) have created the GreenScreen Certified Standard for Reusable Food Packaging, Service Ware, & Cookware. This groundbreaking certification sets a new safety standard for everyday items like pots, pans, food containers and other reusable food packaging that does not contain per- and polyfluoroalkyl substances (PFAS) plus thousands of other chemicals of concern.

The certification draws from CEH's extensive work testing reusable food ware for PFAS and builds on CPA's GreenScreen for Safer Chemicals®, a globally recognized tool for chemical hazard assessment used by governments, companies, and certification standards to encourage the design and use of inherently safer chemical ingredients.



REUSABLE FOOD SERVICE WARE 1.0
00000000
CEH CPA



GreenScreen Certified®



CEH CPA

FACTSHEET
GreenScreen Certified® for Reusable Food Packaging, Service Ware, & Cookware



Standard
Download the Standard [Read More](#)

Technical Factsheet
Download to learn about the [Technical Factsheet](#)

Find Certified Products

Reopening with Reusables

Supporting the American Food Service
Industry with Reusable Food Ware Procurement

December 11, 2024

Will Grassle

Associate for Policy and Programs
Product Stewardship Institute (PSI)



**PRODUCT
STEWARDSHIP
INSTITUTE**



PRODUCT STEWARDSHIP INSTITUTE

Restaurant Waste Reduction and Reuse

WEBINAR

Building Reusable Packaging Systems: Case Studies and Practical Steps for Municipalities



 RECORDING NOW PUBLICLY
AVAILABLE IN PSI WEBINAR ARCHIVES

SPEAKERS:

Jessica Watson – earthday365

Cassandra Hage – Office of Sustainability at
Washington University in St. Louis

Mac Sellars – r.World

Joycelyn Chui – Seattle Public Utilities

MODERATED BY:

Will Grassle, Policy
Associate, PSI

HOSTED BY:



**PRODUCT
STEWARDSHIP
INSTITUTE**

Project Overview

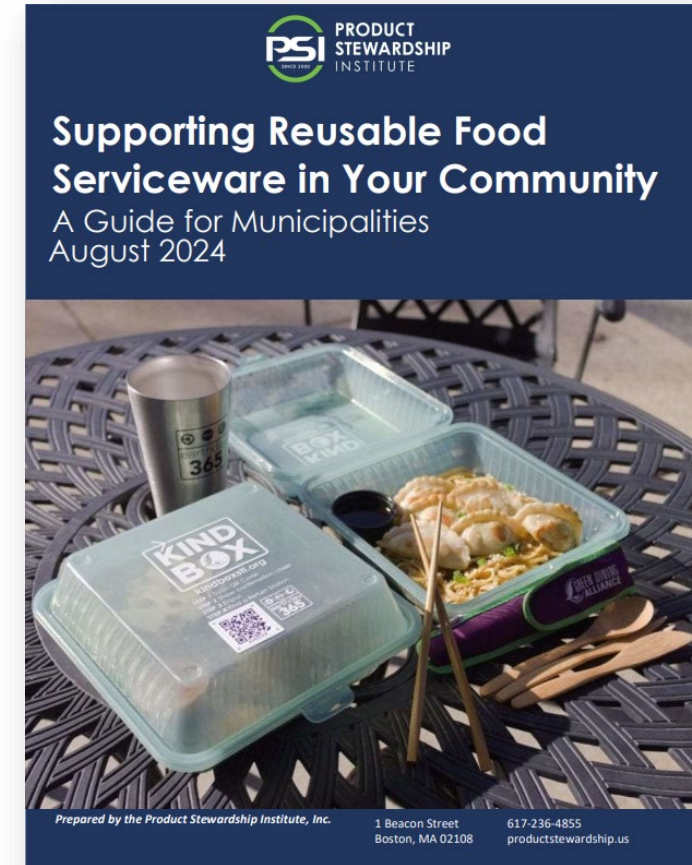
Reopening with Reusables

PSI & ED365 – US EPA Region 7 Grant

Purpose: Reduce the use of single-use food serviceware used by restaurants and other food service establishments in St. Louis.

Project Elements/Deliverables:

- Kind Box Program
- Reuse in Closed-Loop Systems
- Restaurant Waste Reduction
- r.World Feasibility Study
- Municipal Guide



Plastic Footprint and Foodware Cost Calculator

PSI's Plastic Footprint and Foodware Cost Calculator

Plastic Footprint Calculator:

Determine the amount, cost, and types of food serviceware purchased


Foodware Cost Calculator:

Project the cost savings achieved by transitioning from disposable food serviceware to reusable alternatives.

Plastic Footprint

Share the Plastic Footprint Tool:

[Share](#) [Post](#)

Step 1 - Assess Your Plastic Footprint

This Plastic Footprint Tool will help you identify:

- What types of disposable plastic you use
- What types of compostable and other disposable items you use
- How much you buy -- and how much it costs you
- Which products to target

In Step 2, Create a Source Reduction Plan, you will use this information to figure out which plastic and other disposable items to eliminate, reduce, or replace.

Didn't get here from [5 Easy Steps to Reduce Plastic & Benefit Your Business: A Guide for Restaurants & Eateries](#)? Download the guide to start your plastic reduction journey!

Foodware Calculator

Use this handy calculator to project the cost savings you will achieve by reducing disposable plastics at your food business. If you aren't sure of an amount, make your best guess or **look up a cost estimate**.

Name of Item:

Enter name of disposable item you want to reduce and/or replace.

Your current costs

Cases per month:

How many cases you purchase each month.

Municipal Guide on Reuse

Municipal Guide on Reuse

- Overview -

- **Title:** *Supporting Reusable Food Serviceware in Your Community – A Guide for Municipalities*
- **Purpose:** Playbook for municipalities interested in implementing reusable food serviceware systems in their communities.
- **Content:**
 - Problem overview
 - Benefits of a reuse economy
 - Actionable steps
 - Equity and sanitation/cleanliness consideration
 - Additional Resources



Municipal Guide on Reuse

- Highlights -

Environmental and Economic Benefits

- Job creation, litter reduction, achieving sustainability goals, etc.

Recommendations:

- Municipal-Led
- Municipal- Supported
- Reuse Company and Service Provider
- Extended Producer Responsibility

Additional Resources

4. Recommendations

Municipalities have numerous tools at their disposal to support reusable food serviceware systems and programs in their communities, each of which require varying levels of resources and municipal input. These tools range from mandatory reuse and waste reduction ordinances to voluntary initiatives, including reusable food serviceware grant programs and municipal procurement policies that support purchasing from reuse suppliers for city events and ongoing municipal facility operations. Municipalities can customize their reuse strategy based on their size, political atmosphere, geographic location, resident buy-in, and resources available.

Described in the following pages are actionable steps that a municipality can take to support reusable food serviceware systems, along with additional actionable steps that reuse companies and service providers can take to complement and amplify municipal efforts to support reusable food serviceware systems. These actionable steps are divided into four overarching approaches:


- Municipal-led
- Municipal-supported
- Reuse company and service provider
- Extended producer responsibility

Municipal-Led Approaches

Reuse and Refill Systems Within City Operations and Facilities

A foundational step that municipalities can take is to implement reusable food serviceware practices across all city facilities, including public works offices, utility offices, police and fire departments, and other departments. This first step is crucial because it sets an example for restaurants, food service establishments, other businesses, and residents. Leading by example reinforces the 'practice what you preach' principle, making it easier to advocate for similar changes in the broader community. Some examples of reusable food serviceware practices that city facilities may consider include:

- Installing water refill stations rather than supplying bottled water at city buildings.
- Replacing single-use disposable food serviceware with reusable food serviceware and cutlery in city building kitchens and cafeterias.
- Replace pod-using coffee machines with traditional, less wasteful coffee machines.

 **Case Study:** In 2021, SLO introduced its zero-waste plan, "[Lead by Example: A Plan for Carbon Neutral Municipal Operations](#)," which highlights changes the city will make to facilities and its vehicle fleet to reach carbon neutrality and set an example for others in the community.

Reuse Resources

Other Reuse Resources

- PSI Resources -

- “A Guide for Restaurants and Eateries” (Translated into 5 languages)
- “Marine Debris & Plastic Source Reduction Toolkit for Colleges & Universities”
- Restaurant Educational Videos on Helpful Tips for Waste Reduction (Translated into 5 languages)



Other Reuse Resources

- Other Resources -

Reports:

- **Upstream** – The New Reuse Economy Reports
- **World Economic Forum** – Consumers Beyond Waste Report
- **Seattle Public Utilities and University of Washington** – “Considering and Addressing Equity Concerns for Food Serviceware Reuse Systems in Seattle”
- **PR3** – Reuse Standards

The New Reuse Economy: Resource Library



The New Reuse Economy: How reuse systems & services will revolutionize how we consume

[View](#)



Reuse service provider directory

[View](#)

Other Reuse Resources

- Other Resources -

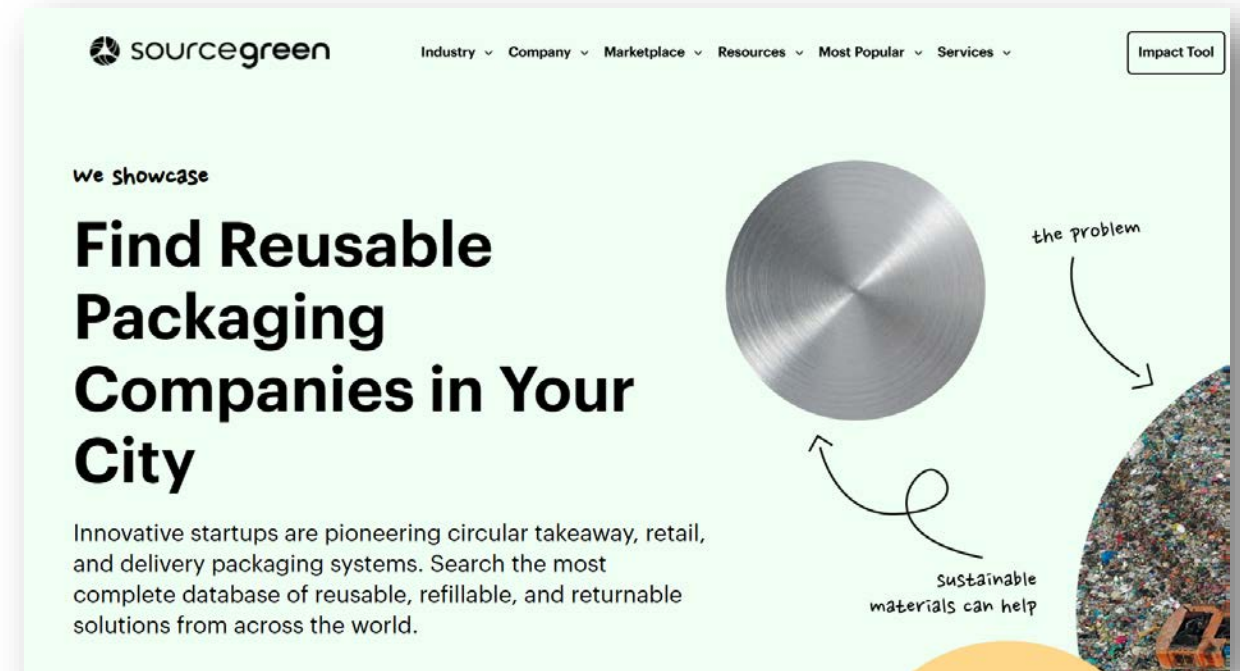
Calculators:

- **Huskee** – Cup Impact Calculator
- **EPA** – Simplified GHG Emission Calculator

Databases/Directories:

- **Biodegradable Products Institute (BPI)** – Certified Compostable Database
- **Source Green** – Reusable Packaging Directory

And So Much More!



Reusables vs. Compostables

Reusables vs. Compostables

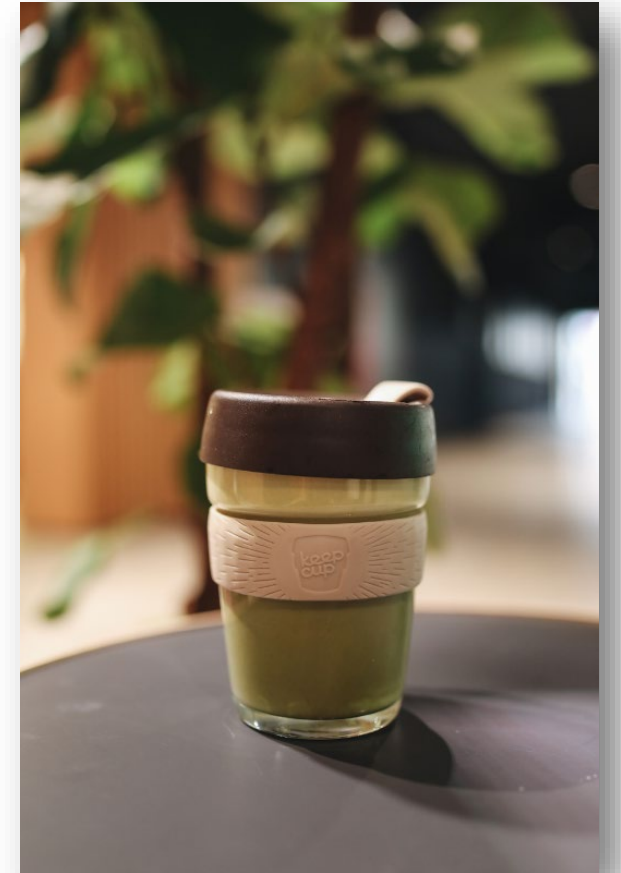
- Reusables -

The Case For Reusables (if reused):

- Lower GHG emissions
- Reduce use of virgin materials
- Job creation
- Long-term cost savings

The Case Against Reusables:

- Higher upfront cost
- Employee training and tracking logistics
- Customer buy-in and behavior change
- Requires dishwashing capabilities



Reusables vs. Compostables

- Compostables -

The Case For Compostables:

- Ease of use (same as other disposables)
- Lower upfront cost v. reusables
- Sustainable signaling to customers

The Case Against Compostables:

- Less "true" waste reduction
- Patchwork of infrastructure
- Improper disposal leads to contamination
- No long-term cost savings



Reusables vs. Compostables

- Case Study -

Missouri Botanical Garden – Sassafras Restaurant

- Action: Compostable to Reusable Portion Cups
- Reusable Portion Cups Purchased: 1056
- Reduction in Food Serviceware: 45,600/year
- Cost Savings: \$1,963/year
- GHG Emission Reduction: 0.85 MTCO2E/year





**PRODUCT
STEWARDSHIP
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Thank you!

will@productstewardship.us

Embedding Circularity at Aramark

Marie Davis

Enterprise Sustainability

Program Development & Engagement Director





Food Services

Hospitality, culinary, and convenience offerings delivered with safety and care

Facilities Management

Innovative and comprehensive solutions to plan, power, and operate your facilities, all with a focus on the bottom line.

Industries

Colleges & Universities

K-12 Schools & Districts

Hospitals & Healthcare Facilities

Stadiums, Arenas & Amphitheaters

Destinations & Cultural Attractions

Workplaces & Manufacturing Facilities

Conventions & Conference Centers

Correctional Facilities

Remote Workplaces

NORTH AMERICA

UNITED STATES

CANADA

MEXICO

SOUTH AMERICA

ARGENTINA

CHILE

EUROPE

BELGIUM

CZECH REPUBLIC

GERMANY

IRELAND

SPAIN

UNITED KINGDOM

ASIA

CHINA

KOREA

What does Circularity mean?

When we use the term **circular**, we refer to our ability to keep materials in the economy and out of the environment. An efficient system generates little to no waste. This is a term increasingly used across our industry to promote responsible production & consumption as well as integrate reuse.

This is a 5-year strategy focused on the following:

FURTHER reduce single-use items

EXPAND opportunities for customers to reuse, recycle, and compost

PARTNER with stakeholders to address challenges

DELIVER more circular operations



© Zero Waste International Alliance zwia.org/zwia

[Zero Waste Hierarchy of Highest and Best Use 8.0 - Zero Waste International Alliance \(zwia.org\)](#)

5- Year Targets

Elimination of SUP (single use plastic) straws

Elimination of SUP stirrers

Elimination of SUP Front of House to go bags

Elimination or Substantial Reduction of
FOH EPS (Styrofoam)

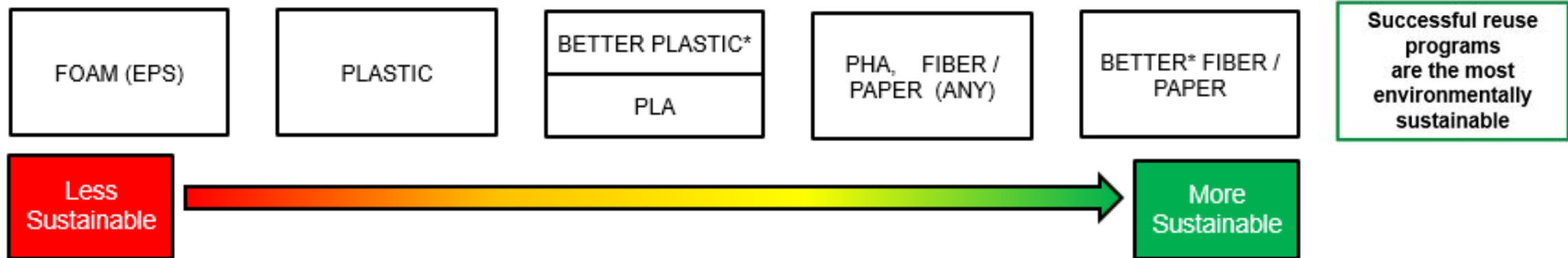
Continued reduction of SUP containers, cutlery and cups and transitioning to more environmentally preferable materials

Expand Reuse



Aramark's Sustainable Materials Spectrum

While every material has its pros and cons and there are always environmental tradeoffs – the below is simplified guidance to show typical sustainability benefits



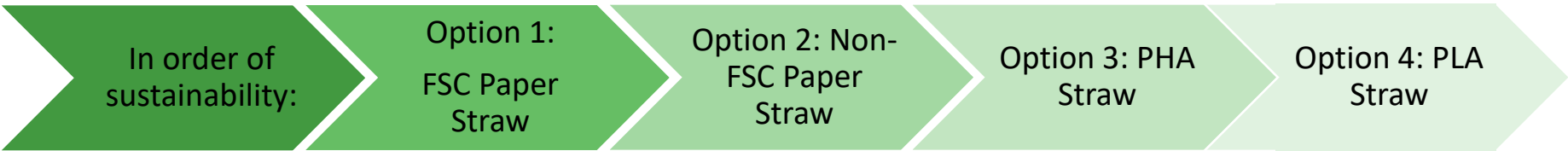
- The true sustainability value of compostable PLA is attained when product is actually composted (sent to be composted in a commercial composting facility)
- "Better Plastic" = Plastics with less virgin content and more post-consumer content. Plastics with 100% post-consumer content, especially if recyclable, could be considered more sustainable than PLA
- "Better Fiber / Paper" = 100% Post Consumer Content and/or FSC certified and/or PFAS free fiber (BPI certified)
- BPI, CMA, and TUV may be used as proxy for No-PFAS Added. Each follows the standard that test reports must show less than 100 ppm total fluorine.
- Other materials, such as aluminum and glass, tend to be more relevant to categories and use-cases other than food service disposables.
- Where possible, consider reusable products and / or whether the item is actually needed.

Using the Sustainable Materials Spectrum

Specific Example Leveraging Sustainable Materials Spectrum:

SUP Straw

Remove unnecessary straws and reduce straw usage where possible by offering upon request.
Transition remaining product to:



Provide operators with specific production information, highlight eco-labels, & offer additional sustainability guidance:



Understanding Packaging (UP) Scorecard

The Spectrum is a quick decision tool that can be used in decision making.

We partner externally with the Understanding Packaging (UP) Scorecard which provides a web-based tool to assess human and environmental health impacts of common foodware and food packaging choices.



UP Scorecard

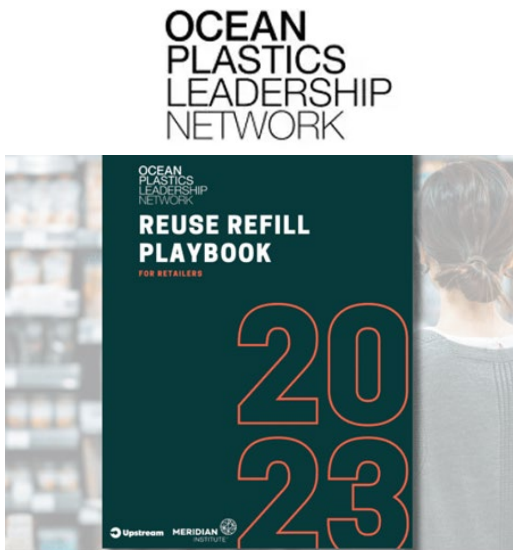
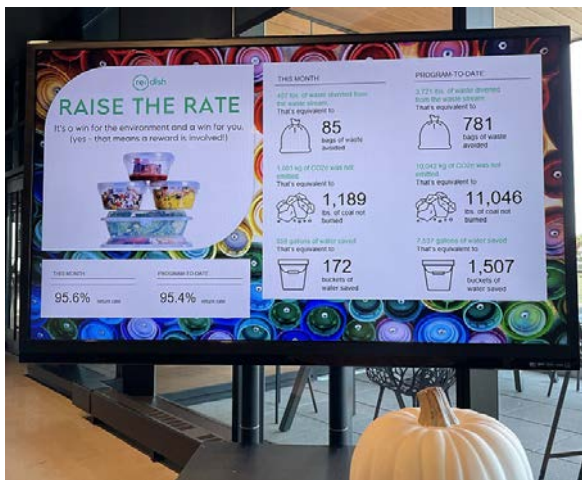
Straws
With Water

Products are shown in order of their summary score (scale from 1 to 100). A higher score means better performance. All scores represent the provision of one functional unit. For Straws this is 1 item. Empty circles with a dotted outline represent scores that had to be approximated due to the limited availability of underlying data.

Product	Plastic Pollution ...	Chemicals of Concern ...	Climate ...	Water use ...	Sustainable Sourcing ...	Recoverability ...	Summary Score ...
paper straw 25% recycled content	100 0 g plastic leakage	11	82 1 g CO ₂ -eq	80 0.01 L of water	26	75	62
stainless steel straw Reused 50 times 30% recycled content	100 0 g plastic leakage	36	27 3 g CO ₂ -eq	1 0.03 L of water	100	100	61
PLA straw 0% recycled content	85 0.01 g plastic leakage	11	78 1 g CO ₂ -eq	28 0.02 L of water	26	1	38
PP straw (User-Defined) 50% recycled content	1 0.05 g plastic leakage	11	22 3 g CO ₂ -eq	34 0.02 L of water	1	1	12
PP straw 0% recycled content	1 0.05 g plastic leakage	11	1 4 g CO ₂ -eq	9 0.03 L of water	1	1	4

Reduce, Reuse, Recycle

Reuse/Refill



Client Highlight
BOSTON UNIVERSITY
272,000+ reusable to-go containers
20,240+ participating individuals
96% container return rate



Compost



Engaging Consumers



- Diversity of operations - **no one product fits all**
- Food service company vs Product Manufacturer - **where we sit in the value chain, availability of alternative materials/supplier transparency**
- Legislation and Regulation- **variance domestically & internationally**
- **Cost of plastics vs. more sustainable alternatives**
- **Waste infrastructure**
- **Consumer Behavior**

Successes

News | Destinations

Yosemite Hospitality Announces Significant Reduction of Single-Use Plastics in Yosemite National Park

December 06, 2023



[Yosemite Hospitality Announces Significant Reduction of Single-Use Plastics in Yosemite National Park - Aramark](#)

Going Green: Reusable Container Initiative Starts at GSU

New program aims to reduce packaging waste



[Choose to Reuse Reusable Container Program | Dining Services \(bu.edu\)](#)
[Students Dining at Boston University Choose to Reuse - Aramark](#)

December 18, 2023

Whittling down waste

UCI is a sustainability superstar in reducing, reusing and recycling – and renouncing plastic

By Nicholas Schou, UCI



In UCI's dining facilities – such as Brandywine (shown) – 97 percent of all products are either reusable or recyclable. UCI

[Whittling down waste – UCI News](#)

REUSABLES & GREEN DISPOSABLES AWARD

Received the most GreenPoints™ in the Disposables Category

Chauncey's Choice at Coastal Carolina University earned 128.58 GreenPoints™ in the **Reusables & Disposables category**. This Certified Green Restaurant® serves all to-go orders in reusables, uses 100% reusables for staff meals, and only offers students reusable plates, cutlery, glasses, bowls, and more with no disposable options available.

FEATURED

UT organizations produce first 'Zero Waste' softball season through composting

Caitlin Mulqueen, Staff Writer Feb 22, 2023 Updated Feb 24, 2023



[UT organizations produce first 'Zero Waste' softball season through composting | Campus Events | utdailybeacon.com](#)

News | Sustainability

Embedding Circularity: Reduce, Reuse, Recycle Takes on New Meaning—and Importance

October 24, 2024

<https://www.aramark.com/newsroom/news/2024/october/embedding-circularity-aramark>



2024 National Pollution Prevention Training
and Conference

Supporting the American Food Service Industry with Reusable Food Ware Procurement

December 11, 2024

1:15 – 2:30PM ET

Moderated by Allison Thompson, EPA, EPP Branch

Speakers:

- **Allison Thompson, EPA, Environmentally Preferable Purchasing Branch**
- **Mark Rossi, Clean Production Action**
- **Will Grassle, Product Stewardship Institute**
- **Marie Davis, Aramark**