



# **PET Beverage Bottle Recycling in 2013**

An Addendum to the  
**Report on Postconsumer PET Container  
Recycling Activity in 2013**

*Produced on behalf of the  
American Beverage Association*

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## Background:

This report complements and expands upon the information contained in the “Report on Postconsumer PET Container Recycling Activity in 2013” previously published by the National Association for PET Container Resources (NAPCOR) and The Association of Postconsumer Plastic Recyclers (APR). The data and information contained in this report were derived from various sources: work performed by NAPCOR to obtain the PET bottle recycling rate for 2013; a bale composition analysis funded by the American Beverage Association (ABA), the International Bottled Water Association (IBWA) and NAPCOR, and performed at Mohawk Industries in early October 2013 by Moore Recycling Associates; and industry data supplied by ABA. As such, the content is considered proprietary to the ABA, NAPCOR, and their respective members, and **should not be distributed by either party without the expressed written permission of the other.**

## Summary:

According to the “Report on Postconsumer PET Container Recycling Activity in 2013,” there were over 5,764 million pounds of PET containers available for recycling in the United States. The American Beverage Association reported adjusted share of PET containers sold in 2013—and thereby available for recycling—for each of four beverage categories. All five PET categories are defined in Table 1.

**Table 1: 2013 PET Container Collection Totals / Recycling Rate Summary (MMlbs)**

Categories	PET Container Types Included	(A) “Available for Recycling” by Category	(B) “Total Collected” by Category	Recycling Rate (B/A)
<b>All Containers</b>	All PET bottles: beverage, food, household, etc.	5,764	1,798	31.2%
<b>ABA Member Beverages*</b>	CSDs, isotonics, water, enhanced water, functional beverages, ready-to-drink teas, juices and juice drinks	4,688	1,557	33.2%
<b>All Beverages</b>	Same as above, plus beer, wine, liquor, and dairy	4,831	1,591	32.9%
<b>CSD</b>	Carbonated Soft Drinks only	1,501	498	33.2%
<b>Still Water*</b>	Unflavored bottled water	1,600	452	28.2%

Source: American Beverage Association, NAPCOR / Includes containers > 8 oz capacity

\* Functional beverages, RTD teas, and enhanced waters are included in “Other Beverage” or “Vitamin Water” categories in Table 4.

“Total Collected” by Category volumes in Table 1 are calculated using the total PET recovered by each collection method, as well as bale composition analysis data; this is further detailed in the “Data and Methodology” section. Collection volumes and recycling rate calculations, by PET container category, are summarized below.

**Table 2: Collection Totals & Recycling Rates by Category**

<b>Year</b>	<b>PET Bottles on U.S. Shelves</b> Available for Recycling (MMlbs)	<b>Total U.S. PET Bottles Collected</b> (MMlbs)	<b>Gross Recycling Rate</b>
2005	5,075	1,170	23.1%
2006	5,424	1,272	23.5%
2007	5,683	1,396	24.6%
2008	5,366	1,451	27.0%
2009	5,149	1,444	28.0%
2010	5,350	1,557	29.1%
2011	5,478	1,604	29.3%
2012	5,586	1,718	30.8%
2013	5,764	1,798	31.2%

<b>Year</b>	<b>PET All Beverage Containers Available</b> (MMlbs)	<b>PET All Beverage Containers Recovered</b> (MMlbs)	<b>Recycling Rate</b>
2005	4,410	1,079	24.5%
2006	4,740	1,171	24.7%
2007	4,950	1,282	25.9%
2008	4,620	1,322	28.6%
2009	4,350	1,304	30.0%
2010	4,510	1,404	31.1%
2011	4,578	1,430	31.2%
2012 <sup>1</sup>	4,700	1,510	32.1%
2013	4,831	1,591	32.9%

<sup>1</sup> 2012 “Containers Recovered” and “Recycling Rate” values have been adjusted to reflect corrected data.

**Table 2: Collection Totals & Recycling Rates (cont.)**

<b>Year</b>	<b>ABA Member Containers Available (MMlbs)</b>	<b>ABA Member Containers Recovered (MMlbs)</b>	<b>Recycling Rate</b>
2006	4,580	1,154	25.2%
2007	4,802	1,262	26.3%
2008	4,464	1,286	28.8%
2009	4,190	1,273	30.4%
2010	4,330	1,372	31.7%
2011	4,402	1,401	31.8%
2012 <sup>2</sup>	4,544	1,480	32.6%
2013	4,688	1,557	33.2%

<b>Year</b>	<b>CSD Containers Available (MMlbs)</b>	<b>CSD Containers Recovered (MMlbs)</b>	<b>Recycling Rate</b>
2009	1,540	503	32.7%
2010	1,590	551	34.6%
2011	1,580	471	29.8%
2012 <sup>2</sup>	1,511	494	32.7%
2013	1,501	498	33.2%

<b>Year</b>	<b>Still Water Containers Available (MMlbs)</b>	<b>Still Water Containers Recovered (MMlbs)</b>	<b>Recycling Rate</b>
2009	1,270	351	27.6%
2010	1,270	360	28.4%
2011	1,306	453	34.7%
2012 <sup>2</sup>	1,463	440	30.0%
2013	1,600	452	28.2%

<sup>2</sup> 2012 “Containers Recovered” and “Recycling Rate” values have been adjusted to reflect corrected data in all three of the Table 2 charts above.

**Table 3: 2013 PET Container Collection Summary (MMlbs)**

<b>COLLECTION METHOD</b>	<b>TOTAL RECOVERED</b>	<b>All Beverage Recovered</b>	<b>ABA Member Beverage Recovered</b>	<b>CSD Recovered</b>	<b>Still Water Recovered</b>
<b>Curbside</b>	<b>1,087.1</b>	913.3	886.9	240.1	229.9
<b>Drop-off</b>	<b>57.2</b>	48.0	47.0	17.2	9.1
<b>Standard Deposit</b> (IA, MA MI, VT)	<b>85.6</b>	85.5	84.9	84.3	0.3
<b>Expanded Deposit</b> (CT, NY, OR)	<b>136.4</b>	136.4	136.4	58.0	73.9
<b>Expanded Deposit</b> (ME, HI)	<b>21.5</b>	21.5	20.3	4.5	5.6
<b>CA CRV</b>	<b>409.8</b>	386.5	381.7	94.2	132.8
<b>TOTAL</b>	<b>1797.7</b>	<b>1,591.2</b>	<b>1,557.2</b>	<b>498.3</b>	<b>451.6</b>

**Data and Methodology:**

NAPCOR's estimates of beverage container types, by collection method, are based on bale composition data. The bale composition analysis work previously mentioned was performed at Mohawk Industries (Summerville, GA) in early October of 2013. PET bales from 16 locations in 14 states—representative of all collection methods and of states where the vast majority of PET containers are collected—were classified into 44 different categories, including seven different beverage container classifications. No attempts were made to account for whatever seasonality may occur with the various products. A summary of that breakdown, as percent by weight, is shown in Table 4 below.

The totals were further broken down into the six major collection method categories as shown in Table 3: Curbside, Drop-off, Standard Deposit, two Expanded Deposit categories, and CRV (California Redemption Value). The individual "Recovered" totals for the four beverage categories in Table 3 were derived by applying the Table 4 percentages to the "Total Recovered" weights for that collection category. For example, CSD containers made up 22 percent of the total curbside material. Applying this percentage to the 1,087 million pounds of total PET container curbside material recovered gives us the 240 million pounds of CSD recovered through curbside, as cited in Table 3.

The four different deposit bale types sorted reflect the variations in containers collected through the ten deposit programs currently operating (see sidebar). The Standard Deposit bale sourced from Iowa is representative of bales from states with similar deposit laws, namely Massachusetts, Michigan, and Vermont. Similarly, the Expanded Deposit bale from Maine is representative of Hawaii. While the Expanded Deposit bale out of New York is reflective of similar Connecticut and Oregon deposit programs, there are likely differences in consumption patterns, specifically with regards to CSD and water. In future analyses, NAPCOR will look at this more closely, possibly sorting more material in this category.

The 2013 composition study methodology was consistent with that of the previous few years and incorporated modifications made in 2009 to more accurately reflect the various ABA beverage categories, particularly in the non-ABA beverages where liquor, mixers and milk are now broken out separately from the Other Beverage category. Vitamin Water was again tracked separately, with Propel flavored water counted in the Other Beverage category. CSD was not analyzed by size as in previous years, only by color and full-wrap counts. All data reflects actual bottle weights to the tenth of a pound.

In 2012, the NAPCOR “Containers Recovered” data reflected overstated volumes in the Standard Deposit categories that should have instead been included in Curbside and Drop-Off totals. Adjustments have been made in Table 2 (above) to correct “Containers Recovered” and “Recycling Rate” values for all four ABA categories affected by this error: PET All Beverage, ABA Member Containers, CSD, and Still Water.

### **Deposit bales analyzed represent the 10 deposit law states in USA:**

#### **Standard Deposit (IA)**

CSD, beer, mineral water (not still), wine coolers, wine and liquor  
also represents: MA, MI, VT\*

#### **Expanded Deposit (NY)**

CSD, water, beer, malt liquors  
also represents: CT, OR\*

#### **Expanded Deposit (ME)**

All beverages except dairy products, and unprocessed cider  
also represents: HI\*

#### **California CRV**

All non-alcoholic beverages except milk; beer, malt liquors, wine coolers

\* for purposes of this report only

**Table 4: 2013 Bale Composition, percent by Weight**

Container Type	Curbside	Drop Off	Deposit (IA)	Expanded Deposit (NY)	Expanded Deposit (ME)	CRV
Soft Drink (CSD)	22%	30%	99%	43%	21%	23%
Juice	16%	17%	0.1%	0%	27%	13%
Water	21%	16%	0.3%	54%	26%	32%
Vitamin Water	2%	2%	0.0%	3%	4%	3%
Other Beverage	20%	18%	0.3%	0%	16%	21%
Beer/Wine	0%	0%	0.3%	0%	0%	0%
Milk, Liquor, Mixers	2%	2%	0.3%	0%	5%	1%
Food	10%	10%	0%	0%	0%	4%
Non-Food	6%	7%	0%	0%	0%	2%

\* Water category includes flavored water, but not carbonated or enhanced waters; these are included in the Other Beverage category.

### Observations:

Comparing 2013 recycling rates with corrected 2012 rates, all are up slightly in 2013, with the exception of the Still Water category. In terms of relative volumes of “Containers Recovered” for recycling, by weight, all categories showed increases, ranging from under one percent for CSD to just over five percent for All Beverage and ABA Member categories. “Containers Available” for recycling volumes were also higher in all categories except CSD. NAPCOR attributes growth in “Containers Recovered” volumes to higher CRV collection, as well as to increases in curbside, and to a lesser extent, deposit collection volumes. These increases occurred despite widely acknowledged sales declines in the CSD sector, and are evidence of both strong Still Water sales and the continued light-weighting of bottles.

In terms of change in bale composition by weight between 2012 and 2013, CSD showed no appreciable change in Drop-Off and CRV collection categories; a one percent increase in Curbside; and a two percent increase in Standard Deposit, signifying a net uptick across the top two collection categories by volume, Curbside and CRV. The most significant year-over-year changes for CSD, in terms of relative percentage of bales by weight, were in the Expanded Deposit Categories, both Maine and New York, in which CSD as a total portion of bale weight decreased by 13 percent and 18 percent, respectively, between 2012 and 2013. CSD made up 21 percent of the Maine bale and 43 percent of the New York bale in 2013. Filling in for CSD declines in these bales in 2013 were Juice in the Maine bale, up 19 percent over 2012 to 27 percent of the bale by weight, and Still Water in the New York bale, up 20 percent over 2012, to comprise 54 percent of the bale. This shift in Expanded Deposit make-up may be

attributable in part to the audit of a New York bale in 2013 and a Connecticut bale in 2012. As mentioned previously, while New York, Connecticut, and Oregon deposit laws reflect similar program inclusions, the markedly different consumption patterns will likely be reflected in bale composition. NAPCOR will look at how to best address this in future audits.

While Still Water was up significantly by relative percentage in the New York bale, it was down in all other collection categories: one percent in Curbside and Standard Deposit; five percent both in CRV and Expanded Deposit (Maine); and seven percent in Drop-Off. The relative percentages of other container types were flat or showed minor changes across collection categories year over year. The most pronounced of these changes occurred in the Other Beverage category, which was up three and four percent in Drop-Off and Curbside, respectively, and down five percent in CRV. Looking at an aggregated All Beverage Category, the relative percentage by weight of All Beverage Containers was flat in both Standard Deposit and Expanded Deposit (Maine/New York), up three percent in Curbside, and down five percent and three percent, respectively, for CRV and Drop-off. For aggregated ABA Member Beverage Containers, there was a three percent increase in Curbside; no appreciable change in Standard Deposit and Expanded Deposit (New York); and declines in CRV, Expanded Deposit (Maine), and Drop-Off of six percent, three percent, and two percent, respectively.