



COALITION *for* RESOURCE RECOVERY



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

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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

Action Env' l Group

Baluchi's

BASF

Chemol

Clean River Systems

DBB Partners

Design & Source

Duro Bag

First Fiber

Global Enviro

Green Bay Packaging

Green Box

HAVI Global Solutions

IESI/Progressive

Imerys

Interstate Container

Jamba Juice

LBP Manufacturing

N&V International

Pret A Manger

Spectra-Kote

Starbucks

Transtech, Inc.

Ulterion

Waste Management

Wastequip

Western Michigan Univ.

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:

***Make Recycling
the Obvious
Choice***
Recycle foodservice
packaging into valuable,
high-quality materials

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

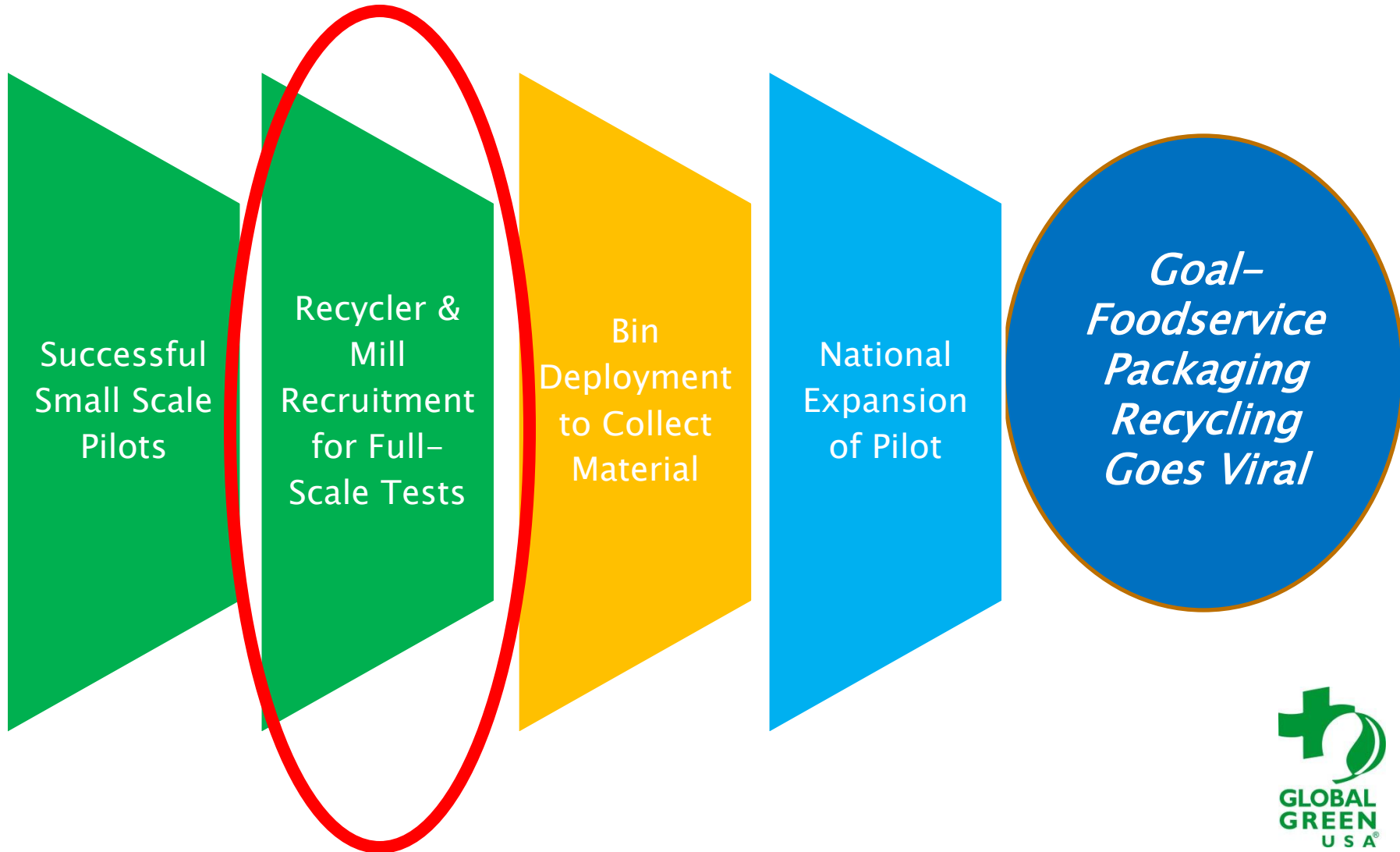
Recycler &
Mill
Recruitment
for Full-
Scale Tests

Bin
Deployment
to Collect
Material

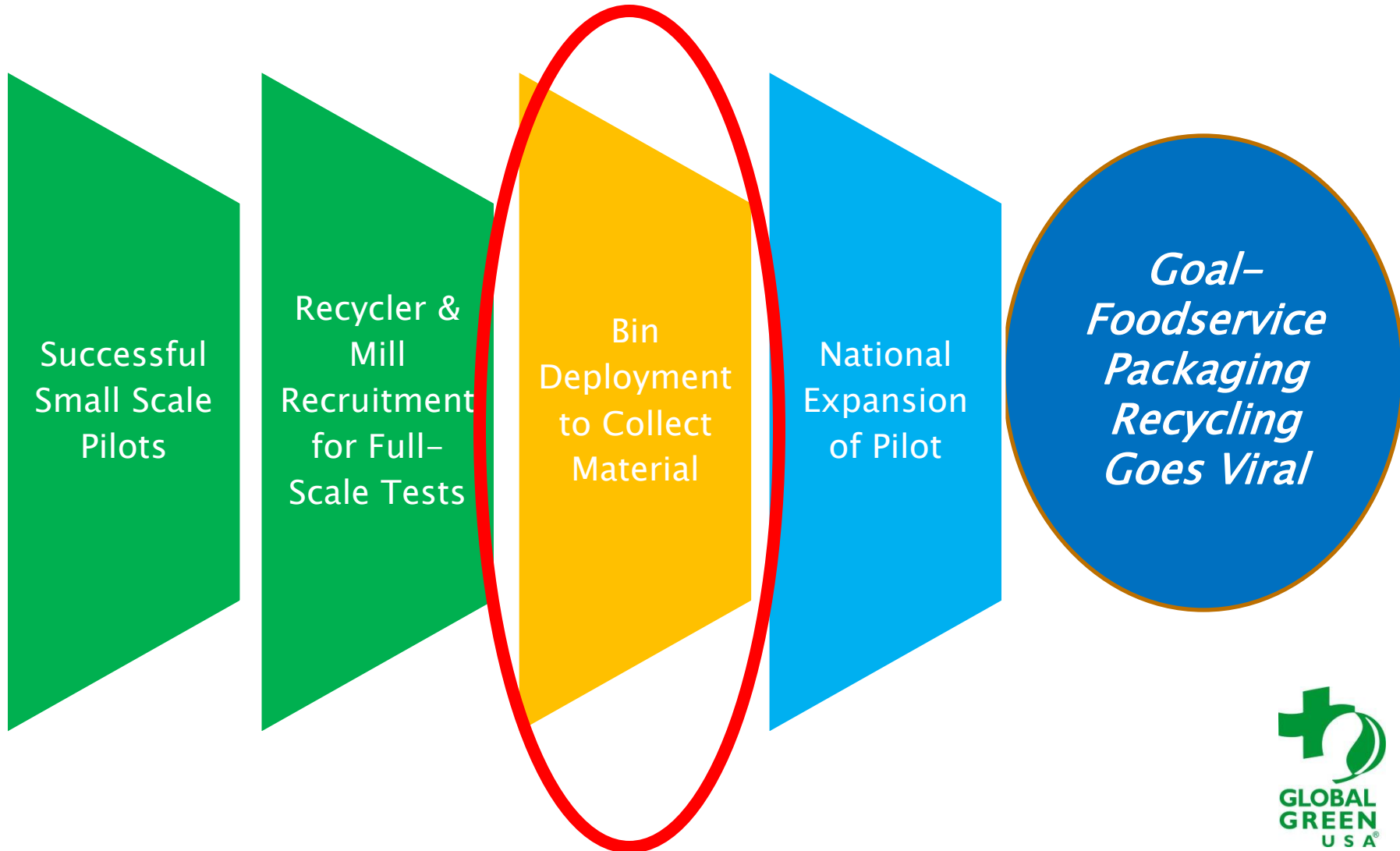
National
Expansion
of Pilot

*Goal-
Foodservice
Packaging
Recycling
Goes Viral*

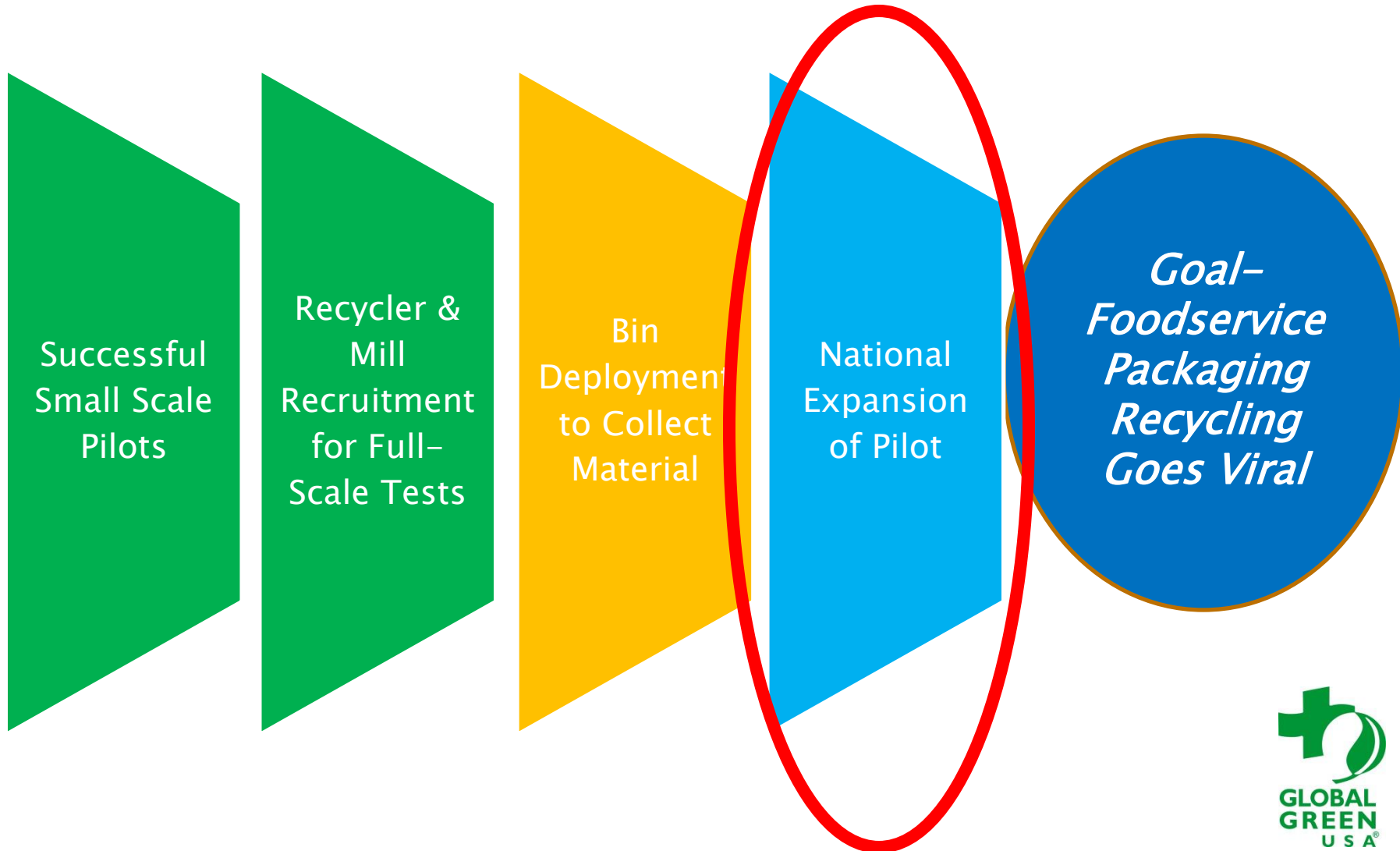
Program Goal and Objectives



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Program Goal and Objectives



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
re-pulpable*

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
re-pulpable*

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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