Next Generation of Curbside Materials

Virginia Recycling Association Conference
Roanoke, Va
May 11, 2016
Materials: Then and Now

THEN:

NOW:
THE PACKAGING STREAM IS EVOLVING – 2012 to 1990 Baseline

*% of waste stream
Source: RRS
### What’s in Your Way?

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How? Public-Private Partnership

A group of carton manufacturers united to deliver long term, collaborative solutions to divert valuable cartons from the landfill.
Rev Up Rural Recycling: Add a New Material to Your Program

Does Your Program Measure Up?

Promote
- Schools
- Community
- Sorting Facility

Add to recycling program

Carton Council
CartonOpportunities.org
CITIZENS expect their recycling program to COLLECT CARTONS

IN FACT, 77% OF US ADULTS SAY THAT FOOD AND BEVERAGE CARTONS ARE RECYCLABLE
We’ve Helped Many Communities
Examples of Other Public-Private Partnership Possibilities
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 Work

FPI

Paper Recovery Alliance (PRA)
Plastics Recovery Group (PRG)
Foam Recycling Coalition (FRC)
PRA, PRG and/or FRC Members

[Logos of various companies]
Foodservice Packaging Recovery Toolkit

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

This Recovery Toolkit 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  Communities  Materials Recovery Facilities  End Markets  Composting & Anaerobic Digestion Facilities
Members of The Materials Recovery for the Future Collaborative share a simple vision:

“Flexible packaging is recycled, and the recovery community captures value from it.”

We are leading research to advance understanding of how flexible plastic packaging can be effectively sorted for recovery.
COMPANIES ARE COMMITED TO FINDING RECOVERY SOLUTIONS FOR FLEXIBLE PLASTIC PACKAGING

- Consumer expectations
- Corporate Environmental Goals
- Shareholder resolutions
- Customer (brand/retailer) requirements
- Regulatory requirements
RRS OPTIONS ANALYSIS IDENTIFIED 4 KEY QUESTIONS FOR MRFF RESEARCH

How can it be affordably sorted at the MRF?

How can increased value be created for the material?

What are viable end markets for the range of materials?
THE KEY PATHWAY FOR OUR RESEARCH – Can loose flexible plastic be separated in a MRF system?

Without affecting the other value streams?
Flexible Plastics Research Program

Address Key Challenges Through Existing Technologies

Thermal Conversion

For example, pyrolysis. Potential solutions for smaller communities or those that want to target the broad range of plastics not currently recycled

MRF Equipment Testing Program

2015-2016 research program aimed at testing most feasible solution based on net system costs and adaptation of existing sortation technology

Re-imagine System of the Future*

PRF Research Program

2016 research to develop new technology to ensure mechanical recycling of resins that currently have markets and increasing the value of the bale

Define System of the Future

Additional work with more diverse recovery value chain partners to develop recovery infrastructure that handles new mix of materials

*Looking for partners to participate in these programs
Towards a MRF of the Future

- Scale
- Cost
- Mission
MOVING THE NEEDLE THROUGH INNOVATION
Recycle by Design partners

**IMGHABEL**

Washington, DC-based international financial and economic advisory firm made up of more than 100 finance and management experts, efficiently mobilizing specialized expertise in infrastructure financing, transaction advisory, capacity building, project finance, and fund management with public-private partnerships as a central focus.

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**RRS**

Ann Arbor-based cutting-edge team of professionals, engineers, economists and communications specialists who share a vision and possess core strengths in materials recovery, coupled with expertise in life cycle management and applied sustainable design.
Two Approaches to Recycling Expansion

- Public sector top-down approach

- Business-driven bottom-up approach
THE COALITION TO ADVANCE RECOVERY IN TENNESSEE
What is required to take Tennessee to the next level of material recovery and subsequent economic benefits?

The solution is found through strategic public and private partnerships in 6 key areas:

1. COLLECTION
2. PROCESSING
3. LOCAL GOVT
4. EDUCATION
5. STATE LEVEL
6. END MARKETS
Each player has influence over a portion of process to build recovery and reap the benefits that follow.