APR's Brief Take on Plastics Recycling Collection, Demand & Programs

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The Association of Plastic Recyclers

Introducing the APR

- The only industry trade association focused solely on plastics recycling
- Three primary objectives:
  1. Increase supply of recycled plastics
  2. Increase the demand for recycled plastics
  3. Eliminate contamination that impacts:
     - Quality of recycled plastics
     - Productivity of plastics recycling operations

APR Recycling
DEMAND CHAMPIONS

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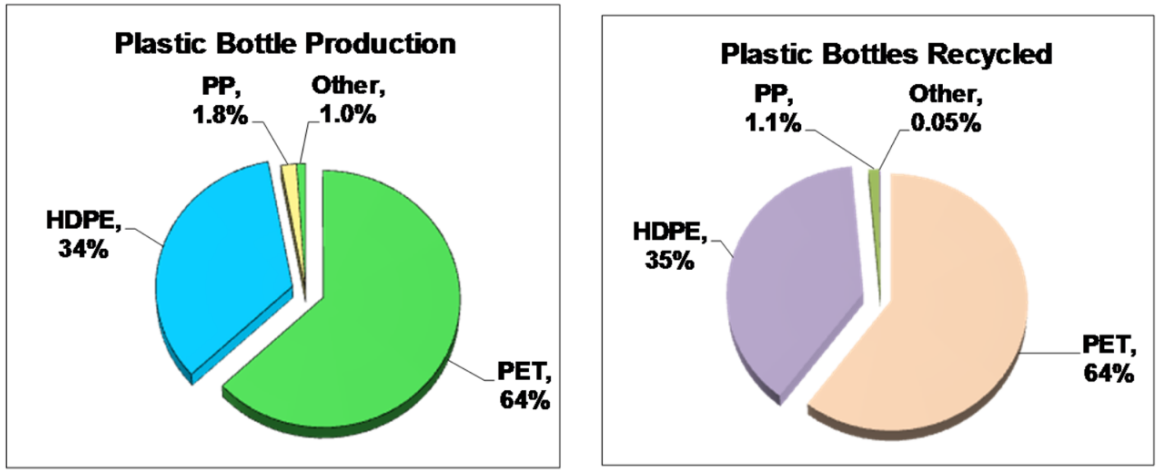
Bottle Production / Recycling 2018

Figure 5
2018 Plastic Bottles Recycled and Plastic Bottle Production by Resin



Source: More Recycling, 2018. NAPCOR, 2018

PET:
1,813 mm lbs. collected
28.9% recycling rate

HDPE Natural:
431 mm lbs., 28.7% rate

HDPE Pigmented:
575 mm lbs, 31.7%

TOTAL HDPE:
1,006 mm lbs. collected
30.4% recycling rate

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Source: APR *"2018 United States National Postconsumer Plastic Bottle Recycling Report,"* https://plasticsrecycling.org/resources/reports/rate-reports , *NAPCOR*

California Redemption (2018)

CRV Container Material	Annual CRV Units Sold	RC Containers per Pound	~ Total CRV Pounds Sold	CRV Redemption Rate	~ Total CRV Pounds Collected	~ Total Pounds Collected
PET	12,480,696,915	22.3	540,289,910	74%	427,000,000	468,000,000
HDPE	196,169,790	6.6	28,024,256	65%	19,300,000	100,000,000
PVC	116,110	11.2	22,767	14%	1,500	1,500
LDPE	8,839,177	40.8	217,714	3%	6,500	14,400
PP	3,512,434	8.2	341,013	11%	47,500	57,000
PS	117,416,820	112.6	1,046,496	27%	282,000	300,000
Other	44,754,072	3.2	13,985,648	7%	980,000	1,100,000

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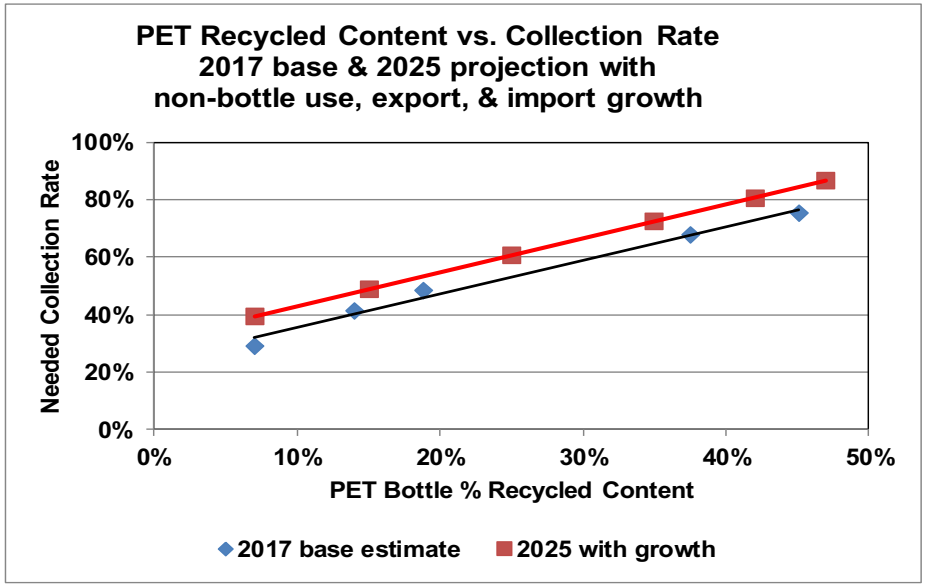
Data Source: CalRecycle "Biannual Report of Beverage Container Sales, Returns, Redemption, and Recycling Rates," https://www.calrecycle.ca.gov/BevContainer/Notices/#Rates

Market Demand – PET

- To support 30% content would require a ~66% recycling rate
- Projected growth of all end uses
- rPET demand growth outpacing supply

FIGURE 2



For PET, not a reclamation capacity, but a collection issue!

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Source: DD Cornell Associates LLC,
NAPCOR / APR *Postconsumer PET Container Recycling Activity in 2017* Report

Market Demand - HDPE

PLASTICS RECYCLING UPDATE

A Resource Recycling, Inc. publication

Resource Recycling | Plastics Recycling Update | E-Scrap News

HDPE prices fall from record highs

Posted on February 12, 2020

by RecyclingMarkets.net Staff

After riding high since last fall – even hitting an all-time record – the price of natural HDPE bales decreased 8% this month.

The national average price of **natural high-density polyethylene (HDPE)** from curbside collection programs has dropped to 54.81 cents per pound, compared with 59.47 cents this time last month. The January average, which was up slightly from the month before, was a record high. This grade traded at 35.19 cents per pound one year ago.

- Strong demand for HDPE, particularly Natural HDPE
- Flexible for use in wide array of products
- More collection would be needed to satisfy additional bottle content requirements

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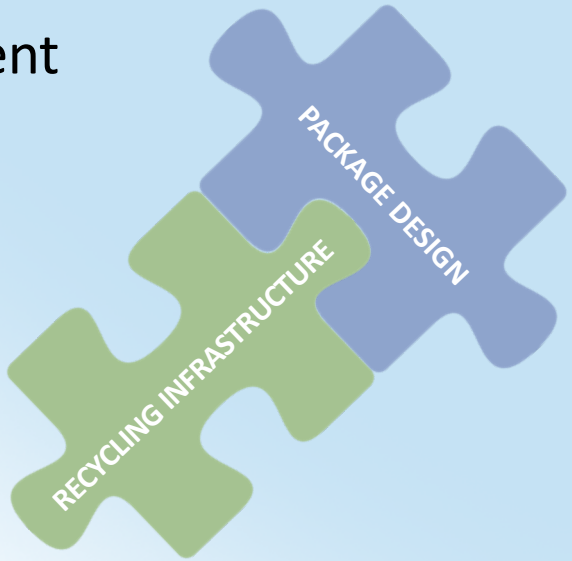
Package Design for Recycling

- The APR Design® Guide for Plastics Recyclability
- APR design guidance — by resin and component
- Test methods
- Training



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https://plasticsrecycling.org/apr-design-guide/apr-design-guide-home

Eliminate Contamination

Preferred

Detrimental

Renders non-recyclable

Requires testing

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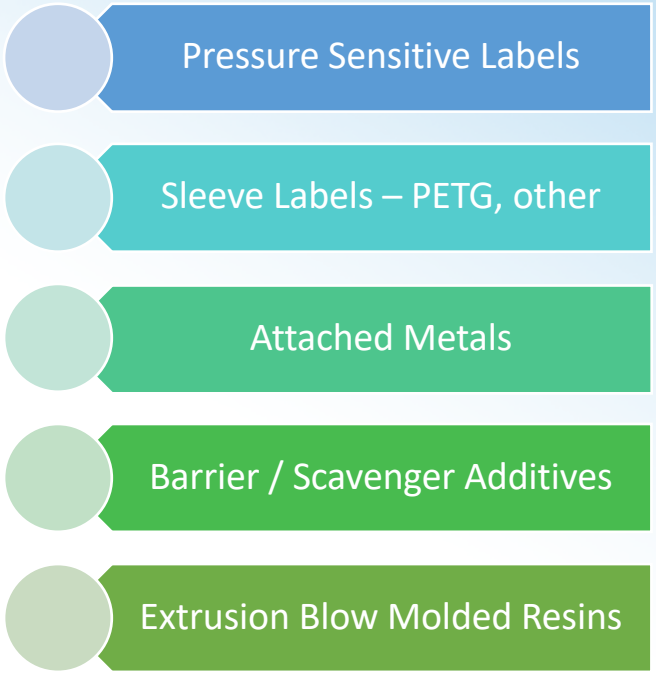
Five for Focus



- Five design focus areas for PET packaging
- Potentially disruptive to recycling
- Help focus positive change

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In Summary…

- Meeting higher recycled content levels in plastic beverage containers requires ***increased collection***
- Recycling compatibility must be part of good package design
- PET postconsumer collection volumes are most affected by deposit laws vs. other resins
- Plastic recycling works

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Moving Forward

- Historically, the APR has been a technical organization, but is well aware of critical need to address supply gap
- APR is actively engaged with legislators—both state and federal—as plastics recycling expert, provider of market data
- APR remains supportive of Deposit Law expansions and opposed to Deposit Law repeals

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