Plastic Market Update

Tonya Randell, More Recycling
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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; and

• Serve as a liaison between industry, public agencies, and NGOs and prioritize accurate information and neutrality in the marketplace.
Overview

Market Overview
Specific Commodities
Resources
Considerations

- Quality & Quantity Matters
- Not all Plastics are Created Equal
- Readily Recyclable vs. Not
- Post Commercial vs. Post Consumer
- Multilayered, Barriers, Multi-resin, Non-plastic components
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*
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
Changes in Collection Programs
Plastic Scrap Price vs Oil

Scrap Price History vs Oil: 2007 to-date

$/lb of plastic scrap: Moore Recycling - FASCA Ports

$/barrel of crude oil: EIA - Cushing, OK

MORE RECYCLING
Domestic vs Export Data

U.S. Postconsumer Plastic Recycling
in millions of pounds

- PET Bottles
- HDPE Bottles
- Non-bottle Rigid
- Film

Yearly data for 2009 to 2014.
Specific Commodities

- PET Bottles & Thermoforms
- HDPE Bottles
- Non-Bottle Rigids
- Polypropylene Bottles & Containers
- Plastic Film and Bags
- Polystyrene
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

http://www.napcor.com/PET/pet_reports.html

NAPCOR
Promoting and Protecting the PET Package
HDPE Bottles

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

End uses of HDPE bottles
Non-Bottle Rигids

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

- PET
- HDPE
- PP
- LDPE
- PS
- PVC
- Other/Mixed

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
Polypropylene Map

Plastic Film & Bags
Retail to Retail Message

• Discourage curbside collection

• More than 18,000 drop off locations

• Many opportunities to improve commercial collection

• Growing use of How2Recycle Label
Polystyrene

- Domestic Markets exist
- Densification is essential
- Easily identifiable
- **Grants available from Foodservice Packaging Institute**
- Athens-Clarke County CHaRM received grant in 2016.
Polystyrene

• Case Studies and Map available: www.RecycleMorePlastic.org
Ag plastics

- Resources expanding-terminology & market info: maps and directories
- Good market for clean ag film and some rigid container types
Resources

RecycleMorePlastic.org

The Association of Plastic Recyclers

Plastics Recycling Terms & Tools

Take the ambiguity out of plastics recycling. Clear, consistent recycling terminology can help your community (and the nation) recycle more plastics.

Market Support

www.RecycleMorePlastic.org
  • Maps
  • Case Studies

www.PlasticsMarkets.org
  • Directories
  • Bale Specs
  • Markets

www.PlasticsRecycling.org
  • Case Studies
  • Toolkits
Education Resources

www.PlasticFilmRecycling.org
  • Tools
  • Case Studies
  • Signage
  • Drop off Directories

www.RecycleYourPlastics.org
  • Plastic Recycling Terminology
    • www.RecycleYourPlastics.org/terms andtools
    • www.RecycleYourPlastics.org/commodityterms
  • Recycling Resources
How to succeed in *all* market conditions?

- Focus on quality
- Strong buyer/supplier relationship
- Consistent Material Supply
Putting the Pieces Together

Demand: PCR Use

Collection: Curbside, Drop off, Special

Design Guidelines

Policy & Infrastructure

Commercial Access
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]