Collaborations to Revitalize Recycling

adapt. evolve. recycle.
WHAT IS RENEW?

• Connects Industry-Led Investments & Community Decision Makers
• Links Municipalities with Research, Resources, and Grants
• Supports a Pro-recycling Narrative Keeping Recycling on the Agenda
• Collaborates to Improve Recycling Systems & Build Circular Economies
HOW RENEW ENGAGES TARGET AUDIENCES

Industry and Municipal
Renew works with Industry Collaborators to:

- Customize solutions for your pain points
- Accelerate the impact of your industry initiatives, setting the stage for voluntary widescale adoption of industry programs
- Gain representation in state, local, and national organizations audiences
- Promote your efforts in person, print, and digital
- Engage with network of decision makers to actively support pro-recycling messaging
- Share costs to access resources and target audiences

Renew is where partnerships and innovation come together to support robust recycling
Renew connects with municipalities to:

- Develop robust recycling programs and expanded material lists
- Accelerate the impact of industry initiatives, which sets the stage for voluntary and widespread adoption of industry programs
- Position recycling as the new manufacturing
- Implement strategic and technological innovation
- Develop and strengthen domestic end markets
- Achieve environmental benefits like GHG reduction and energy conservation

Renew illuminates the path for successful recycling.
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 90% 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)
## Questions We’ve Answered

<table>
<thead>
<tr>
<th>Year</th>
<th>Question</th>
<th>Study</th>
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<tbody>
<tr>
<td>2012</td>
<td>How much material is available? Estimated material generation</td>
<td>Learned curbside had greatest volume for collection</td>
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<td>2013</td>
<td>Are there end markets for FSP? Co-sponsored SPC Centralized Study on the Availability of Recycling</td>
<td>Conducted MRF Material Flow Study</td>
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<td>2014</td>
<td>Who’s recycling FSP? Conducted MRF Benchmarking Study</td>
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<td>2015</td>
<td>What are the access rates for FSP?</td>
<td>Co-sponsored MRF Material Flow Study</td>
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<td>2016</td>
<td>Will the material flow to the right bale? Co-sponsored MRF Material Flow Study</td>
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<tr>
<td>2017</td>
<td>Where are domestic end markets for Paper FSP?</td>
<td>Published end markets map</td>
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<tr>
<td>2018</td>
<td>How does compostable FSP contribute as a feedstock? Study found compostable FSP provided the same benefit as traditional carbon / bulking materials</td>
<td>Conformed 16 mills accepting paper cups</td>
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**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)
- Found little to no difference between FSP versus other commonly recycled food packaging

**How will FSP impact the bale?**
- Estimated impact

**How much FSP arises in bales?**
- Analyzed mixed paper bales in Seattle and NYC
- Co-sponsored Rigid Plastics Bale Audit

**What messaging is clearest for residents?**
- Conducted National Resident Messaging Survey

**How to expand end markets for FSP?**
- Engaged in end market outreach, partnerships & development

**Which cities and composters accept FSP?**
- Co-sponsored BioCycle residential study and surveyed composters

Overviews of studies available at www.recycleFSP.org.
Foodservice Packaging

Single-use foodservice ware and packaging used by foodservice establishments

Specifically, our work focuses on:

- Cups (including sleeves)
- Containers
- Boxes
- Paper bags
<table>
<thead>
<tr>
<th></th>
<th>Chattanooga, TN</th>
<th>Louisville, KY</th>
<th>Washington, DC</th>
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<tr>
<td><strong>MRF Audits</strong></td>
<td>• Contamination decreased from 14% to 8%</td>
<td>• Contamination decreased from 17% to 16%</td>
<td>• Contamination decreased from 33.2% to 25.8%.</td>
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<tr>
<td></td>
<td>• Increase in proportion of fiber collected from 62% to 73%</td>
<td>• Fiber (cardboard, mixed paper, newspaper) increased from 61% to 65%</td>
<td>• Mixed paper increased from 9.4% to 19.9%.</td>
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<td>• 116% increase, to recycling webpage post-launch</td>
<td>• Increased web traffic by 45%</td>
<td>• 140k more views of “How to Prepare Recyclables Video” than expected.</td>
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<td>• 46% increase in cart or bin requests</td>
<td>• Increased cart requests by 33%</td>
<td>• 8.7 to 10 million impressions using Bus/Rail Ads</td>
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<tr>
<td><strong>Engagement</strong></td>
<td></td>
<td>• Social media engagements increased by 234%</td>
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North American End Markets for Plastic FSP

Interactive map at: https://www.recyclefsp.org/end-markets-map
End Markets for Post-Consumer Paper Cups

Mixed Paper Markets

Graphic Packaging International, Battle Creek, MI
Graphic Packaging International, East Angus, QC
Graphic Packaging International, Middletown, OH
Graphic Packaging International, Kalamazoo, MI
Pratt, Conyers, GA
Pratt, Shreveport, LA
Pratt, Staten Island, NY
Pratt, Valparaiso, IN
ND Paper, Fairmont, WV
WestRock, Aurora, IL
WestRock, Battle Creek, MI
WestRock, Chattanooga, TN
WestRock, Dallas, TX
WestRock, Eaton, IN
WestRock, Missisquoi, VT
WestRock, St. Paul, MN
WestRock, Stroudsburg, PA

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

Polycoat / Carton Markets

Great Lakes Tissue, Cheboygan, MI
Sustana (Breakey Fiber), Levis, QC
Sustana (Fox River Fiber), DePere, WI
Foam Recycling Coalition
Current Foam Recycling Coalition Members

- Americas Styrenics
- Cascades
- Chick-fil-A
- CKF
- Commodore
- Convermex USA
- DART
- Dyne-a-pak
- Genpak
- INEOS Styrolution
- KYD
- NOVA Chemicals
- Pactiv
- Republic Plastics
- Total
FRC Grant Communities

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 (CHaRM)
• Hanover-Brockton, Ontario
• Otsego County, NY

2019 FRC GRANTS IN PROCESS

• Oakland County, MI (SOCRRA)
• Pitt County, NC
• Austin, TX
County of Colchester, Nova Scotia

• Provides recycling services to 130,000 residents.
• Transports collected recyclables to county-owned and operated dual-stream MRF.
• County estimated foam polystyrene comprised 1%, or 620 tons, of annual municipal waste stream.
• Awarded $50,000 grant from FRC to purchase foam densifier.
• Foam densifier installed in MRF in April 2016.
Alpine Waste and Recycling
Denver, CO

- Alpine (now GFL) services residential and commercial customers.
- Alpine used the $45,000 FRC grant as an investment tool to assist and justify the cost/benefit of recovery foam at their new single stream MRF.
- Alpine found both west coast and Midwest end market options for their densified foam, but use an Asian export market for best pricing (range of $.06/lb. - $.12/lb.)
Redding, CA program

- 92,000 population
- Drop-off
- Transition to curbside
- City-run program
- City owned MRF
Redding, CA

- 0.62 lbs/capita recovered
- Commodity grade plastic
- High demand
BUILDING STRONGER RECYCLING SYSTEMS

• Success stories
  • Carton recycling – increased access to carton recycling from 18% of households to 60%+ over ten years
  • Direct investments into recycling infrastructure through equipment grants and technical assistance
  • Growing recycling of cartons with investments in school carton recycling programs and education and outreach campaigns and grants.