



Plastics Market: Collecting for Value

Tonya Randell, More Recycling

NRC Webinar

April 18, 2017

More Recycling



More Recycling is the Next Generation of Moore Recycling Associates

- Have nearly 20 years of research and consulting experience in the recycling of postconsumer materials, specifically plastics.
- Offer a deep understanding of the complex and ever-changing lifecycle of plastic packaging
- Serve as a liaison between industry, public agencies, and NGOs and prioritize accurate information and neutrality in the marketplace.



Overview

Introduction & Value Chain

Why Quality Pays:

Market Drivers & Influences

Specific Commodities

How to Collect for Quality:

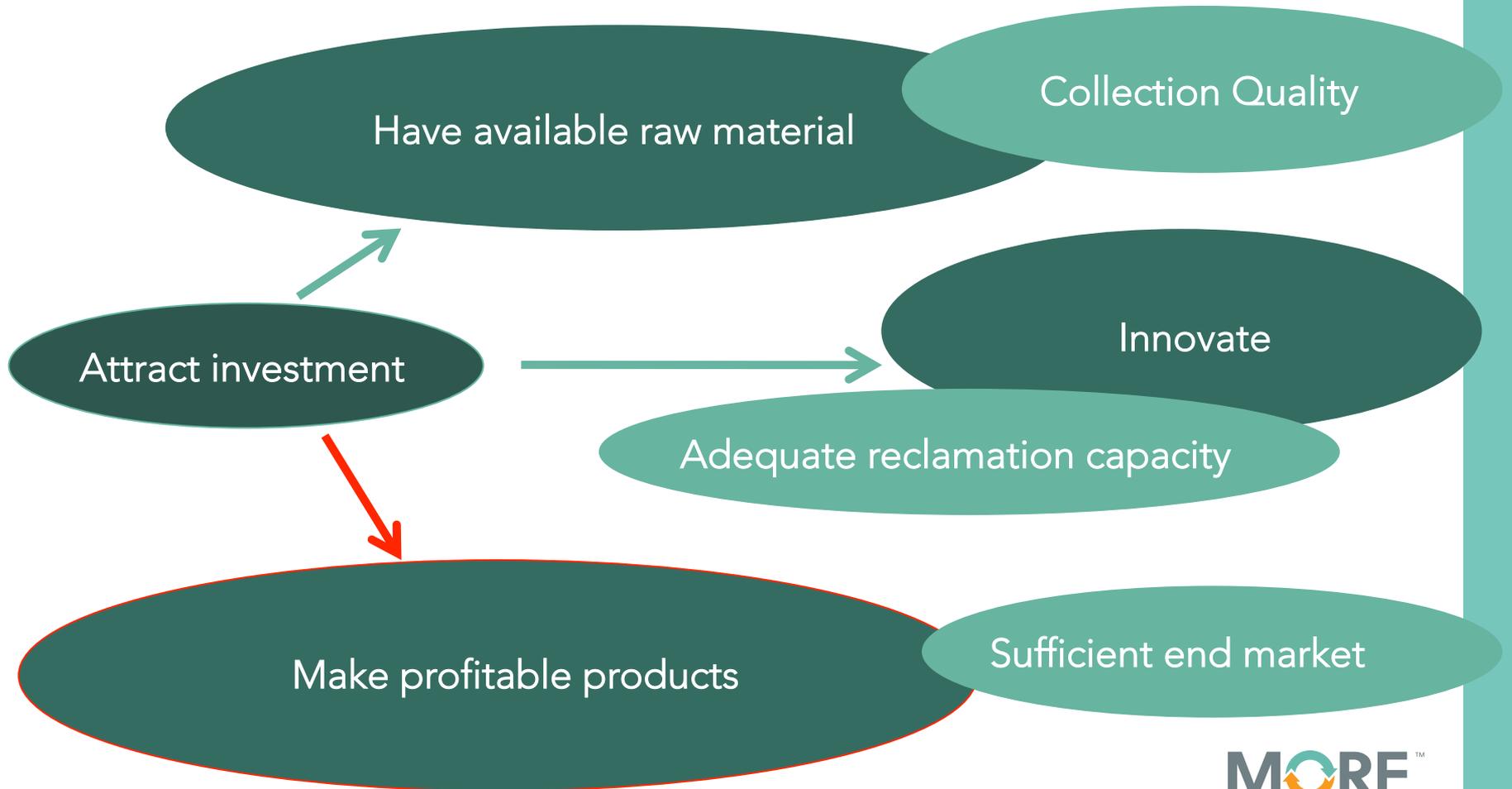
Clear Terminology

Dealing with Plastic Film

Resources

Recycling is a Business

Like all manufacturing, Plastic Recycling must...



Source: Dave Cornell

Considerations

Know your Material

- Not all Plastic Plastics are Created Equal
- Readily Recyclable vs. Not
- Contaminants
- Post Industrial
- **Post Commercial**
- Post Consumer



Know your Market

- Demand
- Direct vs. Broker
- Specs
- Price Influences
- **END USER IS KEY**



The Evolution of Packaging



Pharma /
Over-the-counter



Coffee



Nuts



Shopping

Baby Food & Formula



Personal Care



Cookies /
Crackers



Pet Food



Juice



RECYCLING

Source: Dylan de Thomas

Plastic Film Value Chain

Collection

Consolidation

Reclamation

End Use

Collection

Examples: Haulers, Retailers, Institutions



Consolidation

Examples: Brokers, MRFs, Distributors, Scrap Dealers



Reclamation

Examples: Pellets & End Products



End Markets

Examples: Bottles, Pipe, Bags & Sheeting, Composite Lumber



Plastics Market Drivers

- General economic conditions
- Price of natural gas, petroleum & derivatives
- Virgin resin production capacity relative to demand
- Industrial scrap & off-spec supplies
- ***Supply and demand of recycled feedstock***
 - ***Goals for recycled content***



Current Economic Conditions

Strong Dollar

- + Excess Production of Crude & Other Commodities
 - + Changes in China/Asia
 - + Increased Processing Costs
-

Down Market

Tight Margins

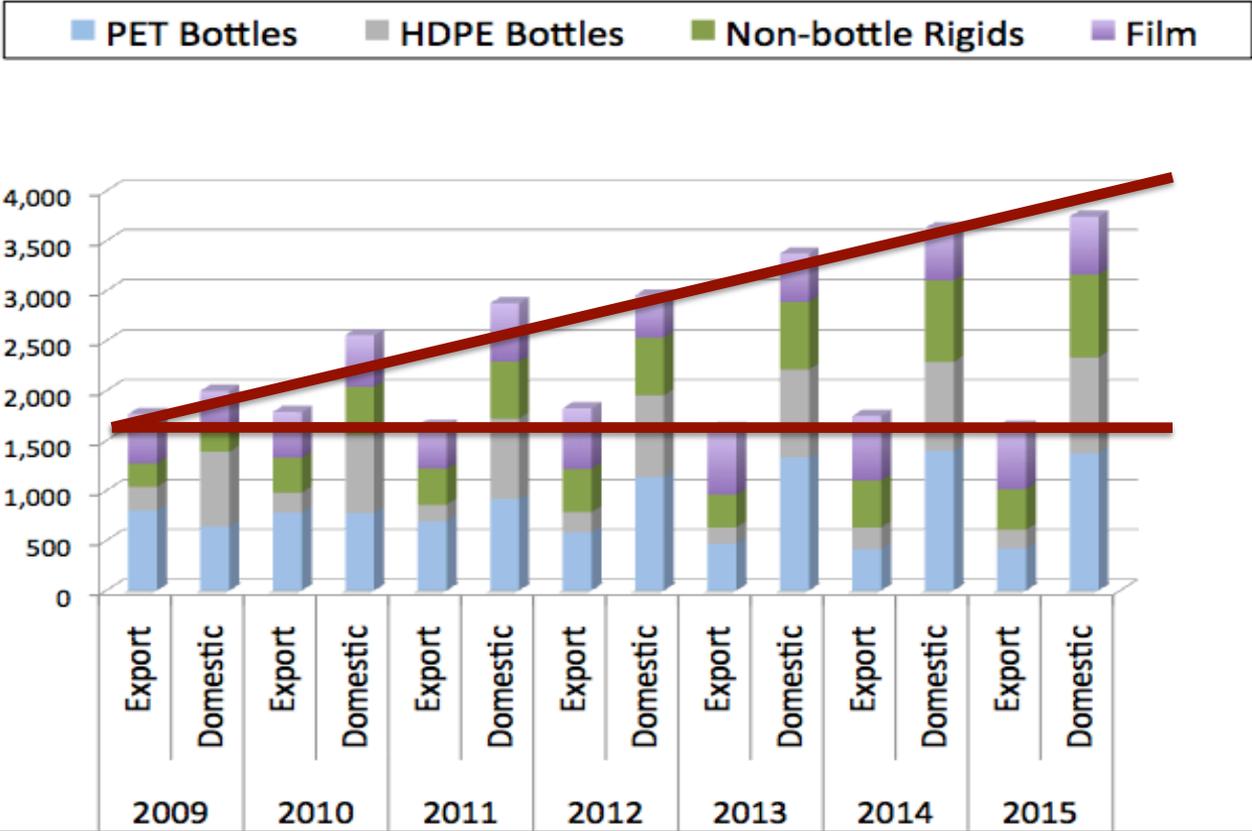
Industry Pains/Constraints

Quality sells

Domestic vs Export Data

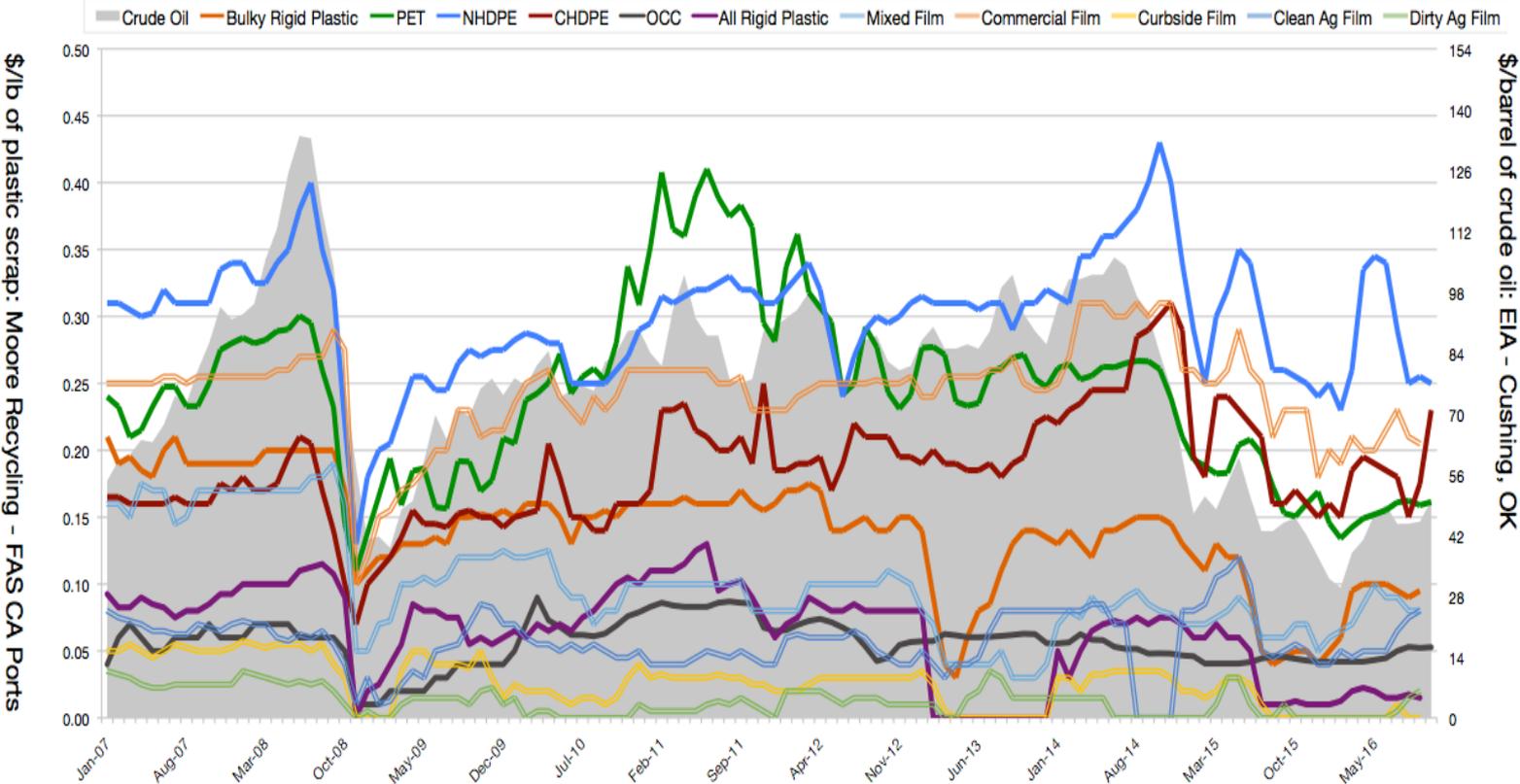
U.S. Postconsumer Plastic Recycling

in millions of pounds



Plastic Scrap Price vs Oil

Scrap Price History vs Oil: 2007 to-date



Specific Commodities

PET Bottles & Thermoforms

HDPE Bottles

Non-Bottle Rigids

Polypropylene Bottles & Containers

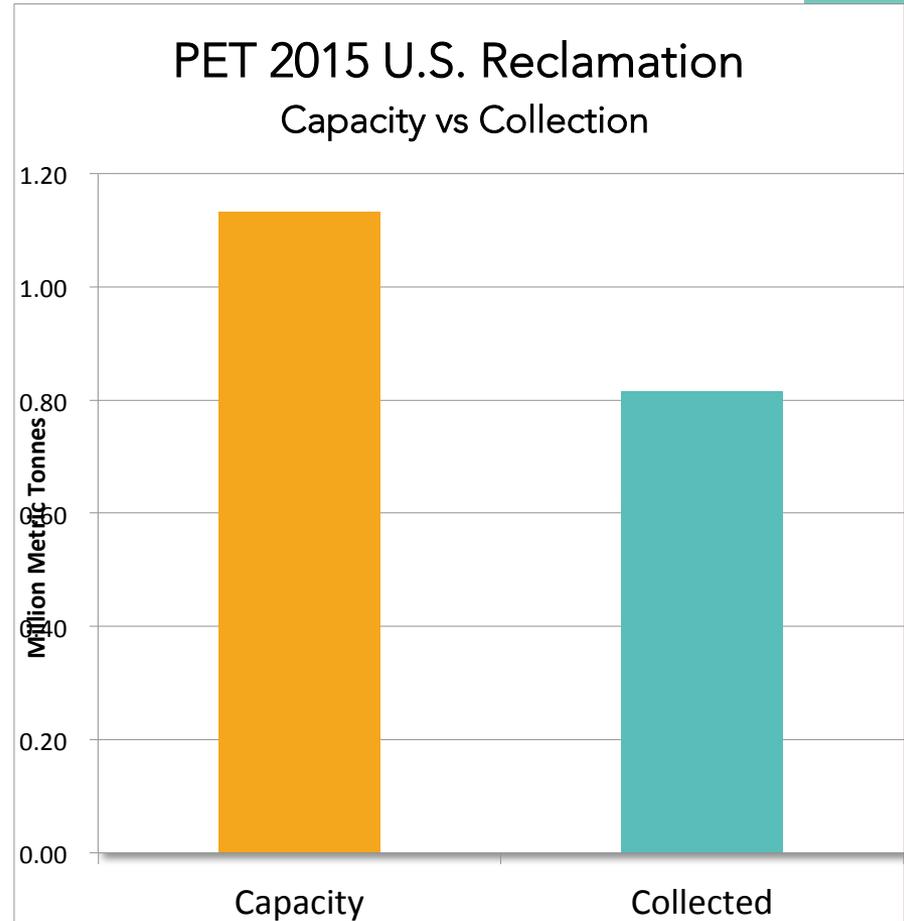
Polystyrene

Bags & Film

PET Recycling

- Recycling Rate: 30.1%*
- Lightweighting affects yields
- Bale yield mid-60% to mid-70%
- Flattening bottle demand
- Lower PCR demand
- Virgin resin capacity

*2015 data



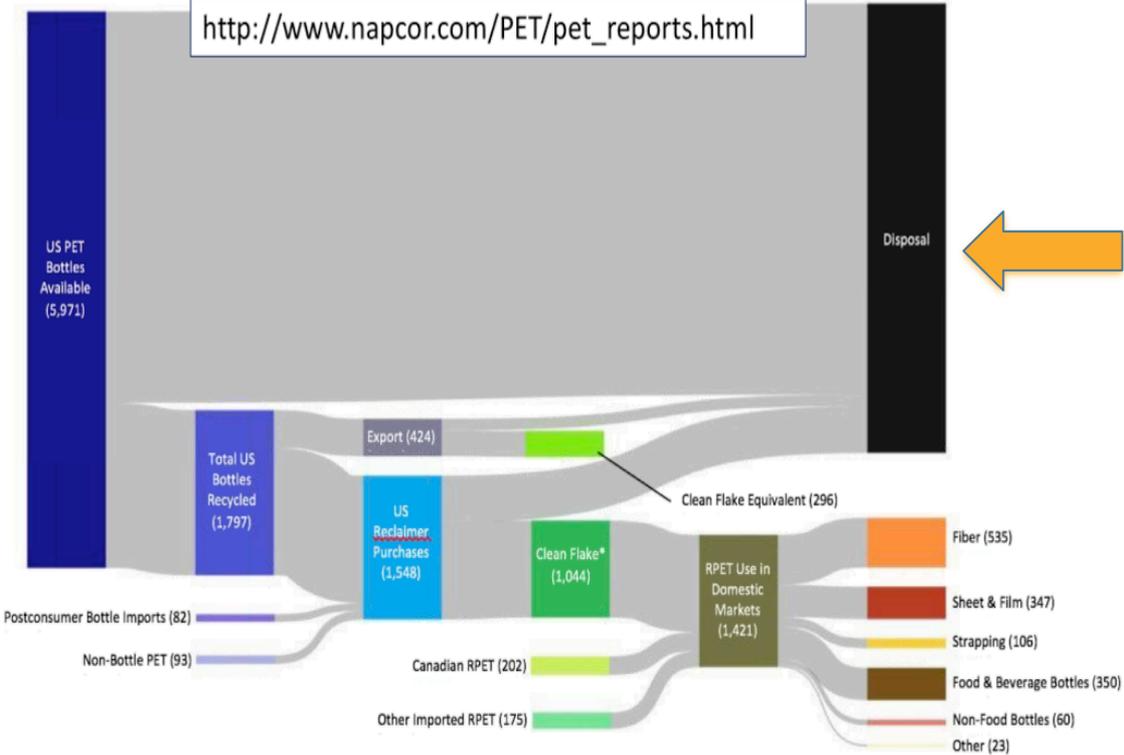
PET Thermoform Challenges

- Intrinsic property differences
- Aggressive labels
- Sorting difficulties
- Black plastic
- Not all haulers/MRFs/reclaimers want them



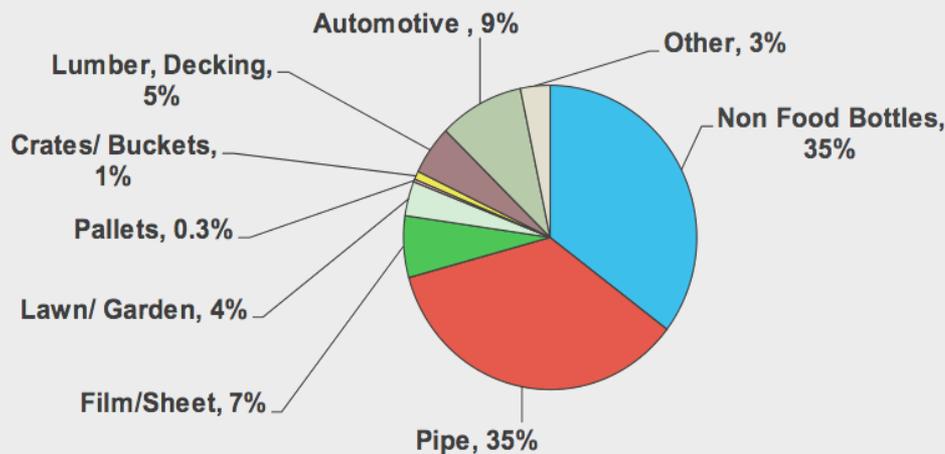
PET Bottle* Movement

PET Materials Flows in the US

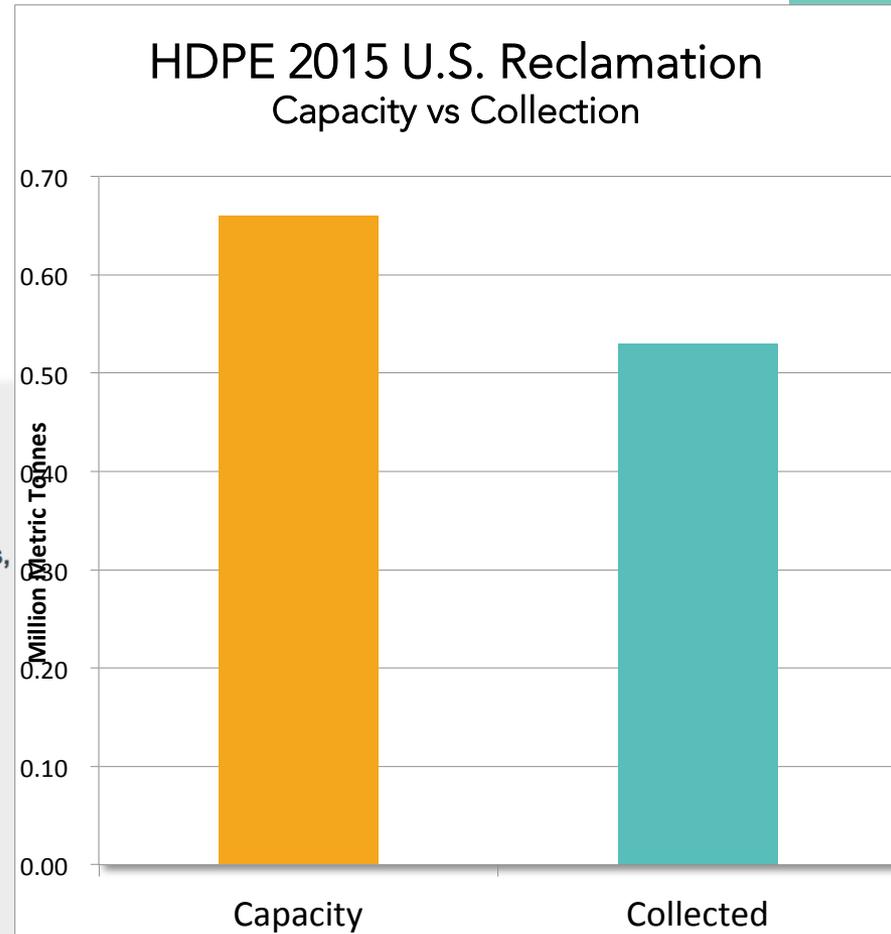


HDPE Bottles

- Recycling Rate 34.6% in 2015
- Right-sizing of bottles
- Bale yield at nearly 82%

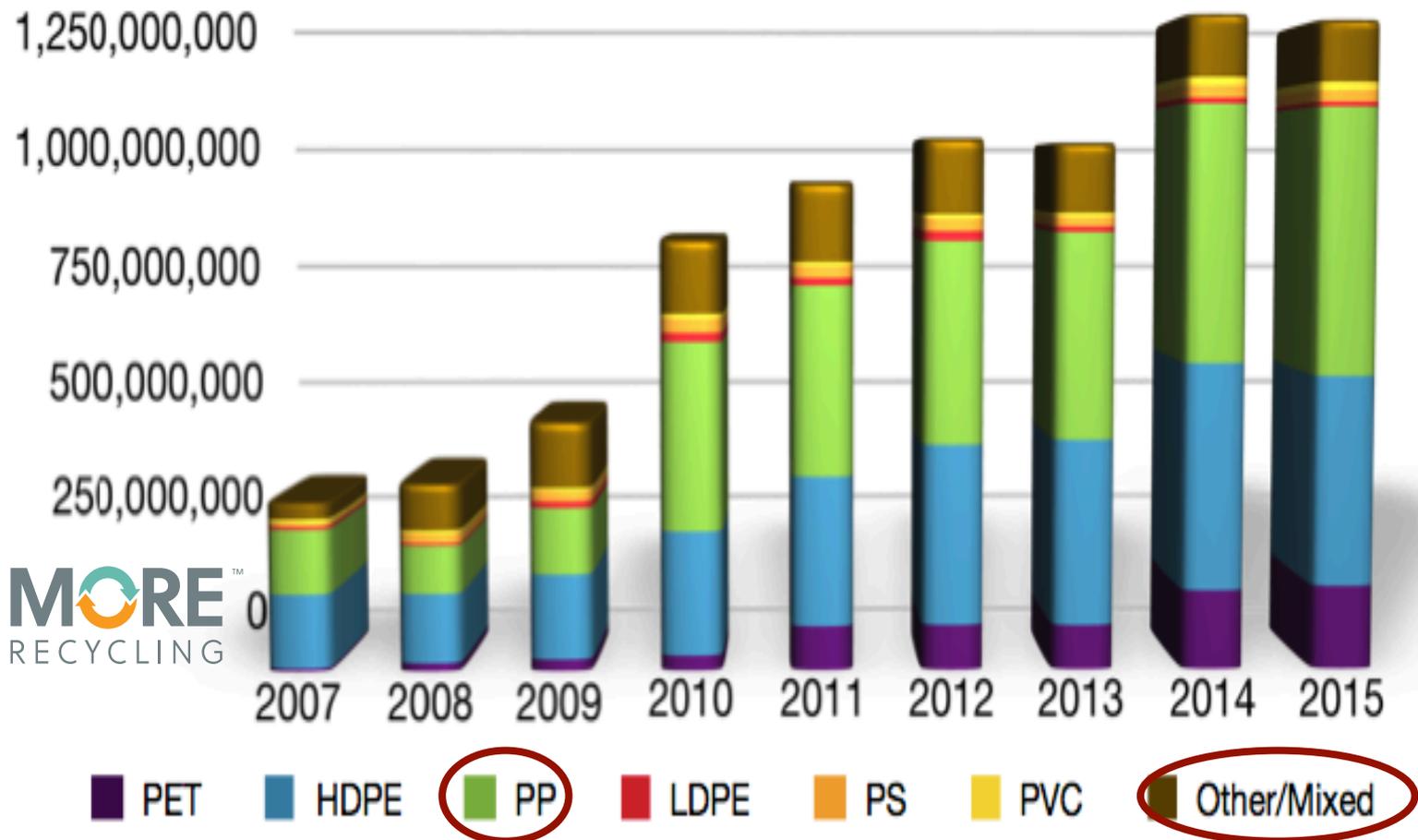


End uses of HDPE bottles



Non-Bottle Rigid

U.S. Non-Bottle Rigid Plastic Recovered Year to Year by Resin² (pounds)

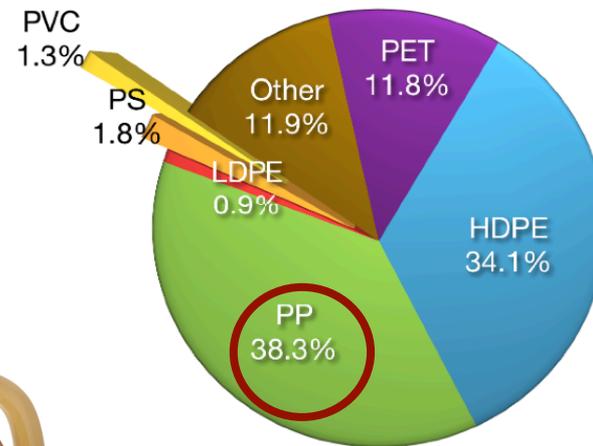


Polypropylene

- Recycling rate is growing for both bottles and containers/caps
- Opportunity to expand collection?
- Demand for material continues to grow
- PRFs/Secondary MRFs support growth of processing

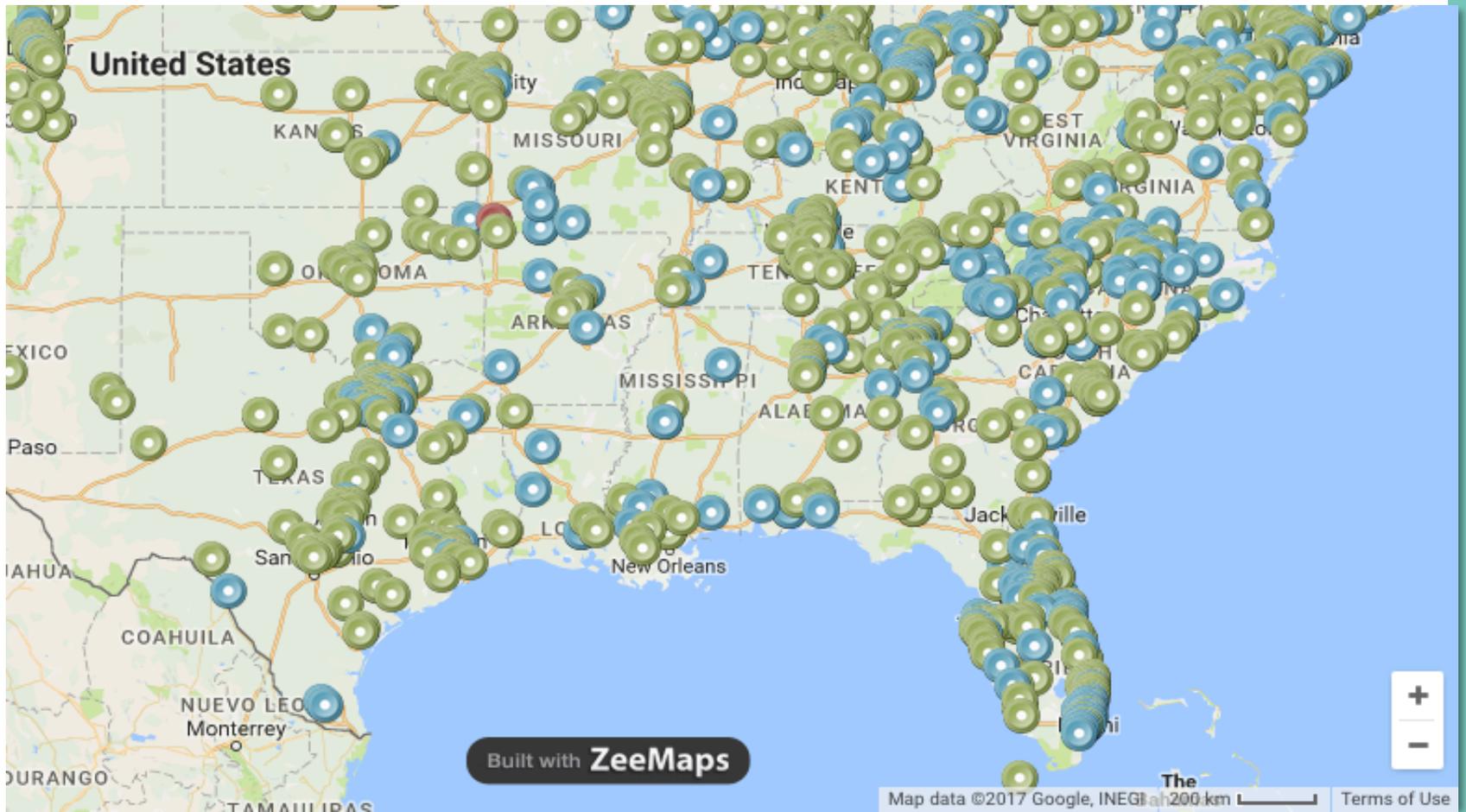


2014 Sources of Non-Bottle Plastics



Polypropylene Map

www.RecycleMorePlastic.org/plastics/map.html



Polystyrene

- Domestic Markets exist
- Densification is essential
- Easily identifiable
- Grants available from Foodservice Packaging Institute



Polystyrene

Case Studies and Map available: www.RecycleMorePlastic.org



Case Studies on Foam Polystyrene Recycling

Check out these successful foam polystyrene programs.

POLYSTYRENE FOAM FOODSERVICE RECYCLING CASE STUDY

Foam PS Drop-off Recycling

Spotlight: Uniek Inc. & City of Madison, WI

Madison, WI has implemented a successful drop-off program for foam PS. The program is a successful partnership with a local distributor, Uniek Inc., who has been recycling foam PS for many years. The City has a dedicated drop-off site where residents can bring their foam PS. The program has been successful in reducing the amount of foam PS in the waste stream.

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Spotlight on Uniek Inc.

POLYSTYRENE FOAM FOODSERVICE RECYCLING CASE STUDY

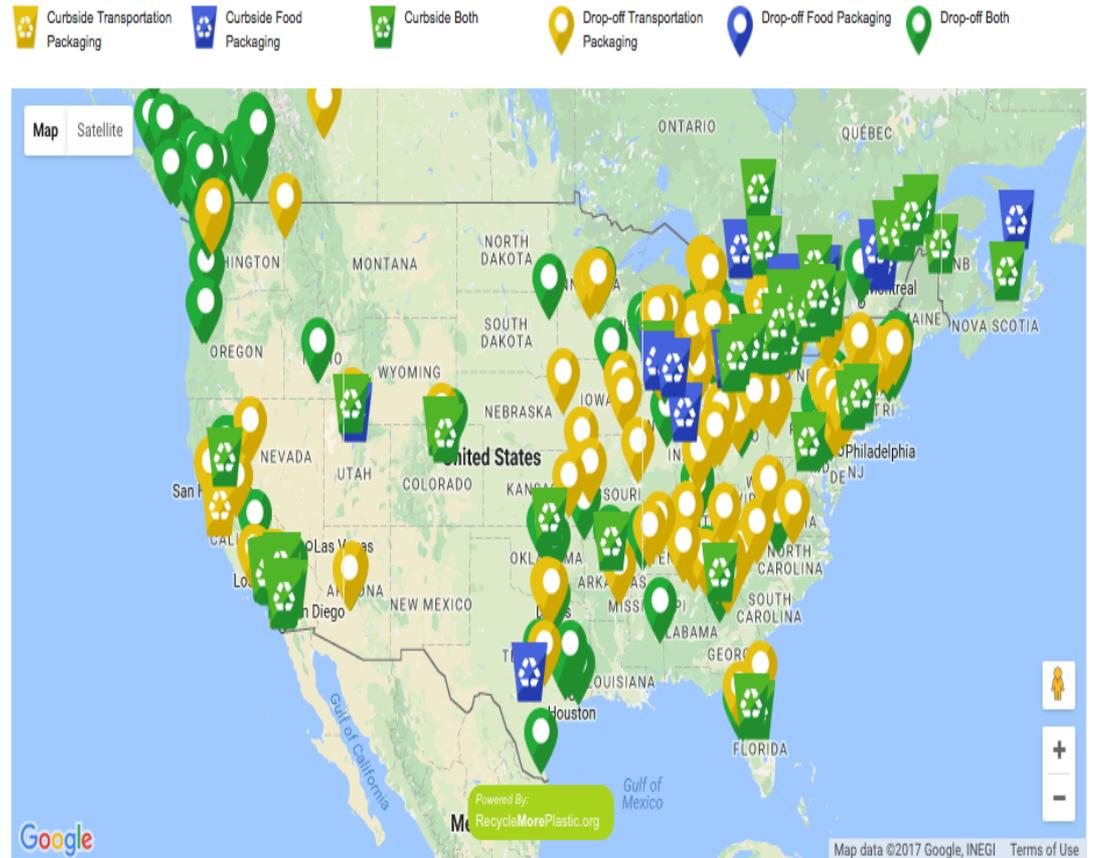
Foam PS Recycling Works at MRF's

Spotlight: EDCO Disposal

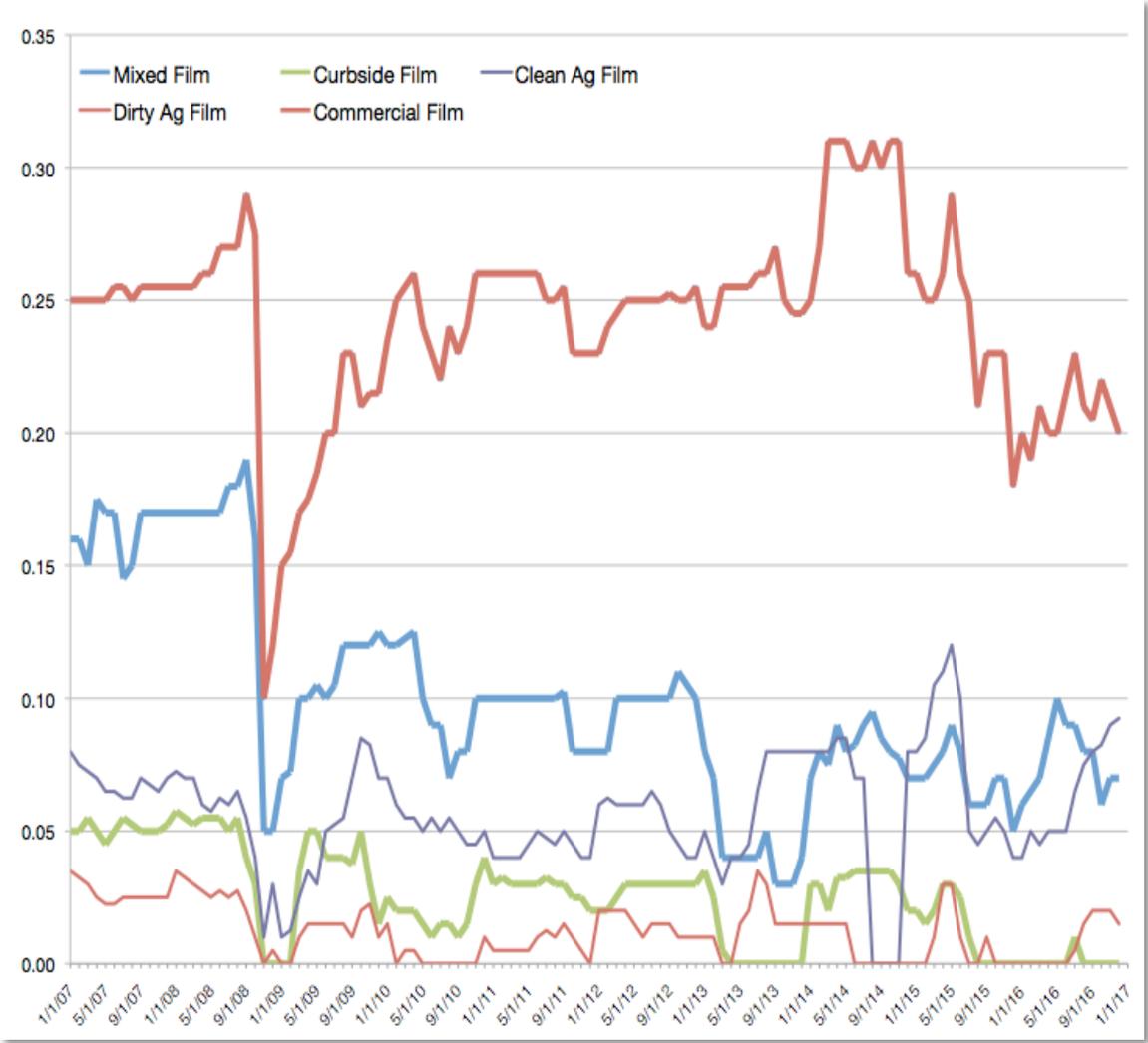
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Spotlight on EDCO Disposal



Plastic Film Scrap Prices

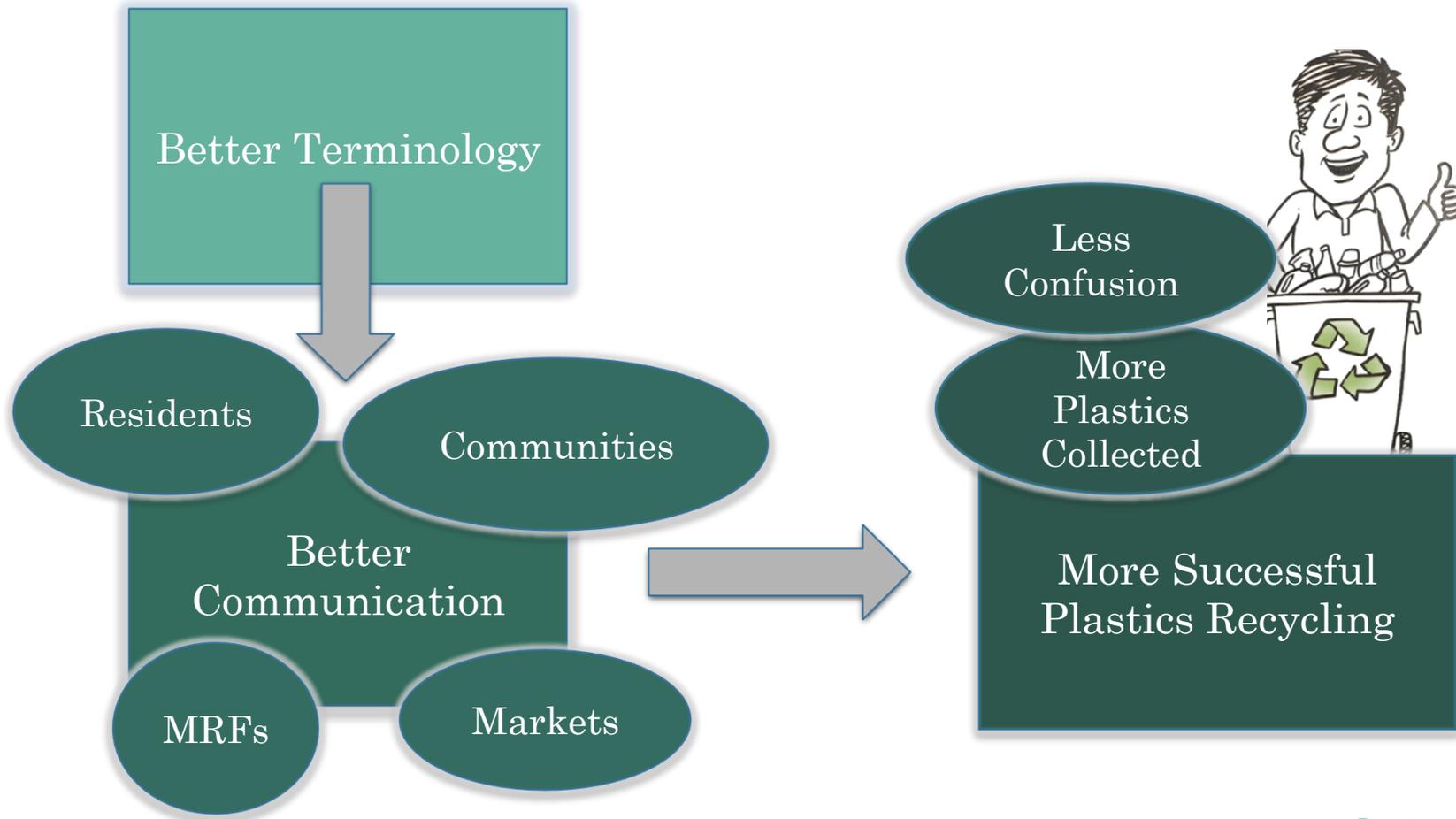


Collect For Value

Clear Terminology

“Return to Retail” Message for Film and Bags

Plastics Recycling Terms



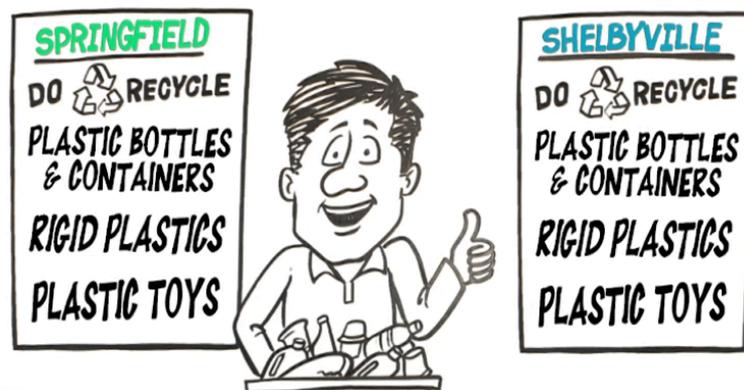
Better Terminology = Better Recycling

The Terms and Tools

Goal: Increase the quality and quantity of plastics collected and to facilitate better tracking.

Outreach Terms: Common terminology and simple tools for community recycling programs in the US and Canada to help these programs communicate more effectively to residents about plastic recycling.

Commodity Terms: Streamline communications about buying and selling plastics that have been collected in the plastics value chain.



Quality and Quantity: The Local Challenge

People are confused and overwhelmed.

Plastics 1-7:
Can I recycle
everything
plastic!?!

I don't get
it, so
forget it!

OR:
I'm not sure,
but I'll put it
in anyway.

Need **meaningful terms** that effectively
communicate



But, what about these?



A Solution:

Outreach Terms:

4 easy steps to build your program with Images and Tool to build program flyer.



RecycleYourPlastics.org



Terms and Tools

[Terms & Tools Home](#) | [Feedback](#) | [login](#)



Plastics Recycling Terms & Tools

Better Communication... Better Recycling

This resource provides common terminology to help streamline communications for community recycling programs throughout the U.S. and Canada. Its goals are to strengthen consumer education and increase the quantity and quality of plastics recycled.

Click each section below in succession to learn more

Overview

1	What are the Terms & Tools?	+
2	Who created the Terms & Tools?	+
3	Why every community should use the Terms & Tools	+

How to Use the Outreach Terms

4	Before/After Example Using the Outreach Terms	+
5	Tool: Use the New Outreach Terms	+
6	The Plastics Recycling Outreach Terms (complete list)	+

Additional Outreach Resources/Tools

7	Image Gallery: A picture is worth a thousand words	+
8	Further Your Outreach with Re-TRAC	+
9	Plastic Film & Bag Recycling	+

Definitions

Categories are defined for easy usage.

Plastic Soda, Water & Other Drink Bottles

Soda, water, juice and other beverages – Commonly marked: PET (1), HDPE (2), PP (5), Other (7)

Plastic Food & Household Bottles/Jars

Screw top bottles/jars - For Example: Food: ketchup, peanut butter, mayonnaise, mustard, Household: laundry detergent, shampoo, and cleaning products – Commonly marked: PET (1), HDPE (2), LDPE (4), PP (5), Other (7)

Plastic Tubs

Tub containers, such as: yogurt, margarine, ice cream tubs, coffee containers: Commonly marked: HDPE (2), LDPE (4), PP (5)

Plastic Tubs & Lids

Tub containers and lids for items such as: yogurt, margarine, ice cream tubs, coffee containers – Commonly marked: HDPE (2), LDPE (4), PP (5)

Plastic Produce, Deli & Bakery Containers, Cups, Trays

Take-out, deli, bakery, berries/produce containers, cookie trays, cake domes, party cups, clear egg cartons – Commonly marked: PET (1), PP (5), PS (6), Other (7)

Plastic Non-food Containers & Packaging

Containers and packaging for non-food items such as: flower pots, small storage containers like tupperware, CD/DVD cases, clear formed plastic packaging around products like toys or hardware and electronics (paper components should be removed) – Commonly marked: PET(1), HDPE (2), LDPE (4), PP (5), PS (6), Other (7)

Plastic Bulky Items

Items as large as or larger than a 5 gallon bucket, such as: drums, large water bottles, crates, large storage bins, baskets, totes and lawn furniture – some may be marked: PET (1), HDPE (2), LDPE (4), PP (5), Other (7)

Plastic Toys

Plastic Toys without metal or electronic components. For Example: Slides, play kitchen, sand bucket and shovel, flying disk, bat & ball

Plastic Buckets

5 gallon buckets, kitty litter buckets – Commonly marked: HDPE (2), PP (5)

Plastic Flower Pots

Rigid flower pots, 4 inches or larger – Commonly marked: HDPE (2), PP (5)

Plastic PET (1) Bottles & Jars

Screw top bottles/jars that are marked PET (1) - For Example: Beverage - soda, juice, water and other beverages, Food - ketchup, peanut butter, mayonnaise, mustard, Household - shampoo, cleaning products

Plastic PET (1) Containers & Lids

Take-out and other containers, lids, cake domes and trays used to package items such as fresh produce, baked goods, nuts, and deli items; and clear cups that are marked PET (1)

Image Gallery

- Royalty-free
- Acceptable items and exclusions
- Provided in JPEG, TIFF, and EPS
- EPS allows for easy layering



Image Gallery

These images are royalty-free and can be downloaded and used as needed.

Plastic PET (1) Bottles & Jars



Image Title
Screw-top bottles for soft drinks, ice tea and other beverages

Download formats:

JPEG: 92 KB

EPS: 12.2 MB

TIFF: 9.2 MB



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Screw-top bottles for soft drinks, ice tea and other beverages

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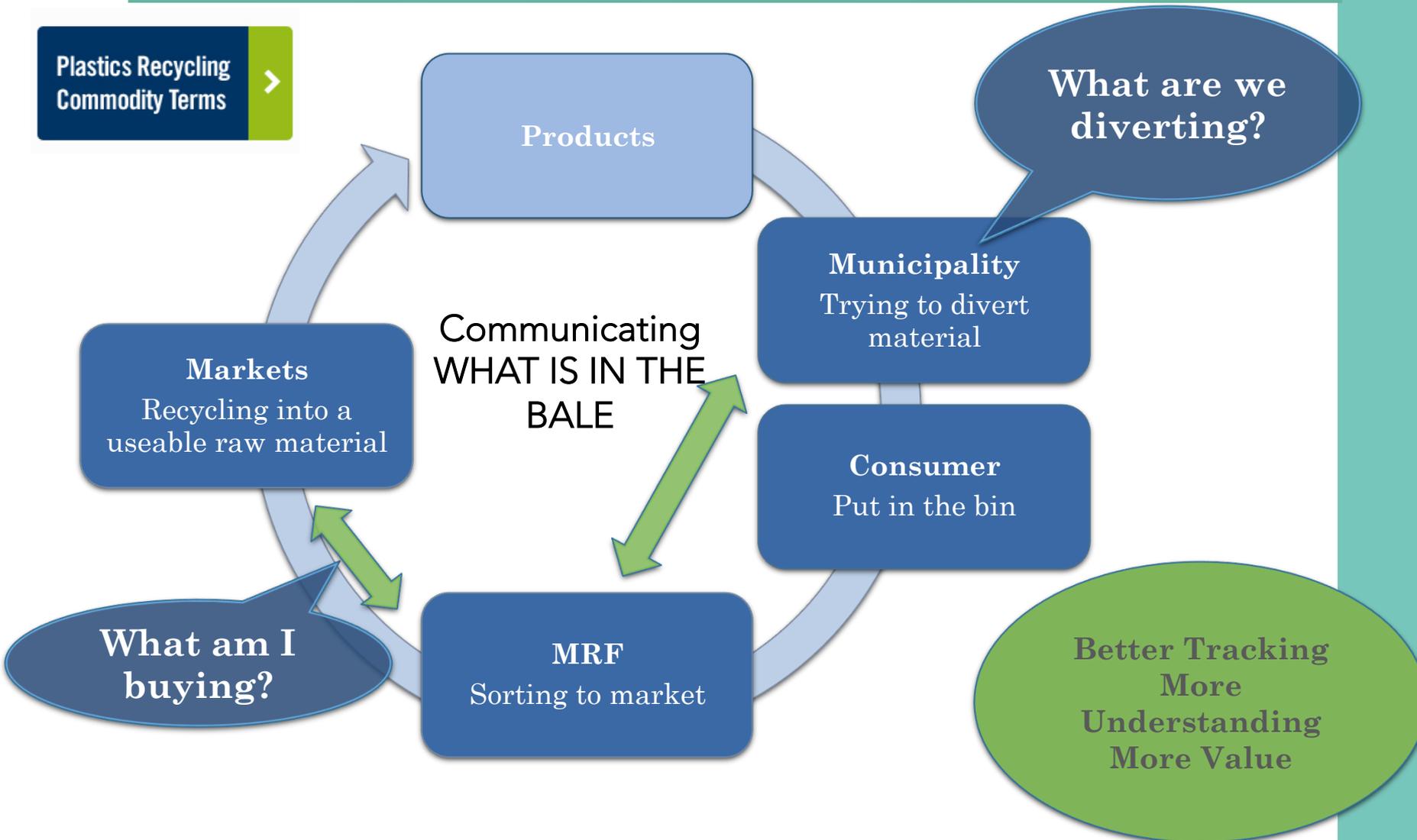
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Commodity Terms: Communications with MRFs and Markets

Plastics Recycling
Commodity Terms >



Why Use the Commodity Terms?

“Waste Management recognizes the importance of communicating with one voice - to communities and their residents about what to put in the bin, and with markets about what is being sold. Common terminology helps us achieve that goal.”

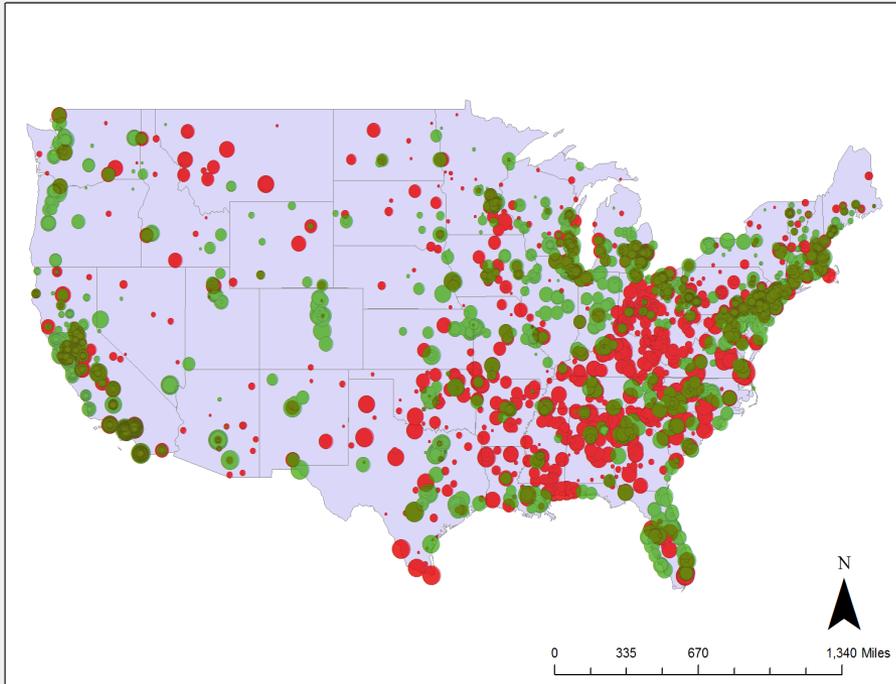
Susan Robinson, Sr Public Affairs Director,
Waste Management



Better Tracking: Consistent Terms = Consistent Data



Better Tracking: Critical Plastics Data

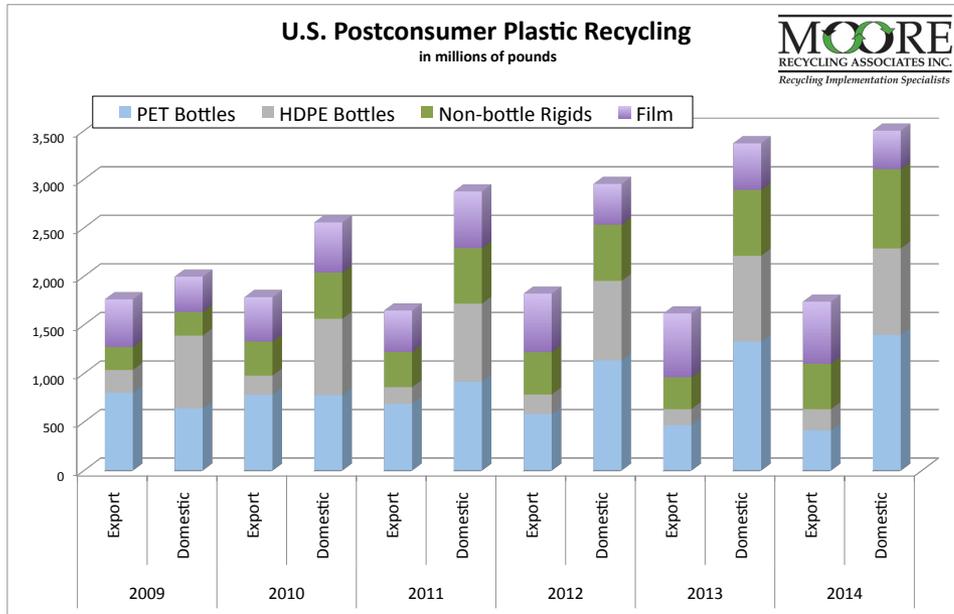


Availability of Recycling (PP Tub & Containers)

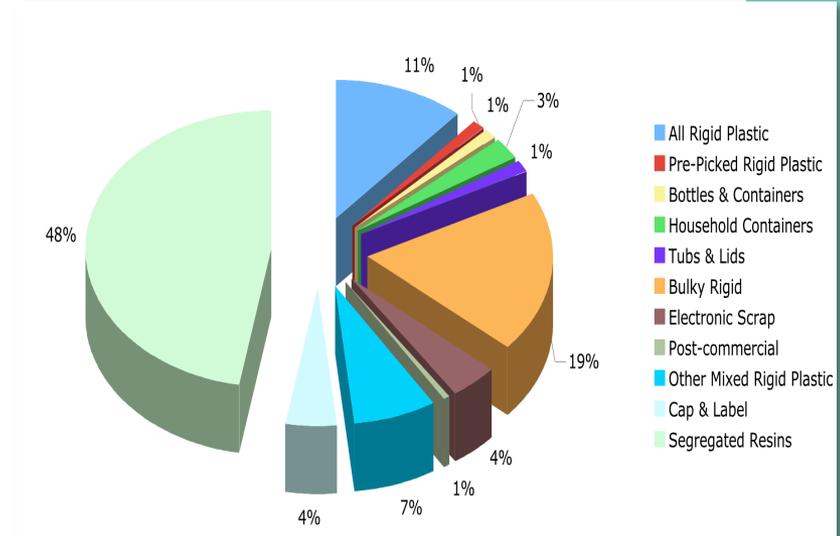


Bale Audits & MRF Studies

Better Tracking: Critical Plastics Data



Sources for Non-Bottle Rigid Plastic



Annual Plastic Recycling Reports

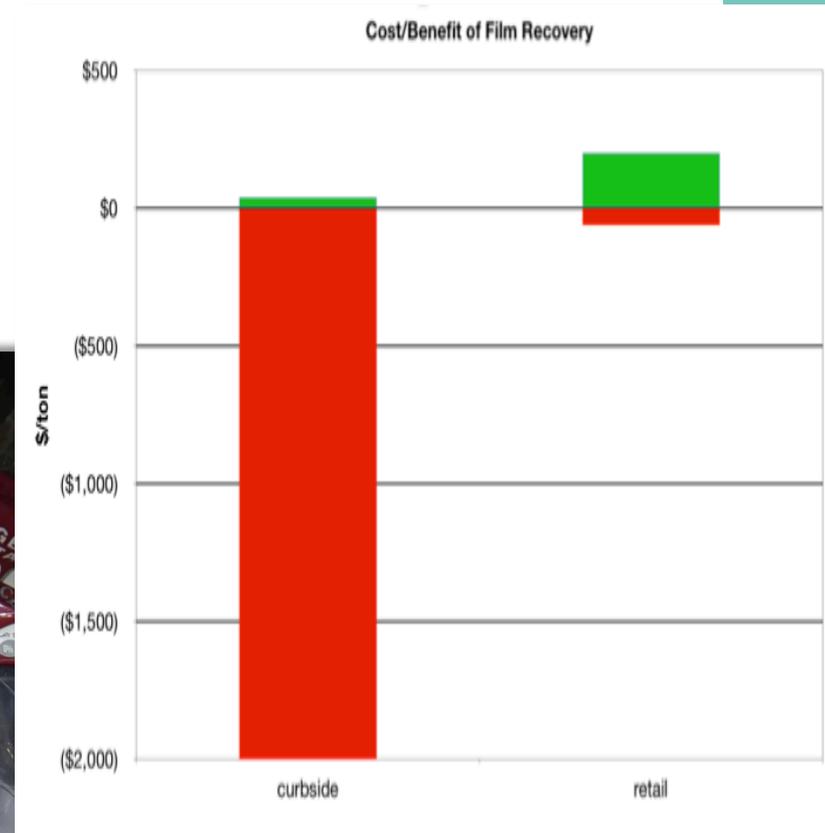
Find and USE the Terms & Tools



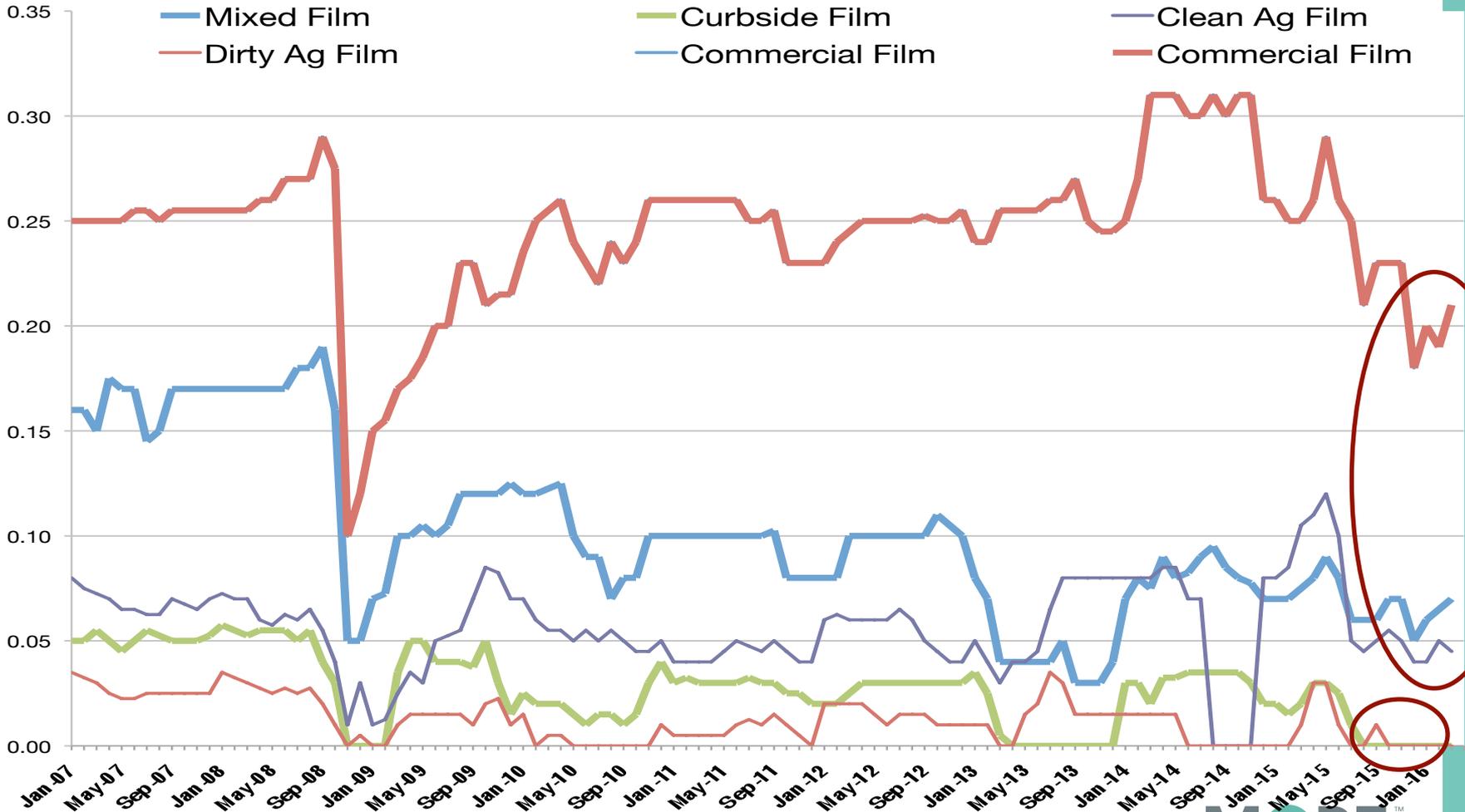
www.RecycleYourPlastics.org/termsandtools
www.RecycleYourPlastics.org/commodityterms

Bags & Film

- “Return to Retail:” Discourage curbside collection
- More than 18,000 drop off locations
- Many opportunities to improve commercial collection
- Growing use of How2Recycle Label



Historical Film Scrap Price



Retail Collection vs. Curbside

- **Pro:** Retail collection keeps material clean, dry, and *valuable* for end markets
- **Pro:** Takes advantage of existing, efficient infrastructure
- **Con:** Have to take material elsewhere; easier to put in trash or bin anyway?

Final- Quality pays; use of existing infrastructure improves efficiency

- **Pro:** Curbside collection *is* easy for consumers
- **Con:** Problematic for MRFs– reducing efficiency for ALL commodities
- **Con:** Generally too dirty for domestic processing and very expensive to clean.

Final- No markets currently to justify extra cost of washing/handling to recycle this material.

RECYCLE

clean & dry

bags & wraps

HERE



NOT in Curbside Recycling



Air Pillows

Newspaper Bags

Food Storage Bags

Bubble Wrap



and Carryout Bags

Also look for any packaging with this How2Recycle label

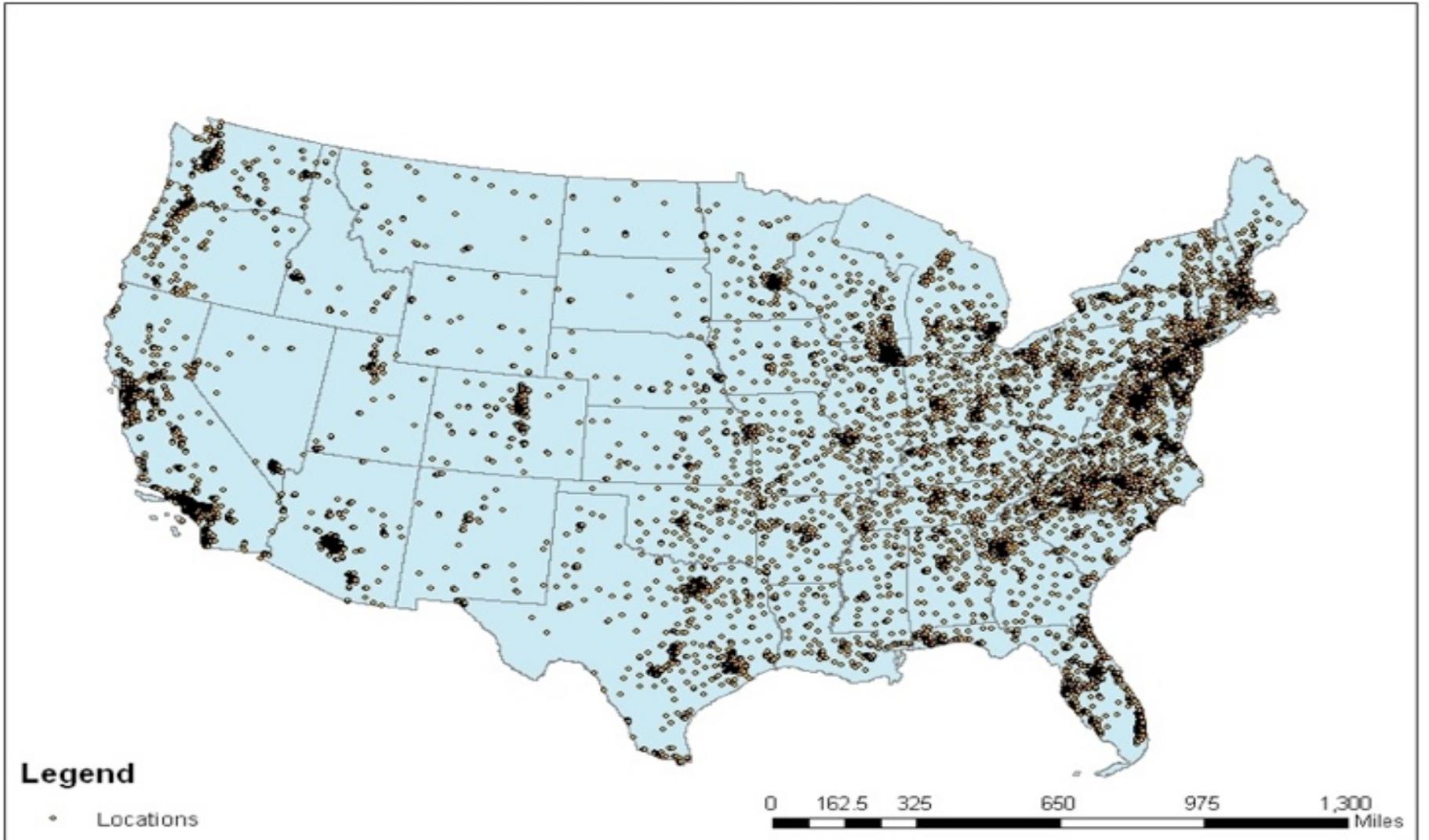
NO candy bar wrappers, chip bags, six-pack rings or degradable bags

PlasticFilmRecycling.org



US Retail/Drop-offs Locations

United States Map of All Drop-Off Facilities



WRAP can Help



- Provide alternative solutions for film and bags- NOT curbside bins/MRFs
- Maximize material quality- for film *and* other commodities
- Protect local environment
- Support your sustainability goals

What is WRAP?



Wrap Recycling Action Program (WRAP)

Free and Voluntary public education & outreach initiative, led by the Flexible Film Recycling Group (FFRG).

- Seeks to engage motivated partners *nationwide*

Goal: Double film recycling by 2020 through *return to retail and drop off collection and greater commercial access.*

Objectives:

- Dramatically increase film recycling by:
 - Forging partnerships with key allies/stakeholders
 - Providing essential educational tools & programs
 - Gather data to improve tools and information

WRAP Tools



Recycle Plastic Film Beyond Bags

film drop off directory

Find drop off locations in your area

Recycle clean, dry plastic bags, film and wrap at participating stores

Retail Bags, Newspaper Bags, Paper Products & Super Wrap (Packaging), Air Film, Case Wrap (e.g. snacks, beverage cases), Food Storage Bags, Dry Cleaning Bags

Where do I RECYCLE plastic bags and wraps? NOT curbside.

FIND A STORE OR OTHER DROP-OFF LOCATION NEAR YOU.

CLICK TO FIND

film drop off directory

NO BAGGED RECYCLABLES... NO BAGS OF BAGS... NO BAGS IN THIS CART!

Where can I recycle plastic bags and wraps? At store drop-off locations! See back panel for details.

WHERE TO RECYCLE

film drop off directory

PLASTIC BAGS, FILM AND WRAP

Malls and Retail Centers

Thank you for your interest in setting up a plastic film recycling program!

Consumer goods are often shipped to retailers in packages or pallets wrapped with plastic film because it protects products during shipping from contamination like dirt and moisture, helps secure goods for reduced breakage and damage, and helps protect inventory from shrinkage or loss.

Why Recycle Film Plastics?
Businesses care about smart recycling practices. Customers care too, and like to feel good about where they shop. But also, recycled plastic film has a market value – there's a strong domestic market for this material to make things like composite lumber. Within retail centers, there is a significant amount of flexible plastic film. Therefore, a well-designed program to collect and sell good quality plastic film to recycles can offset operating costs, potentially generate revenue for a small management entity, and can reduce waste disposal costs.

What is Plastic film?
Plastic film is thin polyethylene plastic used for wraps, packaging or commercial retail use bags. It is sometimes called stretch film or shrink film. Most plastic film collected for recycling may carry either a #2 HDPE or #4 LDPE mark. Common commercial or retail use examples include:

- Case, shrink, and pallet (stretch film) wraps
- Furniture and electronics wraps
- Film and bags designed to protect or transport merchandise
- Bubble wrap and air packets (shipping)
- Grocery, produce, newspaper and retail bags
- Dry cleaning bags

Keeping the film **CLEAN, DRY and CONTAMINANT FREE** is vital to recycling this material. Recyclers say that it is essential to keep the following out of your recycling bins to protect the quality of your material:

- Any material other than #2 or #4 (can be stiff and/or crinkly)
- Degradable bags and film
- Rigid plastics – bottles, hangers, clamshells, etc.
- Taps, paper, silica packets or other waste
- Rigid foam or "peanuts"
- Food waste

Typically, labels and permanent marker on films are okay to recycle, as they will be removed in the recycling process.

If you are not sure about a specific material, please check with your recycler before including any material in your recycling stream.

If any of your tenants accept bags and film from customers, please have them add their information to our Film Drop-Off Directory at www.plasticfilmrecycling.org



plasticfilmrecycling.org

wrap



Resources

Bale Specs

Directories

Tools

Value Chain Case Study

Links

Putting the Pieces Together



Demand:
PCR Use



Design
Guidelines



Policy &
Infrastructure



Collection:
Curbside,
Drop off,
Special



Commercial
Access

Bale Specs

- ISRI
- APR
- Individual Buyers
- Work to streamline grades, types, and language-Plastic Terms & Tools
- **Knowing what your buyers want is the most important spec**

Mixed Bulky Rigid Plastics

This grade primarily consists of non-bottle PE and PP bulky rigid plastic items such as plastic drums, crates, buckets, baskets, toys, refuse totes, and lawn furniture typically collected in a residential recycling MRF. This grade should not contain any mixed 1-7 bottles and containers.

Product: Mixed household items

Source: Postconsumer material

Contamination: Total allowed—2% listed below

—Non-specified plastic or non-plastic material

General: Refer to the General Information section for more information.

Mixed Color HDPE Buckets

Shall consist of HDPE buckets and “pail-grade” 5-8 melt-injection-grade HDPE recovered from any residential, construction, or commercial application. Original product such as paint or food must be emptied from unit, but dry surface residue is allowed. Metal handles are acceptable. Standard bale will include white or other colored 5-gallon buckets.

Product: Buckets recovered from a sorting facility

Source: Residential and commercial materials

Contamination: Total allowed—5% listed below

—Other types of HDPE containers or bottles

—Large rigid plastics such as crates, drums, toys, lawn furniture, etc.

—Nonspecified plastic or nonplastic material such as metal, paper, or glass.

General: Refer to the General Information section for more information.

Mixed Color HMW HDPE Drums

Shall consist of high-molecular-weight HDPE drums or barrels recovered from any commercial application. Original product such as solvents or chemicals must be emptied from the unit, and the unit must be rinsed in accordance with federal and state regulations prior to baling. Plastic lids and spouts are acceptable. Standard bale will include blue, white, or other colored 55-gallon drums.

Source: Commercial materials

Contamination: Total allowed—2% listed below

—Other types of HDPE containers or bottles

—Large rigid plastics such as crates, buckets, pails, toys, lawn furniture, etc.

—Nonspecified plastic or nonplastic material such as

The following items are not allowed: HMW drums or 55 gallon drums; metal on toys; pallets with metal; film and bags; wood; glass; or electronic scrap.

Refer to the “Prohibited Material” section for more information.

General: Refer to the General Information section for more information.

Tubs and Lids Without Bulky

Description: Any whole container with a #2 HDPE, #5 PP, and/or #4 LDPE resin code generated from a positive-sort curbside, drop off, or other public or private recycling collection program. Tubs are containers that have a neck or mouth similar in size to its base. Lids are caps for tubs that have a fastening feature other than threads. Examples include yogurt cups, margarine tubs, ice cream tubs, and cold drink cups (transparent, cold serve). Nursery pots are not acceptable.

Bulky rigid plastics are not allowed.

Product: Tubs and lids.

Source: Postconsumer material generated from a curbside, drop off, or other public or private recycling collection program.

Contamination: Total allowed—10% by weight.

—#1 PET bottles;

—#1 PET or #3 PVC thermoform packaging;

—#2 HDPE pails and buckets;

—#3 PVC (polyvinyl chloride);

—#6 PS (polystyrene);

—#7 Other;

—Paper;

—Liquids.

The following items are not allowed (0% allowed): Film and bags; metal handles; wood; glass; or electronic scrap.

Refer to the “Prohibited Material” section for more information.

General: Refer to the “General Information” section for more information.

Tubs and Lids With Bulky

Description: Any whole container, with a #2 HDPE, #5 PP, and/or #4 LDPE resin code generated from a positive-sort curbside, drop off, or other public or private recycling collection program. Tubs are containers that have a neck or mouth similar in size to its base. Lids are caps for tubs that have a fastening feature other than threads. Examples include yogurt cups, margarine tubs, ice cream tubs, and cold drink cups (transparent, cold serve). Nursery pots are not acceptable.

Bulky rigid plastics are allowed.

Product: Tubs and lids.

Directories



http://www.plasticfilmrecycling.org/s04/s04_getlisted.html

www.plasticsmarkets.org/recycle/viewsearch.html



http://www.plasticfilmrecycling.org/plasticbag/s11_pcrdirectory.html

Tools

Warehousing and Distribution (For the Retail Sector)

Thank you for your interest in setting up a plastic film recycling program!

Many types of products are shipped to distributors and retailers wrapped with plastic film to help protect them from contamination during shipping, secure them for reduced shrinkage and damage, and protect inventory from shrinkage or loss.

Why Recycle Plastic Film?

Businesses care about smart recycling practices. Recycled plastic film has a market value – there's a strong domestic

market for this material to make things like composite lumber. There can be significant amounts of flexible plastic film within a distribution network. Therefore, a well-designed program to collect and sell quality plastic film to recyclers can offset operating costs, potentially generate revenue, and reduce waste disposal costs.

To analyze the cost benefit of recovery, check out the calculator tool on PlasticFilmRecycling.org



What is Plastic Film?

Plastic film is thin polyethylene plastic used for wraps, packaging, and commercial/retail use bags. It is sometimes called stretch film or shrink film.

Most plastic film collected for recycling may carry either a #2 HDPE or #4 LDPE mark. Common commercial or industrial use examples include:

- Case, shrink, and pallet (stretch) film wraps
- Furniture and electronics wraps
- Film and bags designed to protect or transport merchandise
- Bubble wrap and air pockets (shipping)
- Grocery, produce, newspaper, and retail bags
- Dry cleaning bags

Scrap film is a material whose price can fluctuate. Additionally, many recyclers pay different rates for different grades of material. **Postindustrial** material is scrap from industrial or manufacturing processes.

Postconsumer material is any film or bags that have been used for their intended purpose. Below are descriptions of common recycling grades:

Commercial Film – Clear LDPE film. Clean, dry and free of contaminants (including labels)

Mixed Film - Clean – Dry mixed-color LDPE and HDPE film.

Mixed Retail Film – Same as above, includes film and bags returned by consumers to drop off locations.

The value of your material is dependent on quality. Recyclers state that keeping the film **CLEAN, DRY** and **CONTAMINANT FREE** is vital to recycling this material. To that end, keeping the following non-polyethylene scrap out of your program will help protect the quality of your material:

- Multi-layered, laminated, or heavily printed films
- Degradable bags and films
- Agricultural films
- Rigid plastics, tape, paper, or other waste
- Rigid foam or "peanuts"
- Food waste

Small labels and permanent marker on films are typically okay to recycle, as they will be removed in the recycling process.

If you are not sure about a specific material, please check with your recycler before including any material in your recycling stream.

If any of your wholesale customers accept bags and film from the public, please have them add their information to our Film Drop-Off Directory at www.plasticfilmrecycling.org



plasticfilmrecycling.org



Plastic Bottles and Containers

◀ EXPLORE MORE

WHAT IS IT USED FOR?

Bottles for beverages (e.g., milk, water, juice and soda), foods (e.g., peanut butter, ketchup, mustard, mayonnaise), household detergents, and **toiletries** (e.g. shampoo, body wash, mouthwash, lotion, medicine). Containers for yogurt, cheese and deli and dairy products. And caps and lids.

WHY IT WANTS TO BE RECYCLED.

Used plastics are valuable resources, versatile and adaptable to many uses. There is a wide market for your recycled plastic bottles and containers. Recycling your plastics helps keep valuable materials out of landfills and helps reduce energy use and emissions.

Recycling Rigid Plastics Beyond Bottles: CONTAINERS



The Association of Plastic Recyclers

Marketable Material, Growing Demand



Value Chain Case Study

- COMING SOON!
- Resource for all parts of the Recycling Value Chain
- Case studies, reports, tools
- Highlights recycling successes

Reclamation

WHO?
Reclaimer, Manufacturer

SPOTLIGHT CASE STUDY
Trex


WHAT?
The process of recycling plastic film requires that the material be taken from its sheet-like form and converted back into a raw product; this process is called reclamation. Reclaimers buy consolidated material by the truckload from distribution centers and commercial film haulers and through a process of grinding, melting and running through screens they produce plastic pellets similar to the original pellet used to make the sheet. Some reclaimers are vertically integrated, meaning that they produce a product and use their own pellet as an input, others simply sell the pellet to a plastic product manufacturer.



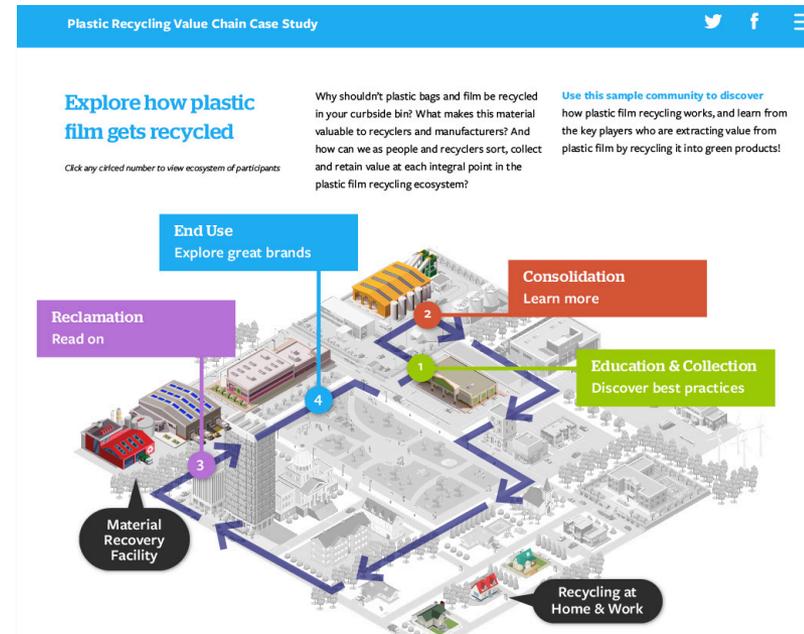
End Use

WHO?
Manufacturers, Brand Companies

SPOTLIGHT CASE STUDY
Seventh Generation


WHAT?
Once the plastic film is transformed to pellet it can be used as a raw product just like virgin plastic. Some end users make products from 100% recycled content, while others combine smaller amounts with virgin resin. Whether or not end users incorporate recycled content depends heavily on the price of virgin plastic. When oil prices are low, virgin plastic is very cheap to produce and this makes it difficult for recycled pellet to compete. Fortunately many brand companies have sustainability goals that include the use of recycled content and this keeps the market alive no matter how cheap virgin resin becomes.

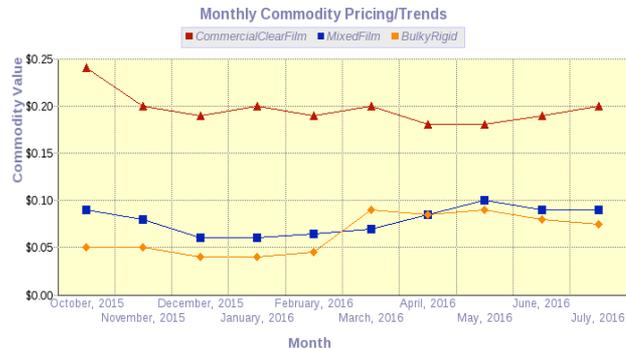




PlasticsMarkets.org

- Recycler Database:
 - **List in Directory**
 - **Search for buyers**
- Scrap Pricing
- Export Procedures
- National Recycling Reports

Scrap Plastic Pricing



Company Search Form

Clear form

Please select a load size:

Truckload Quantity



Less Than Truckload Quantity



Select Buyer/Supplier

Search for Buyers

Search for Suppliers

Select a material form.

Baled

Dirty Regrind/Shred

Clean Flake or Regrind

Loose

Densified

Pellet

Select a Material Product Type.

Bottles Container & Bulky

- Bottles
- Non-bottle Containers
- Thermoforms/Clamshells
- Tubs and Lids
- Bulky Rigid Plastic
- Buckets
- Bottles and Containers
- Bottles, Containers, and Bulky (All Rigid Plastic)
- Pre-picked Rigid Plastic: No Bulky (No PET & HDPE Bottles)
- Pre-picked Rigid Plastic: with Bulky (No PET & HDPE Bottles)

Film & Foam

- Ag Film (see Ag Plastic to the right)
- Film
- Mixed Retail Bags/Wraps Film
- MRF Film
- Film and Cardboard
- Multi-layer/Laminate Film
- Foam (Flexible)
- Foam (Rigid)

Other Commodities

- Ag Plastic
- Auto Plastic Scrap
- Battery Casings
- Boat Wrap
- Caps (bottle caps)
- Carpet Trim Scrap
- CDs
- Construction and Demolition Scrap
- Drums
- Electronic Scrap Plastic
- Hangers
- Manufacturing Scrap
- Pallets
- Sheeting
- Strapping
- Super Sacks
- Other



Resource Links

- ISRI Bale Specs
 - <http://www.isri.org/docs/default-source/commodities/specsupdate.pdf?sfvrsn=2>
- APR Bale Specs
 - <http://www.plasticsrecycling.org/markets/model-bale-specs/pe-pp-resin-specifications>
- PlasticsMarkets.org
 - [Connect suppliers and buyers of all types of scrap plastic]
- PlasticFilmRecycling.org
 - [Resource for plastic film recycling]
- RecycleYourPlastics.com
 - [Resources for common terminology and collection tips]

Questions?

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