

Foodservice Packaging Recovery

GRC Conference Sept 27, 2022



Foodservice Packaging Institute



- Established in 1933
- Only industry trade association in North America solely focused on all single-use foodservice packaging products
- Members include:
 - Converters and their raw material and machinery suppliers (represents about 85% of the industry)
 - Foodservice distributors and operators

FPI's Recovery Groups



Paper Recovery Alliance (PRA)

Plastics Recovery Group (PRG)



Foam Recycling Coalition (FRC)

Paper Cup Alliance (PCA)

Current PRA/PRG Members



































































Foodservice Packaging



Single-use foodservice ware and packaging used by foodservice establishments



Specifically, our work focuses on:

- Cups (including sleeves)
- Containers
- Boxes
- Paper bags











Questions we've answered



How much material is available? Estimated material generation	Who's recycling FSP? Conducted MRF Benchmarking Study	Are there end markets for FSP? Published end markets map	What are the access rates for FSP? Co-sponsored SPC Centralized Study on the Availability of Recycling		Where are domestic end markets for Paper FSP? • Surveyed mills; 4 • 16 markets at end accepting paper FSP of 2018 • 21 markets at end of 2019 • 30 confirmed markets at end of 2020				33 confirmed markets	
	Will the material flow to the right bale? Co-sponsored MRF Material Flow Study		How to expand end markets for FSP? Engaged in end market outreach, partnerships & development						Joint Declaration by 8 Mill Companies	Paper Cup Recycling white paper released
2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Where is the material available to be collected? Learned curbside had greatest volume for collection	Is food residue a problem? • Food Residue Study (Boston) • Food Residue Study (Delaware)		How much FSP arises in bales? Analyzed mixed paper bales in Seattle and NYC Co-sponsored Rigid Plastics Bale Audit	What messaging is clearestfor residents? Conducted National Resident Messaging Survey	How to add FSP to city's materials? Developed image library, flyers, ads, video, best practice language	How does compostable FSP contribute as a feedstock? Found compostable FSP provided the same benefit as traditional carbon / bulking materials	Where are North American end markets for Plastic FSP? Surveyed PET, PP, and PS end markets How can plastic FSP be made more recyclable? Partnered with APR to develop Design Guide for Foodservice Plastics Recyclability		How much FSP arises in bales? Mixed paper bale audit (1 MRF) corroborated 2015 findings Mixed plastic bale	How much FSP arises in bales? Mixed paper bale audits from partner
	Found little to no difference between FSP versus other commonly recycled food packaging									MRFs (pending) What are current
	How will FSP impact the bale? Estimated impact	mpact the bale?			Which cities and composters accept FSP? Co-sponsored			How can more PET be	audit corroborated 2015 findings be recycled?	access rates? Co-sponsored cup access study with NextGen (pending)
					BioCycle residential study and surveyed composters			Spearheaded PET Thermoforms Collaboration Best capture opportunities for paper cups? Paper cup flow studies (4 MRFs) corroborated		Other studies planned / underway

Research pending in 2022:

- Mixed paper bale audits
- Resident Messaging Survey
- Update Food Residue Study
- Chicago CompostABLE Contamination and Correlation Study

Research planned for 2023:

- Update generation data
- Resident awareness surveys (pre- and postlaunch)
- End markets survey

Research planned for 2024:

- Update disposal data
- Update recovery estimate

2015 results on % to container line



Paper Cup Recycling

Mill Commitment



We Want Your Paper Cups!



OUR COMMITMENT TO RECYCLING

We, the undersigned organizations, are committed to increasing paper cup recycling. With the ever-increasing need to accelerate the recovery of foodservice packaging, we have taken many foundational and intentional steps to increase the viability of paper cup recycling and ensure and market acceptance.

A HIGHLY DESIRABLE RECYCLED MATERIAL

Paper cups are made with long, bleached fiber that are highly desired by paper mills because it adds strength and quality to new products made with recycled fiber. To date, there are 29 paper mills across nine companies in North America that accept residential mixed paper bales with paper cups included. Additionally, there are 5 mills/facilities across three companies that accept paper cups into bales of aseptic and gable top cartons ('Grade 52' bales). Participating paper mills have performed pulpability testing and/or mill trials to determine their ability to successfully recover fiber from paper cups and use the fiber in their furnish.

MAKING NEW EVERYDAY PRODUCTS

To provide a liquid barrier to the fiber, paper cups have a coating either on the inside (for hot drink cups) or on both sides (for old drink cups). The pulping systems in use at our mills can separate the coatings from the fiber and recover the fiber as a feedstock for new products. Yield from the cup is in the 70 to 90 percent range, depending on whether the cup has a single or double sided coating and the pulping system in use. These fiber products go on to be made into a variety of everyday items such as cereal boxes, facial tissues, corrugated boxes, and new paper cups!

ADDING PAPER CUP RECYCLING

Material recovery facilities (MRFs) can add paper cups to their accepted material list. Communities can advocate for the inclusion of paper cups in their recycling stream by working with their waste haulers and MRFs.

A list of mills that accept paper cups and a map are on the next page. You can also find them on an interactive map <u>here</u>.

JOIN THE PAPER CUP RECYCLING MOVEMENT

Many of us are members of the Foodservice Packaging Institute, which provides industry-funded grants to MRFs, waste haulers, and communities that expand paper cup recycling access, increase current recovery capabilities, and educate residents on new paper cup recycling programs. If you are interested in partnering with FPI to add paper cup recycling to your recycling program, visit www.recyclefsp.org or email recyclefsp.org or or mail recyclefsp.

Additional information about paper cup recycling may be found at: www.recyclepapercups.org.















SUSTANA FIBER



We Want Your Paper Cups!



Des Moines, IA ND Philadelphia, PA Fai

Essity Barton, AL Menasha, WI Middletown, OH South Glens Falls, NY

Georgia-Pacific Green Bay, WI Muskogee, OK

Graphic Packaging International Battle Creek, MI East Angus, QC Middletown, OH Kalamazoo, MI

Great Lakes Tissue Cheboygan, MI

Green Bay Packaging Green Bay, WI ND Paper Fairmont, WV

Pratt Conyers, GA Shreveport, LA Staten Island, NY Valparaiso, IN Wapakoneta, OH

Sonoco Hartsville, SC

Sustana Levis, QC DePere, WI WestRock

Aurora, IL.
Battle Creek, MI
Chattanooga, TN
Dallas, TX
Eaton, IN
Missisquoi, VT
St. Paul, MN
Stroudsburg, PA

THE MIXED PAPER MILLS ON THIS LIST REPRESENT:



of the U.S./Canadian mixed paper demand (% by quantity consumed)



of the U.S./Canadian mills consuming mixed paper (% by mill count)

Generators should contact end markets directly or via their broker to determine specifications and terms. *as of 6/2022

Paper Cup Recycling



- Made with long, bleached fiber – highly desired by paper mills.
- Can be sorted into mixed paper (Grade 54) or polycoat (Grade 52) bales.
- Pulping systems can separate coatings from fiber with a 70%-90% yield.
- Fiber goes on to become cereal boxes, facial tissue, corrugated boxes, and new paper cups!



Paper Cups Accepted in 2 Commodities



mills/facilities

3 companies

in polycoat bales

29 mills

companies

accept cups in mixed paper bales

representing



Of U.S./Canadian mixed paper demand (% by quantity consumed)



Of U.S./Canadian mills consuming mixed paper (% by mill count)

North American Paper Cup Acceptance





End Markets for Post-Consumer Paper Cups



Mixed Paper Markets

Cascades, Ashland, VA (operational Q1 2023)

Cascades, Kingsey Falls, QC

Cascades, Niagara Falls, NY

Essity, Barton, AL

Essity, Menasha, WI

Essity, Middletown, OH

Essity, South Glens Falls, NY

Georgia-Pacific, Green Bay, WI

Georgia-Pacific, Muskogee, OK

Graphic Packaging International, Battle Creek, MI

Graphic Packaging International, East Angus, QC

Graphic Packaging International, Middletown, OH

Graphic Packaging International, Kalamazoo, MI

Green Bay Packaging, Green Bay, WI

ND Paper, Fairmont, WV

Pratt, Conyers, GA

Pratt, Shreveport, LA

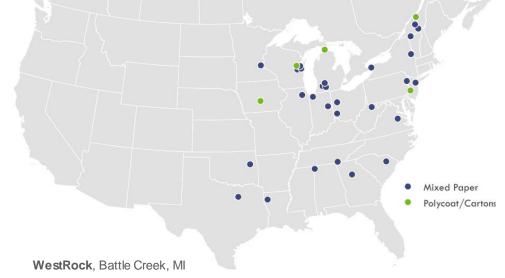
Pratt, Staten Island, NY

Pratt, Valparaiso, IN

Pratt, Wapakoneta, OH

Sonoco, Hartsville, SC

WestRock, Aurora, IL



WestRock, Chattanooga, TN

WestRock, Dallas, TX

WestRock, Eaton, IN

WestRock, Missisquoi, VT

WestRock, St. Paul, MN

WestRock, Stroudsburg, PA

Polycoat / Carton Markets

Continuus, Des Moines, IA

Continuus, Philadelphia, PA

Great Lakes Tissue, Cheboygan, MI

Sustana (Breakey Fiber), Levis, QC

Sustana (Fox River Fiber), DePere, WI

Interactive map at: https://www.recyclefsp.org/end-markets-map



Georgia Opportunities

Paper Cup Recycling Access



Regional Strategy & Partnerships



Goal: Increased recovery of paper and plastic cups and containers



Communities with access to paper cup recycling RIGHT NOW



Athens- Clarke County:

All of ACC

Dekalb County

- · Avondale Estates
- Brookhaven
- Chamblee
- Decatur
- Doraville
- Lithonia
- Pine Lake
- Stone Mountain
- Tucker
- Dunwoody
- Unincorporated DeKalb

Fulton County

- Alpharetta
- Atlanta
- College Park
- East Point
- Fairburn
- Hapeville
- Roswell

Cobb County

- Smyrna
- Powder Springs
- Austell

Chatham County:

- Savannah
- Pooler

Columbus Consolidated Government

In discussion

Website – www.recycleFSP.org







No matter what role you play in recovering foodservice packaging, this toolkit has something for everyone.

Recovering Foodservice Packaging (FSP) can have substantial benefits in cost-saving waste reduction, revenue generation, reduction of environmental impact and positive expectations from residents and customers. This website presents lessons learned in successful recovery of foodservice packaging. It is a comprehensive resource on what foodservice packaging is currently being recovered, collected, processed and marketed. Let's get started!





Foodservice Operators

A growing number of restaurant and foodservice operators recycle items like cardboard. Many compost food scraps. What's next? As these efforts become more mainstream, operators may be wondering about recycling or composting those cups, containers, boxes, bags and other items used by their customers.

The National Restaurant Association (NRA) and FPI have teamed up to offer tips and information on how to implement onsite recycling and composting programs, with an emphasis on foodservice packaging.

Why Recycle/Compost Foodservice Packaging?

- programs can help you become compliant and avoid fines. Check the map below to find out more
- environment and increase brand loyalty by giving customers the opportunity to recycle or compost their waste in-store.

Resources

Resident Education Kit





HOME

ABOUT FPI

FOODSERVICE OPERATORS

COMMUNITIES

MATERIALS RECOVERY FACILITIES

END MARKETS

RKETS COMPOSTING

COMPOSTING & AD FACILITIES

FAQs

Resident Education Kit

FPI is committed to making resident outreach of recycling foodservice packaging (FSP) simple and successful. We have resources to add to your current educational material or if you're starting from scratch. Click on the buttons below to access the resources in the kit.











Best Practices



FPI Community Partnerships



Community Partnership



GOALS

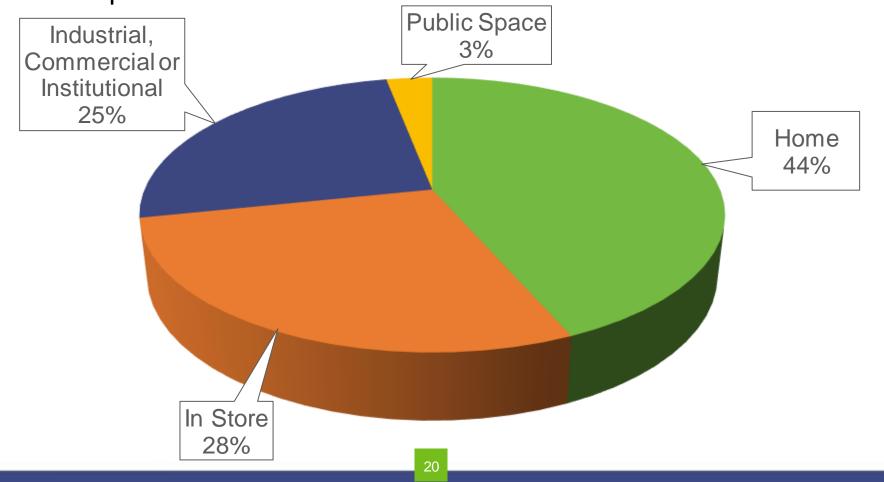
FPI's overall goal is to develop and promote economically viable and sustainable recovery solutions for foodservice packaging.

The purpose of FPI's Community Partnership program is to add a suite of foodservice packaging to curbside recycling programs.

Why Focus on Curbside Collection?



Most foodservice packaging is discarded at home or in the workplace



Overview of Community Partnerships



If all stakeholders agree, FPI and partners work together in these areas:











Contracting

Define
obligations
of community
and aspects
of FPI
support

Operations Plan

How big?
Any process
changes?
What is
sorted
where?

Communications Plan

Education and outreach planning, adding new material (language, images, integration into existing media)

Community Kick-off Event

PR and publicity kickoff event

Measurement & Benchmarking

tonnage, residue, bale audit — what and how much? Before snapshot and again 6-9 months after kickoff.

Sample Educational Flyer





Sample Educational Flyer





Food Waste

INCLUDES:

- Waste from food preparation
- Patient tray food waste
- Unserved prepared foods
- Cooled soups
- Expired foods (all packaging removed)



Fruits



Vegetables



Eggshells



Bread/Pasta/Grains



Meat/Bones/Dairy



Oil/Grease

Other Organic Waste

INCLUDES:

- BPI Certified products
- Food-soiled paper and cardboard (e.g. pizza boxes and packing boxes-remove tape and staples)
- Unbleached paper products



BPI Certified Products



Coffee Grounds, Unbleached or BPI Certified Coffee Filters and Tea Bags



Napkins and Paper Towels unbleached only

Non-Compostable Materials: When In Doubt, Leave It Out!



No Glass Jars/ Bottles



No Plastic includes jugs, bags, wrap,



No Condiment Packaging



No Metal includes food/beverage cans, utensils



No Bleached Paper Towels/ Napkins



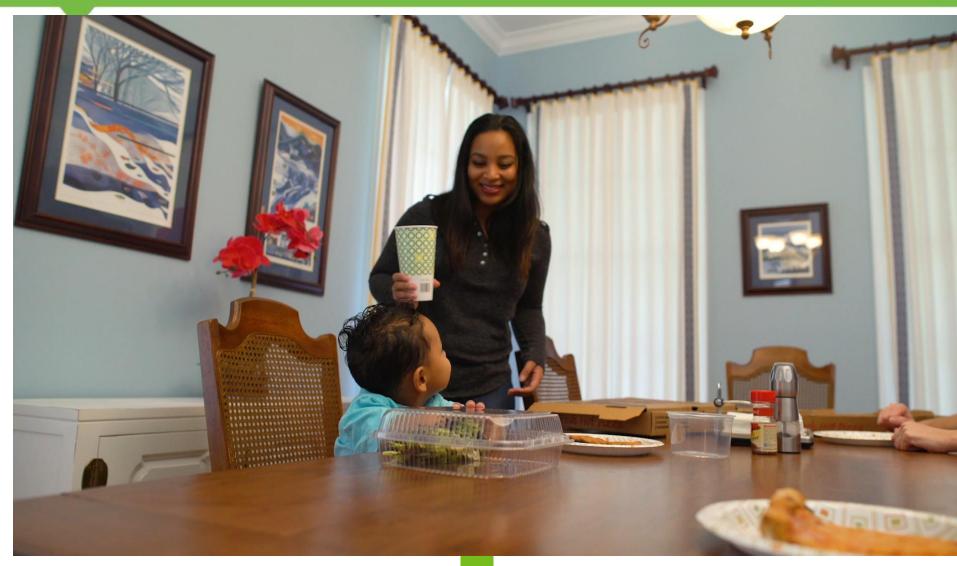
No PPE includes masks, gloves, hair nets

HENRY FORD HEALTH.



Customizable Video





Athens-Clarke County













Athens-Clarke County





ACC Recycling celebrates becoming the first county to accept paper cups

7 PHOTOS 10:10 a.m. EST Jan. 22, 2021



Atlanta





RECYCLE THANK YOU FOR RECYCLING THESE:





Paper





Metal





Bottles and Jars empty and dry

Aluminum and Steel Cans empty and dry

Cartons, Mixed Paper, Cardboard, Newspaper, and Magazines flatten cardboard

Bottles and Containers empty and replace cap













Recyclables no garbage

return to retail

or Clothing

Cords, Hoses or Chains

No Food or Liquid empty all containers



www.atlantaga.gov/recycling

Need a cart? You may be eligible CONTACT ATL for a replacement at no extra charge.













Community Partnerships Success



	Chattanooga, TN	Louisville, KY	Washington, DC
MRF Audits	 Contamination decreased from 14% to 8% Increase in proportion of fiber collected from 62% to 73% 	 Contamination decreased from 17% to 5-8% Fiber (cardboard, mixed paper, newspaper) increased from 61% to 65% 	 Contamination decreased from 33.2% to 25.8%. Mixed paper increased from 9.4% to 19.9%.
Engagement	 116% increase, to recycling webpage post-launch 46% increase in cart or bin requests 	 Increased web traffic by 45% Increased cart requests by 33% Social media engagements increased by 234% 	 140k more views of "How to Prepare Recyclables Video" than expected. 8.7 to 10 million impressions using Bus/Rail Ads



Foam Recycling Coalition

FRC Summary



Current Foam Recycling Coalition Members (2022)





















Foam Recycling Coalition

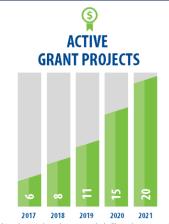


Project Work

- General education about foam recycling
- Understanding end markets
 - End market study
- Grant program
 - FRC offers grants to public and private businesses in the U.S. and/or Canada to recycle foam FSP and protective packaging
 - Recipients will receive funding for equipment, technical assistance
 - 32 grant projects have been awarded funding since 2015
 - www.recyclefoam.org

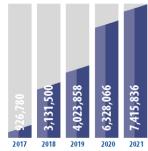
FRC Infographic





24 total grants have been awarded. Chart shows cumulative number of FRC grantees that have installed equipment and are operating foam PS recycling programs through the end of 2021.





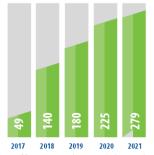
Additional population that have access to foam recycling based on active FRC grant projects.



Impact of Foam PS Recycling Grants in North America

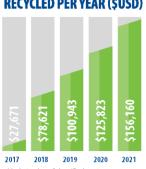
FPI's Foam Recycling Coalition has awarded grants across North America to increase the recycling of foam polystyrene. The data here summarizes the impact of the grants that have been implemented from 2017 through 2021. FRC began awarding grants in 2015. For more details, please visit www.RecycleFoam.org

LANDFILL SPACE SAVED PER YEAR (53FT TRAILER LOADS)



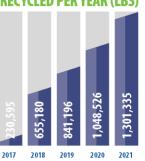
Volume of foam converted to an equivalent number of tractor trailer loads. 53 ft trailer = 3,816 cubic feet, non-densified foam = 1.30lb./ cubic ft.

VALUE OF FOAM RECYCLED PER YEAR (\$USD)



Market value of densified post-consumer foam PS packaging collected by grantee:

TOTAL WEIGHT OF FOAM RECYCLED PER YEAR (LBS)



Reported weight collected for recycling from active grantees.

FRC Grant Communities



Mecklenburg County, NC

Wilmington, NC (UNC-W)

Mount Prospect, IL

Troy, VA

FRC GRANT COMMUNITIES

- Metro Denver, CO
- Colchester County, Nova Scotia
- Athens-Clarke County, GA
- McLeod County, MN
- Redding, CA
- Madison County, NY
- Agilyx Tigard, OR
- Pyrowave Valleyfield, Quebec
- Atlanta, GA
- · Hanover-Brockton, Ontario
- Otsego County, NY
- Austin, TX
- Westmoreland County, PA
- Greensboro, NC (x2)
- Coon Rapids, MN
- St Lucie County, FL
- Collier County, FL
- Norman, OK
- Rock Spring, WY
- Memphis, TN
- Outagamie County, WI
- · Gilford County, NH



Thank you!

Visit RecycleFSP.org for more info:

Contact:
Ashley Elzinga, FPI
aelzinga@fpi.org

Matt Todd, RRS mtodd@recycle.com





NOW RECYCLING:

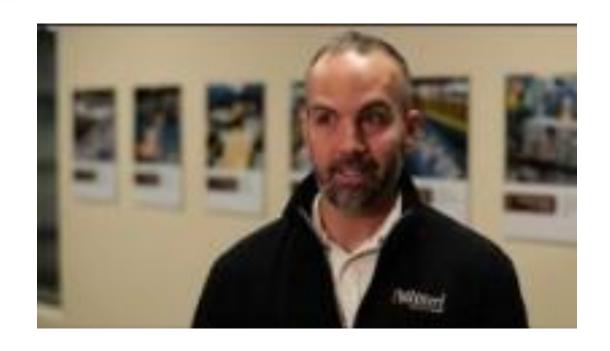
Clean & empty
PAPER
CUPS





Madison, WI

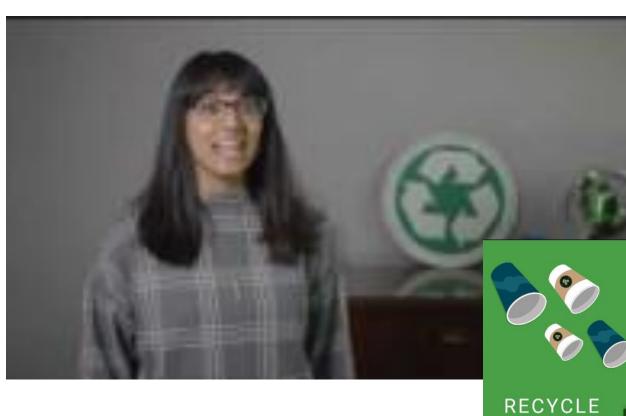






Detroit, MI: GFL & RRRASOC







With the inclusion of paper beverage cups in our acceptable materials, you can now quench your thirst the smart way! Be sure to recycle the clean, empty cup from your afternoon pick-me-up beverage (no lids, straws or stirrers, please). To find out more, visit rrrasoc.org.



RECYCLE
CLEAN &
EMPTY
PAPER
CUPS

Denver Campaign Launch









Partnership Allows Two Million Residents to Recycle Paper Cups

Denver Joins Chattanooga, Tenn.; Washington, D.C.; and Louisville, Ky as FPI community partner.

Waste360 Staff | Dec 05, 2018



NEWS > ENVIRONMENT

Denver can now recycle paper coffee cups

The city aims to improve its below-average recycling rate

By SAM TABACHNIK | stabachnik@denverpost.com | The Denver Post PUBLISHED: November 30, 2018 at 4:24 pm | UPDATED: November 30, 2018 at 5:10 pm

Massive stacks of recycled trash inside Alpine Waste and Recycling towered behind Denver City Councilwoman Kendra Black as she posed a question nearly every coffee drinker has asked: What are we supposed to do with those paper cups?



Sample Communications Materials









Reporting from Current CPs: Refresh Campaigns









