

## Plastics Recycling Markets Overview

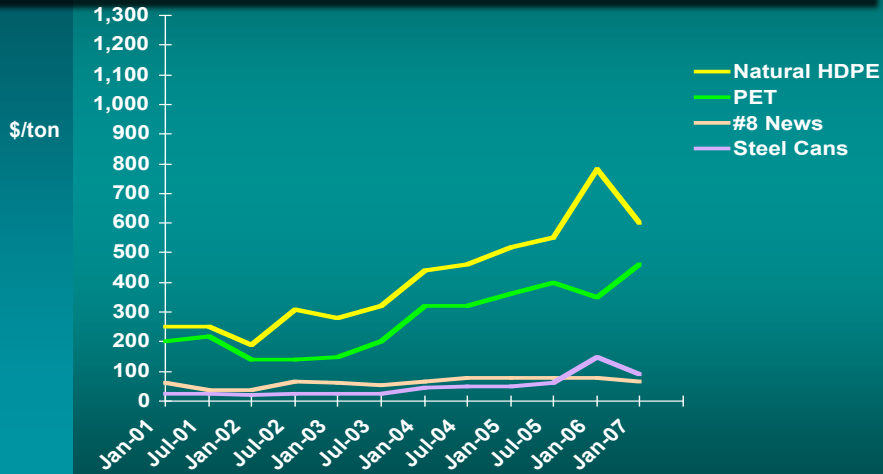


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## Plastics Recycling Overview

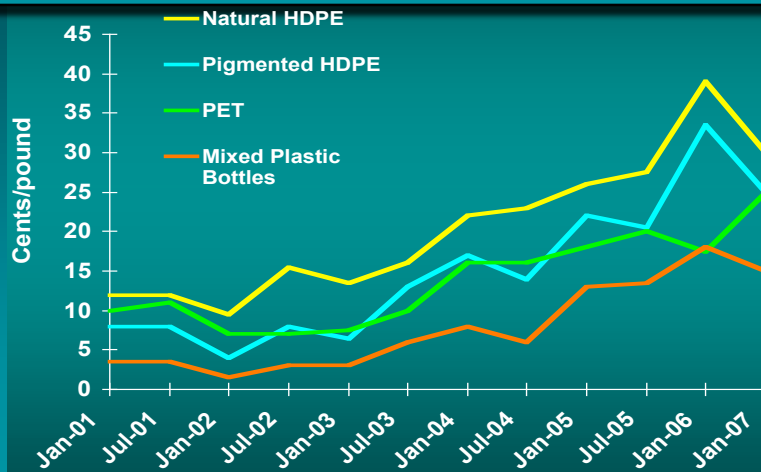
- PET and HDPE bottles are the most common plastics targeted by municipal recovery programs
  - 96% of all plastic bottles are PET or HDPE
  - Only 4% are made of resins #3-7
  - Nearly 2100 communities collect “all plastic bottles” for recycling
  - Growing number of communities collecting non-bottle rigid containers
- Polyethylene film plastics are the most common plastics recycled by businesses

## Market Prices for Major Commodity Recyclables – 5 Year Trends



Source: R. W. Beck, Inc. and Waste News

## Historical PET and HDPE Bottle Bale Prices



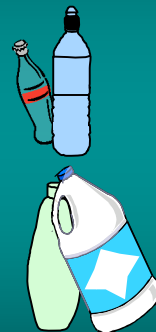
Source: R. W. Beck, Inc., Waste News, & Moore Recycling Associates, Inc.

## Market Price Summary

- Plastics have a high per-ton value
- Current market prices are well above 5-year averages

## Market Access for Florida Material

- In the Southeast:
  - Over half of US PET bottle reclamation capacity
  - Over half of US HDPE bottle reclamation capacity
  - One of the largest markets for mixed plastic bottle bales



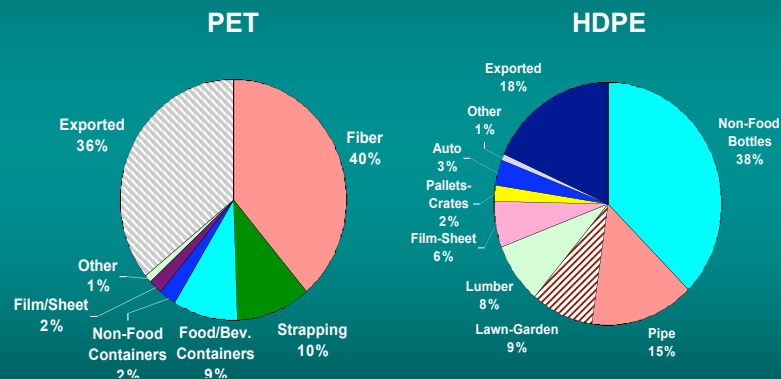
## Recycled Plastic Markets (Examples)

- Bottles - e.g. Envision, KW Plastics, Mohawk, Ensley  
APR members [www.plasticsrecycling.org](http://www.plasticsrecycling.org)
- Film – bags and stretch/shrink
  - AERT, TREX, NextLife Recycling, Hilex-Poly (bag manufacturer)
- Buckets & Crates; Bulky HDPE Rigids
  - Champion Polymer Recycling, Winchester, KY & Houston, TX

## Recycled Plastic Markets (Examples)

- Drums
  - <http://www.reusablepackaging.org>
- Miscellaneous –
  - Avangard - Houston, TX; GMR, LLC of Brooklyn, NY - take mixed rigid containers and other materials; Haycore in Canada –tubs, pails, #2,4,5,7.

## PET & HDPE Bottle Markets



Source: R. W. Beck Inc. 2004

## Market Trends

- Domestic PET reclaimers lack supply
  - MRFs selling to exporters
- HDPE reclaimers color sorting pigmented bottles
  - Higher value bottle-to-bottle recycling
- Plastic lumber producers struggling to meet growing product demand
  - Increased film recovery needed
  - Importing film recovered in Europe

## Market Trends (continued)

- Automated sorting of all-plastic bottle bales growing
  - WM Recycle America – 100 million pounds/yr. capacity
  - Single stream recycling facilities being equipped with optical sorting equipment
- Size and equipment at such facilities makes it economical to recover polypropylene and PVC bottles

## Recovered PET Export Trends



Source: NAPCOR

## All Plastic Bottles

- Easier message for consumers to understand – *"If it's a bottle – put it in the bin!"*
- APC worked with numerous cities past 6-7 years to increase all bottle programs
- Proven to pull average of 10-20% more PET and HDPE from waste stream
- Large sorting facilities market PVC and PP in addition to other resins
- Growing Markets – An increasing number of MRFs accept all plastic bottles

## All Plastic Bottles (cont.)

- Nearly 2100 programs – Resource Recycling surveyed communities in Jan '06 – average -28% recovery growth
- Most communities that switch to single stream collection collect all plastic bottles
- [www.allplasticbottles.org](http://www.allplasticbottles.org) –web site contains documents, graphics, peer list, markets information



## Increasing Supply of Plastic Bottles

- APC initiative with SP Recycling in Metro Atlanta
- Pilot Program kicked-off Aug. 2005
  - Plastic bottle and paper containers co-located at approximately 50 public drop-off sites w/newspaper (& AL)
  - Multi-year data being gathered to assess performance and ability to be replicated in other SE areas
  - Approx 16,000 lbs/month of plastic bottles being collected currently



## Visit our web sites for resources

- Databases
  - Markets
  - Recycled products
- Camera-ready clip art
- How-to guides
- Information
- Links

## ACC Resources You Can Use

- [www.PlasticsResource.com](http://www.PlasticsResource.com)
- [www.AllPlasticBottles.org](http://www.AllPlasticBottles.org)
- [www.PlasticBagRecycling.org](http://www.PlasticBagRecycling.org)

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