



## DEPARTMENT OF RESOURCES RECYCLING AND RECOVERY

801 K STREET, MS 19-01, SACRAMENTO, CALIFORNIA 95814 • (916) 322-4027 • WWW.CALRECYCLE.CA.GOV

**May 10, 2011**

### NOTICE

**To:** All Interested Parties

**Subject:** Biannual Report of Beverage Container Sales, Returns, Redemption, and Recycling Rates

Public Resources Code Section 14551 requires the Department of Resources Recycling and Recovery (CalRecycle) to report biannually on the redemption and recycling rates for each six-month period within 130 days from the end of that period. Enclosed, please find the Biannual Report of Redemption and Recycling Rates for the second half of 2010 and the full calendar year 2010. CalRecycle is pleased to report that the overall recycling rate for calendar year 2010 was 82 percent.

The recycling rate for the first half of 2010 was 86 percent. The second half calendar year recycling rate was lower than the first half at 78 percent, which is consistent with the trend observed over the life of the recycling program.

During 2010, Californians recycled more than 16.5 billion beverage containers. California continues to lead the nation in total quantity of bottles and cans recycled.

If you have any questions about this report, please contact Jason Marshall, Deputy Director, at (916) 323-3836.

Mark Leary  
Acting Director

Enclosures



Intentionally left blank



# Biannual Report of Beverage Container Sales, Returns, Redemption & Recycling Rates

<b>RATES</b>	<b>CONTAINERS</b>
--------------	-------------------

ALUMINUM	Redemption	Recycling	Sales*	Recycled	Refillable	Postfilled
JUL - DEC 2010	92	92	4,690,972,850	4,335,150,421	0	78,255,150
JAN - JUNE 2010	95	95	4,139,530,221	3,927,101,177	0	105,028,761
JUL - DEC 2009	91	91	4,868,254,684	4,412,768,853	0	101,199,661
JAN - JUNE 2009	91	91	4,332,122,180	3,941,500,646	0	44,303,845
<b>GLASS</b>						
JUL - DEC 2010	90	81	1,560,018,180	1,256,831,829	318	211,907,776
JAN - JUNE 2010	101	90	1,365,423,094	1,225,430,897	300	208,325,167
JUL - DEC 2009	85	77	1,667,765,942	1,276,277,514	805	211,175,108
JAN - JUNE 2009	96	85	1,463,364,328	1,243,043,696	892	229,286,263
<b>#1 PET</b>						
JUL - DEC 2010	63	63	4,499,646,536	2,856,964,781	0	92,837,810
JAN - JUNE 2010	74	74	3,548,291,149	2,622,342,927	0	83,418,271
JUL - DEC 2009	69	69	4,522,439,326	3,136,311,034	0	82,339,591
JAN - JUNE 2009	78	78	3,658,715,637	2,869,448,621	0	76,065,937
<b>#2 HDPE</b>						
JUL - DEC 2010	228	86	170,100,621	146,622,140	0	247,960,206
JAN - JUNE 2010	242	98	158,374,808	155,656,115	0	235,718,790
JUL - DEC 2009	225	102	176,283,701	180,495,866	0	225,952,036
JAN - JUNE 2009	254	116	157,489,406	182,964,511	0	226,682,828
<b>#3 PVC</b>						
JUL - DEC 2010	0	0	154,034	433	0	17
JAN - JUNE 2010	0	0	586,051	517	0	6
JUL - DEC 2009	0	0	582,064	846	0	0
JAN - JUNE 2009	0	0	404,713	1,000	0	0
<b>#4 LDPE</b>						
JUL - DEC 2010	1	1	10,571,451	94,225	0	5,841
JAN - JUNE 2010	1	1	7,161,478	40,716	0	3,499
JUL - DEC 2009	0	0	5,599,955	11,654	0	1,699
JAN - JUNE 2009	2	2	4,793,388	73,492	0	4,006
<b>#5 PP</b>						
JUL - DEC 2010	5	5	347,076	15,714	0	1,624
JAN - JUNE 2010	3	2	348,882	8,678	0	1,266
JUL - DEC 2009	1	1	855,145	8,855	0	3,272
JAN - JUNE 2009	1	1	498,361	3,580	0	28

(Continued on next page)



# Biannual Report of Beverage Container Sales, Returns, Redemption & Recycling Rates

Table 1  
May 10, 2011

<b>RATES</b>		<b>CONTAINERS</b>				
#6 PS	Redemption	Recycling	Sales*	Recycled	Refillable	Postfilled
JUL - DEC 2010	7	7	32,775,033	2,267,490	0	190,656
JAN - JUNE 2010	8	8	28,555,782	2,397,305	0	118,902
JUL - DEC 2009	2	2	32,560,740	718,512	0	120,354
JAN - JUNE 2009	3	2	30,085,789	591,006	0	309,378
<b>#7 OTHER</b>						
JUL - DEC 2010	10	9	15,815,205	1,426,915	0	202,429
JAN - JUNE 2010	13	12	11,666,084	1,437,347	0	175,872
JUL - DEC 2009	6	5	26,384,690	1,437,591	0	202,963
JAN - JUNE 2009	14	13	11,561,036	1,560,508	0	180,656
<b>BIMETAL</b>						
JUL - DEC 2010	11	11	12,824,642	1,376,413	0	118,218
JAN - JUNE 2010	16	14	10,560,920	1,517,585	0	208,134
JUL - DEC 2009	7	7	26,579,935	1,790,673	0	119,930
JAN - JUNE 2009	16	16	12,153,553	1,903,652	0	181,154
<b>ALL MATERIALS</b>						
JUL - DEC 2010	80	78	10,993,225,628	8,600,750,361	318	631,479,727
JAN - JUNE 2010	88	86	9,270,498,469	7,935,933,264	300	632,998,668
JUL - DEC 2009	81	80	11,327,306,182	9,009,821,398	805	621,114,614
JAN - JUNE 2009	87	85	9,671,188,391	8,241,090,712	892	577,014,095

## CALCULATION OF REDEMPTION AND RECYCLING RATES

A = number of empty beverage containers returned

B = refillables returned

C = postfilled food or drink packaging containers returned

D = number of beverage containers sold

$$\text{Redemption Rate} = \frac{A + B + [C - (0.05 \times (A + B))]}{D}$$

$$\text{Recycling Rate} = \frac{(A+B)}{D} \quad \text{(The value in brackets [ ] is included only when greater than zero.)}$$

CONTAINER PER POUND RATES (GRV/POSTFILLED)	ALUMINUM	GLASS	#1 PET	#2 HDPE	#3 PVC	#4 LDPE
JAN - AUG 2010	29.3/32.25	1.9/0.93	15.0/6.05	5.9/4.9	9.8/NA	39.4/NA
SEPT - DEC 2010	28.2/32.25	1.9/0.93	14.3/6.05	5.9/4.9	9.2/NA	37.8/NA
PER POUND RATES (CRV/POSTFILLED)	#5 PP	#6 PS	#7 OTHER	BIMETAL		
JAN - AUG 2010	3.2/NA	120.2/NA	4.7/NA	4.7/NA		
SEPT - DEC 2010	3.2/NA	82.1/NA	5.0/NA	4.7/NA		

**FOOTNOTE:** \* Because of the delay between the time a container is distributed for sale and the time it is returned for recycling, the Department has determined the average "Return Time" as two months. The sales shown reflect this two month lag period.

\* Beginning 2003, all recycling and redemption rates are presented as whole numbers.

**CALENDAR YEAR - REDEMPTION AND RECYCLING RATES**

Table 2 / May 10, 2011

<b>Rates</b>		<b>Containers</b>					<b>1 of 5</b>
<b>ALUMINUM</b>	<b>Redemption</b>	<b>Recycling</b>	<b>Sales*</b>	<b>Recycled</b>	<b>Refillable</b>	<b>Postfilled</b>	
<b>2010</b>	<b>94</b>	<b>94</b>	<b>8,830,503,071</b>	<b>8,262,251,598</b>	<b>0</b>	<b>183,283,911</b>	
2009	91	91	9,200,376,864	8,354,269,499	0	145,503,506	
2008	84	84	9,539,853,194	8,004,343,689	0	44,421,762	
2007	79	79	9,613,050,224	7,616,879,727	0	88,490,455	
2006	72	72	10,018,815,900	7,217,550,376	0	10,495,163	
2005	73	73	9,649,079,960	7,073,940,741	0	16,864,583	
2004	76	75	9,764,193,509	7,361,715,276	0	3,312,941	
2003	67	70	9,595,275,797	6,682,353,680	0	56,635,725	
2002	74	74	9,420,894,816	6,971,154,448	0	85,989,348	
2001	75	75	9,426,681,445	7,036,772,391	0	75,404,003	
2000	76	76	9,521,709,518	7,086,969,721	0	73,859,460	
1999	80	80	9,189,990,393	7,348,438,576	0	155,372,430	
1998	80	80	9,273,717,898	7,381,508,007	0	178,559,988	
1997	80	80	9,192,062,677	7,391,944,684	0	206,552,057	
1996	80	80	9,046,339,201	7,257,109,422	0	157,451,082	
1995	84	84	8,996,915,732	7,565,437,626	0	293,381,456	
1994	82	82	9,640,060,625	7,859,363,654	0	150,118,131	
1993	84	84	9,473,124,532	7,926,540,025	0	214,496,528	
1992	85	85	9,849,092,574	8,378,479,015	0	204,306,718	
1991	85	85	9,735,460,863	8,235,715,915	0	170,214,314	
1990	76	76	9,859,752,871	7,478,135,392	0	153,794,134	
1989	64	64	9,231,958,871	5,940,283,700	0	49,407,050	
1988	62	61	8,829,125,615	5,416,522,775	0	358,327,175	
<b>GLASS</b>	<b>Redemption</b>	<b>Recycling</b>	<b>Sales*</b>	<b>Recycled</b>	<b>Refillable</b>	<b>Postfilled</b>	
<b>2010</b>	<b>95</b>	<b>85</b>	<b>2,925,441,274</b>	<b>2,482,262,726</b>	<b>618</b>	<b>420,232,943</b>	
2009	91	80	3,131,130,270	2,519,321,210	1,697	440,461,371	
2008	84	76	3,339,106,477	2,523,961,411	7,525	391,349,224	
2007	75	67	3,489,108,046	2,330,774,614	9,638	389,179,670	
2006	66	59	3,608,513,760	2,112,947,786	2,821	370,369,583	
2005	65	58	3,466,533,078	2,013,762,725	2,130	353,661,624	
2004	63	56	3,479,268,354	1,955,998,098	128,867	342,089,880	
2003	58	51	3,389,513,062	1,723,047,987	364,085	314,717,017	
2002	59	52	3,426,758,463	1,788,856,334	380,457	314,008,206	
2001	62	54	3,469,509,699	1,868,554,693	378,452	362,368,007	
2000	60*	54*	3,342,291,557	1,828,493,003	4,193,806	315,211,767	
1999	71	60	2,699,056,360	1,563,428,698	56,547,053	381,756,617	
1998	75	63	2,547,082,395	1,533,478,471	78,152,008	379,486,791	
1997	79	67	2,488,007,100	1,575,406,811	90,836,718	383,973,447	
1996	82	69	2,432,063,268	1,574,020,543	102,421,509	400,541,247	
1995	86	74	2,477,905,727	1,731,621,270	111,828,496	376,815,597	
1994	84	73	2,554,889,789	1,735,423,078	125,310,440	384,421,672	
1993	86	75	2,524,975,195	1,753,023,220	147,140,942	369,469,526	
1992	95	72	2,638,669,944	1,718,900,206	168,996,240	718,914,546	
1991	85	71	2,837,961,367	1,802,801,890	198,954,148	508,723,118	
1990	60	57	3,252,914,365	1,644,555,614	215,792,631	183,272,912	

<b>Rates</b>			<b>Containers</b>				<i>2 of 5</i>
<b>GLASS</b>	<b>Redemption</b>	<b>Recycling</b>	<b>Sales*</b>	<b>Recycled</b>	<b>Refillable</b>	<b>Postfilled</b>	
1989	45	40	3,136,247,664	945,069,624	304,045,641	216,179,258	
1988	44	35	3,165,716,125	664,948,766	441,803,396	324,349,294	
<b>#1 PET</b>	<b>Redemption</b>	<b>Recycling</b>	<b>Sales*</b>	<b>Recycled</b>	<b>Refillable</b>	<b>Postfilled</b>	
<b>2010</b>	<b>68</b>	<b>68</b>	<b>8,047,937,685</b>	<b>5,479,307,708</b>	<b>0</b>	<b>176,256,081</b>	
2009	73	73	8,181,154,963	6,005,759,655	0	158,405,528	
2008	62	62	8,603,054,451	5,322,655,475	0	146,233,004	
2007	54	54	8,318,703,619	4,526,823,914	0	137,690,275	
2006	47	47	7,798,923,048	3,644,524,984	0	141,107,582	
2005	46	46	6,858,895,480	3,124,591,752	0	130,597,359	
2004	39	39	6,415,159,040	2,512,392,756	0	121,121,275	
2003	36	35	5,553,858,516	1,947,144,218	0	125,886,380	
2002	36	36	4,732,756,528	1,687,585,835	0	106,089,707	
2001	37	36	4,032,761,142	1,435,601,027	0	112,531,165	
2000	34	34	3,239,139,000	1,181,701,068	0	73,332,339	
1999	79	65	1,278,411,247	829,974,260	0	223,909,692	
1998	69	57	1,284,678,834	731,421,805	0	193,778,325	
1997	69	58	1,206,774,464	698,322,157	0	168,565,032	
1996	69	59	1,028,068,545	607,521,858	0	127,904,829	
1995	74	64	760,783,391	488,882,966	0	99,011,197	
1994	80	71	605,667,834	429,468,272	0	77,573,604	
1993	76	70	577,329,580	403,344,084	0	58,323,616	
1992	75	68	549,907,144	371,540,845	0	58,814,794	
1991	58	56	530,597,819	299,758,173	0	20,829,383	
1990	31	31	558,856,452	171,828,692	0	8,298,647	
1989	7	7	556,680,692	37,863,612	0	1,221,987	
1988	5	4	560,093,605	24,327,749	0	2,971,618	
<b>#2 HDPE</b>	<b>Redemption</b>	<b>Recycling</b>	<b>Sales*</b>	<b>Recycled</b>	<b>Refillable</b>	<b>Postfilled</b>	
<b>2010</b>	<b>235</b>	<b>92</b>	<b>328,475,429</b>	<b>302,278,255</b>	<b>0</b>	<b>483,678,996</b>	
2009	239	109	333,773,107	363,460,377	0	452,634,864	
2008	210	91	340,429,976	311,121,660	0	420,195,579	
2007	172	67	380,601,853	256,710,868	0	411,767,176	
2006	168	59	368,095,875	217,278,376	0	412,468,760	
2005	149	51	390,610,134	199,446,347	0	393,714,308	
2004	131	47	425,894,436	198,752,419	0	370,342,710	
2003	97	34	525,379,842	176,430,068	0	342,980,733	
2002	118	42	427,072,126	181,466,591	0	331,509,039	
2001	110	39	457,575,262	177,141,048	0	336,565,235	
2000	98	22	385,191,241	93,243,804	0	345,788,475	
<b>#3 PVC</b>	<b>Redemption</b>	<b>Recycling</b>	<b>Sales*</b>	<b>Recycled</b>	<b>Refillable</b>	<b>Postfilled</b>	
<b>2010</b>	<b>0</b>	<b>0</b>	<b>740,085</b>	<b>950</b>	<b>0</b>	<b>23</b>	
2009	0	0	986,777	1,846	0	0	
2008	8	8	948,340	78,331	0	1,399	
2007	14	14	752,626	107,992	0	6	
2006	19	19	314,221	60,124	0	529	
2005	6	6	570,261	36,597	0	1,693	
2004	5	5	922,688	45,486	0	3,719	

<b>Rates</b>			<b>Containers</b>				<b>3 of 5</b>
<b>#3 PVC</b>	<b>Redemption</b>	<b>Recycling</b>	<b>Sales*</b>	<b>Recycled</b>	<b>Refillable</b>	<b>Postfilled</b>	
2003	5	4	1,151,133	48,650	0	7,218	
2002	1	1	3,518,723	19,920	0	5,642	
2001	2	1	3,519,764	51,490	0	4,172	
2000	2	2	2,259,829	46,244	0	9,514	
<b>#4 LDPE</b>	<b>Redemption</b>	<b>Recycling</b>	<b>Sales*</b>	<b>Recycled</b>	<b>Refillable</b>	<b>Postfilled</b>	
<b>2010</b>	<b>1</b>	<b>1</b>	<b>17,732,929</b>	<b>134,941</b>	<b>0</b>	<b>9,340</b>	
2009	1	1	10,393,343	85,146	0	5,705	
2008	0	0	8,828,872	14,277	0	3,222	
2007	0	0	6,888,846	10,778	0	5,543	
2006	0	0	6,462,289	5,782	0	12,055	
2005	0	0	6,900,494	8,140	0	1,265	
2004	0	0	5,862,416	2,951	0	473	
2003	0	0	7,301,050	2,575	0	13,214	
2002	0	0	13,679,022	2,417	0	10,423	
2001	1	0	14,066,167	9,638	0	106,864	
2000	0	0	893,623	228	0	47	
<b>#5 PP</b>	<b>Redemption</b>	<b>Recycling</b>	<b>Sales*</b>	<b>Recycled</b>	<b>Refillable</b>	<b>Postfilled</b>	
<b>2010</b>	<b>4</b>	<b>4</b>	<b>695,958</b>	<b>24,392</b>	<b>0</b>	<b>2,890</b>	
2009	1	1	1,353,506	12,435	0	3,300	
2008	1	1	1,709,379	13,082	0	623	
2007	3	3	2,210,175	77,063	0	572	
2006	2	2	3,945,154	73,484	0	3,867	
2005	1	1	3,074,850	22,976	0	942	
2004	1	1	3,139,197	21,889	0	0	
2003	1	1	1,790,682	12,098	0	6,925	
2002	2	1	1,107,605	16,537	0	5,057	
2001	8	7	514,294	34,721	0	6,094	
2000	10	10	811,660	79,025	0	2,529	
<b>#6 PS</b>	<b>Redemption</b>	<b>Recycling</b>	<b>Sales*</b>	<b>Recycled</b>	<b>Refillable</b>	<b>Postfilled</b>	
<b>2010</b>	<b>8</b>	<b>8</b>	<b>61,330,815</b>	<b>4,664,795</b>	<b>0</b>	<b>309,558</b>	
2009	3	2	62,646,529	1,309,518	0	429,732	
2008	1	1	51,728,106	607,647	0	21,768	
2007	1	1	33,996,598	387,283	0	40,131	
2006	1	1	32,432,195	247,029	0	12,488	
2005	1	1	32,641,452	205,317	0	19,544	
2004	0	0	52,667,652	82,155	0	22,238	
2003	0	0	74,408,481	32,680	0	50,193	
2002	0	0	73,390,428	26,699	0	9,144	
2001	0	0	49,856,952	39,758	0	13,855	
2000	0	0	26,362,287	66,534	0	3,281	
<b>#7 OTHER</b>	<b>Redemption</b>	<b>Recycling</b>	<b>Sales*</b>	<b>Recycled</b>	<b>Refillable</b>	<b>Postfilled</b>	
<b>2010</b>	<b>11</b>	<b>10</b>	<b>27,481,289</b>	<b>2,864,262</b>	<b>0</b>	<b>378,301</b>	
2009	9	8	37,945,726	2,998,099	0	383,619	
2008	7	7	35,934,816	2,427,064	0	271,432	
2007	7	6	40,366,526	2,579,342	0	266,837	
2006	5	4	41,525,903	1,788,663	0	229,111	

<b>Rates</b>			<b>Containers</b>				<b>4 of 5</b>
<b>#7 OTHER</b>	<b>Redemption</b>	<b>Recycling</b>	<b>Sales*</b>	<b>Recycled</b>	<b>Refillable</b>	<b>Postfilled</b>	
2005	6	6	29,787,510	1,801,073	0	76,924	
2004	10	10	25,369,712	2,541,878	0	126,225	
2003	1	1	25,520,391	290,781	0	33,095	
2002	0	0	20,544,424	41,234	0	10,531	
2001	0	0	10,842,578	19,820	0	10,112	
2000	1	1	14,656,909	80,409	0	23,362	
<b>BIMETAL</b>	<b>Redemption</b>	<b>Recycling</b>	<b>Sales*</b>	<b>Recycled</b>	<b>Refillable</b>	<b>Postfilled</b>	
<b>2010</b>	<b>13</b>	<b>12</b>	<b>23,385,562</b>	<b>2,893,998</b>	<b>0</b>	<b>326,352</b>	
2009	10	10	38,733,488	3,694,325	0	301,084	
2008	14	14	31,632,517	4,306,701	0	347,164	
2007	10	9	38,942,741	3,699,321	0	401,092	
2006	8	8	41,529,914	3,235,096	0	356,523	
2005	8	7	47,178,540	3,508,551	0	432,928	
2004	6	5	65,019,282	3,020,186	0	1,057,274	
2003	6	6	68,296,985	4,098,082	0	520,747	
2002	2	1	56,396,942	785,045	0	156,002	
2001	1	1	47,846,889	523,120	0	164,993	
2000	1	1	25,093,499	297,767	0	63,323	
1999	11	11	2,270,648	260,797	0	15,370	
1998	13	13	2,088,892	264,603	0	10,246	
1997	19	19	2,252,193	432,794	0	27,375	
1996	17	17	2,230,519	388,095	0	29,890	
1995	21	21	2,268,190	484,539	0	21,375	
1994	17	17	2,506,373	430,610	0	10,470	
1993	19	19	3,655,432	683,945	0	16,945	
1992	12	12	6,453,684	796,519	0	42,330	
1991	14	14	6,353,803	878,207	0	59,958	
1990	3	3	10,529,837	314,760	0	34,415	
1989	2	2	10,643,975	199,890	0	354,570	
1988	0	0	7,683,421	13,237	0	300	
<b>All MATERIALS</b>	<b>Redemption</b>	<b>Recycling</b>	<b>Sales*</b>	<b>Recycled</b>	<b>Refillable</b>	<b>Postfilled</b>	
<b>2010</b>	<b>84</b>	<b>82</b>	<b>20,263,724,097</b>	<b>16,536,683,625</b>	<b>618</b>	<b>1,264,478,395</b>	
2009	84	82	20,998,494,573	17,250,912,110	1,697	1,198,128,709	
2008	75	74	21,953,226,128	16,169,529,337	7,525	1,002,845,178	
2007	69	67	21,924,621,254	14,738,050,903	9,638	1,027,841,756	
2006	61	60	21,920,558,259	13,197,711,698	2,821	935,026,546	
2005	62	61	20,485,271,759	12,417,324,219	2,130	895,371,171	
2004	61	59	20,237,496,286	12,034,573,093	128,867	838,076,736	
2003	56	55	19,242,495,939	10,533,460,820	364,085	842,851,246	
2002	60	58	18,176,119,077	10,629,955,059	380,457	837,793,099	
2001	62	60	17,513,174,192	10,518,747,707	378,452	887,174,501	
2000	62	61	16,558,409,123	10,190,977,803	4,193,806	808,294,098	
1999	76	74	13,169,728,648	9,742,102,332	56,547,053	761,054,109	
1998	76	74	13,107,568,019	9,646,672,886	78,152,008	751,835,350	
1997	78	76	12,889,096,434	9,666,106,446	90,836,718	759,117,911	



<b>Rates</b>			<b>Containers</b>				<b>5 of 5</b>
<b>All</b>	<b>Redemption</b>	<b>Recycling</b>	<b>Sales*</b>	<b>Recycled</b>	<b>Refillable</b>	<b>Postfilled</b>	
<b>MATERIALS</b>							
1996	78	76	12,508,701,533	9,439,039,918	102,421,509	685,927,048	
1995	83	81	12,237,873,040	9,786,426,401	111,828,496	769,229,625	
1994	80	79	12,803,124,621	10,024,685,614	125,310,440	612,123,877	
1993	82	81	12,579,084,739	10,083,591,274	147,140,942	642,306,615	
1992	85	82	13,044,123,346	10,469,716,585	168,996,240	982,078,388	
1991	82	80	13,110,373,852	10,339,154,185	198,954,148	699,826,773	
1990	70	70	13,682,053,525	9,294,834,458	215,792,631	345,400,108	
1989	56	56	12,935,531,202	6,923,416,826	304,045,641	267,162,865	
1988	55	52	12,562,618,766	6,105,812,527	441,803,396	685,648,387	

\* Because of the delay between the time a container is distributed for sale and the time it is returned for recycling, the Department has determined the average "Return Time" as two months. The sales shown reflect this two month lag period.

Intentionally left blank