Recovering Paper Foodservice Packaging:
Pilot Programs with Global Green USA’s Coalition for Resource Recovery

Lily Kelly, Global Green USA

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About Global Green USA

• US Chapter of Green Cross International, founded by President Mikhail S. Gorbachev to foster a value shift to a sustainable and secure future by reconnecting humanity with the environment. Over 30 national affiliates around the world.

• Global Green’s programs create **sustainable urban environments** by merging innovative research, technical assistance, cutting-edge community based projects and targeted education and outreach.

• 501c3 non-profit organization
About Global Green USA’s Coalition for Resource Recovery (CoRR)

- CoRR is an industry working group dedicated to combating climate change and **transforming waste to assets**, and assisting cities in reaching 70% waste diversion.

- CoRR conducts **pilots and related research** to identify and accelerate development of scalable, transferable waste diversion programs and technologies.
# A Coalition of Members

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CoRR’s Programs
Recyclable Wholesale Transfer Packaging
CoRR’s Programs

Commercial Food Waste Recovery
CoRR’s Programs

Recovering Paper Foodservice Packaging
Foodservice Packaging Recycling Initiative

Overarching Goal:

Recycle foodservice packaging into valuable, high-quality materials

Make Recycling the Obvious Choice
Why Recover Paper Packaging?

• Brand value
  • Customers want to recycle

• Saves Money
  • Why pay to landfill it when you can sell it to a paper mill?

• Helps the Environment
  • Recycling all paper foodservice packaging would be equivalent to shutting down 3 coal–fired power plants with no loss of energy.
Initial Program Hypotheses

- Restaurants want to recycle, but need it to be cost-effective for them and their haulers
  - Research undertaken by the National Restaurant Association supports this

- Much foodservice packaging can be recycled at common mill types.
  - Pilots with WMU support this, as well as anecdotal evidence from mills.

- Waste haulers will accept it if there is demonstrable demand by paper mills.
Program Goal and Objectives

- Successful Small Scale Pilots
- Recycler & Mill Recruitment for Full-Scale Tests
- Bin Deployment to Collect Material
- National Expansion of Pilot
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Goal—Foodservice Packaging Recycling Goes Viral
Program Goal and Objectives

- Goal: Foodservice Packaging Recycling Goes Viral
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Program Goal and Objectives

- Foodservice Packaging Recycling Goes Viral

1. Successful Small Scale Pilots
2. Recycler & Mill Recruitment for Full-Scale Tests
3. Bin Deployment to Collect Material
4. National Expansion of Pilot

Goal—Foodservice Packaging Recycling Goes Viral
Supporting the Pilots
What We Do

- Work with haulers in NYC to determine the range of options within their existing systems and contracts
- Provide research support to QSRs concerning recoverable packaging types
- Add brand value through promotion of commitment to helping increase waste diversion
What We Do

- Provide on-the-ground support for recycling system deployment, including:
  - Research
  - Employee outreach materials
  - Waste sorts and reporting
  - Environmental evaluation
What We Do

• Help to promote the environmental benefits of participants’ activities through:

  • Speaking engagements
  • Videos
  • Webinars
  • Website Content

  • Conferences
  • Blogs
  • Twitter
  • Newsletters
Pilot #1 –
The Starbucks Cup
Pilot #1: The Starbucks Cup

- **Research Question**
  - Can paper coffee cups with PE coatings be repulped and recycled at common mill types (such as mills that accept OCC)?
Pilot #1: The Starbucks Cup

- **Step 1**
  - Tested pre-consumer coffee cups at WMU pilot mill on OCC recycling equipment

Yes, they are recyclable and repulpable
Pilot #1: The Starbucks Cup

• **Step 2**
  • Collected Starbucks coffee cups at 7 locations in NYC
  • Tested post-consumer coffee cups at WMU pilot mill on OCC recycling equipment

Yes, they are recyclable and repulpable
Pilot #2 – Pret A Manger’s Food Packaging
Pilot #2: Pret A Manger Food Packaging

- **Research Questions**
  - Can a variety of paper packaging, including PE coated and windowed packaging, be recycled on common mill equipment?
  - Can a purity level of 85% or better be achieved by customers?
Pilot #2:
Pret A Manger Food Packaging

- **Step 1**
  - Tested pre-consumer packaging at WMU pilot mill on OCC recycling equipment

  *Yes, they are recyclable and repulpable*
Pilot #2: Pret A Manger Food Packaging

- **Step 2**
  - Help develop a bin with CleanRiver that will encourage customer sorting

Yes, purity averaged 75%
Pilot #2: Pret A Manger Food Packaging

- **Step 3**
  - Tested mix of unsorted post-consumer packaging at WMU in accordance with 2 recyclability and repulpability tests

  Yes, the packaging mix was repulpable and recyclable
Pilot #2: Pret A Manger Food Packaging

• **Step 4**
  • Undertook a waste characterization to measure the success of the program

  *Stream purities were good*

  *Diversion at participating locations reached 55%, near corporate goal*
Summary of Key Findings

- Customers will sort, given sufficient cues

- The paper packaging was found to be recyclable and repulpable in accordance with two recyclability protocols, including:
  - The Fiber Box Association’s protocol for coated OCC
  - Western Michigan University’s protocol for tissue and towel applications
Summary of Key Findings

- Mills want to test it as an input in a controlled trial, and are interested in it as a consistent source of long fibers.

- Most importantly - Pret and Starbucks’ hauler subsequently announced that they now accept post-consumer foodservice packaging for recycling from their customers
Next Steps

- Collect sufficient post-consumer material to run a series of tests at full-scale mills
  - Already have 6 mills lined up who wish to test material

- Document the outcome and disseminate the results
  - Identify ways to make packaging more recycling-friendly
  - Encourage more mills to ask for paper packaging as an input, building demand for the material
Thank You!

Any Questions?
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