

Used Oil Recycling Rate Annual Report: 2008

Introduction

This annual report presents 15 years of oil sales and recycling data, from 1994 through 2008. The information presented in Table 1 is based on quarterly reports submitted to the Department of Resources Recycling and Recovery (CalRecycle).

Oil is categorized as lubricating oil and industrial oil. Lubricating oil includes, but is not limited to, any oil intended for use in an internal combustion engine crankcase, transmission, gearbox, or differential in an automobile, bus, truck, vessel, plane, train, heavy equipment, or other machinery

powered by an internal combustion engine (Public Resources Code [PRC] section 48618). Industrial oil includes, but is not limited to, any compressor, turbine, or bearing oil, hydraulic oil, metalworking oil, or refrigeration oil. Industrial oil does not include dielectric fluids (PRC section 48616).

The volume of used lubricating oil recycled as shown in Table 1 is a measure of the total volume received by used oil recycling facilities. Oil sales are based on data reported by oil manufacturers or the entity that first takes title to lubricating oil for sale, use, or transfer.

Table 1. Annual Oil Sales and Used Oil Recycling Volumes (In Millions of Gallons)

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Lubricating Oil Sales	141.2	140.8	136.2	137.8	142.1	150.0	154.3	163.6	168.0	150.2	150.5	153.7	152.8	150.0	114.6
Industrial Oil Sales	78.0	117.3	140.9	141.7	152.4	176.4	155.7	149.1	147.1	135.8	144.6	123.1	116.4	95.3	143.5
Total Oil Sales*	219.2	258.1	277.1	279.5	294.5	326.4	310.0	312.7	315.1	286.0	295.0	276.8	269.2	245.1	258.1
Lubricating Oil Recycled**	59.9	54.6	56.8	60.9	73.6	76.9	80.0	81.9	83.1	83.7	87.0	87.9	88.1	88.3	85.0
Industrial Oil Recycled**	16.7	19.5	20.8	19.3	11.6	10.4	7.9	15.5	17.5	32.4	32.5	29.7	27.2	30.4	24.9
Total Oil Recycled	76.6	74.1	77.6	80.2	85.2	87.3	87.9	97.4	100.6	116.1	119.4	117.6	115.3	118.7	109.9

* The volumes for oil sales are subject to change as fees on oil sales and refunds for exempt lubricating oils may be reported up to one year after the initial sale.

** Figures include used oil collected in California and used oil sent outside of California.

Recycling Trends

The used lubricating oil recycling rate is based on the amount of lubricating oil recycled as a percentage of lubrication oil sales.

Figure 1 shows used lubricating oil recycling rates from 1994 through 2008.

Lubricating oil sales. Figure 1 shows 2008 lubricating oil sales totaled 114.6 million gallons, a 23.5 percent decrease from the 150.0 million gallons sold in 2007. This is largely attributed to higher crude oil prices, with oil sales numbers dropping precipitously in the final half of 2008.

Used lubricating oil recycling rate. Figure 1 shows that 85.0 million gallons of used lubricating oil were recycled during 2008, which was 3.7 percent below the 88.3 million gallons collected in 2007. The recycling rate for 2008 was 74.2 percent, which is a large increase from the 58.9 percent recycling rate in 2007.

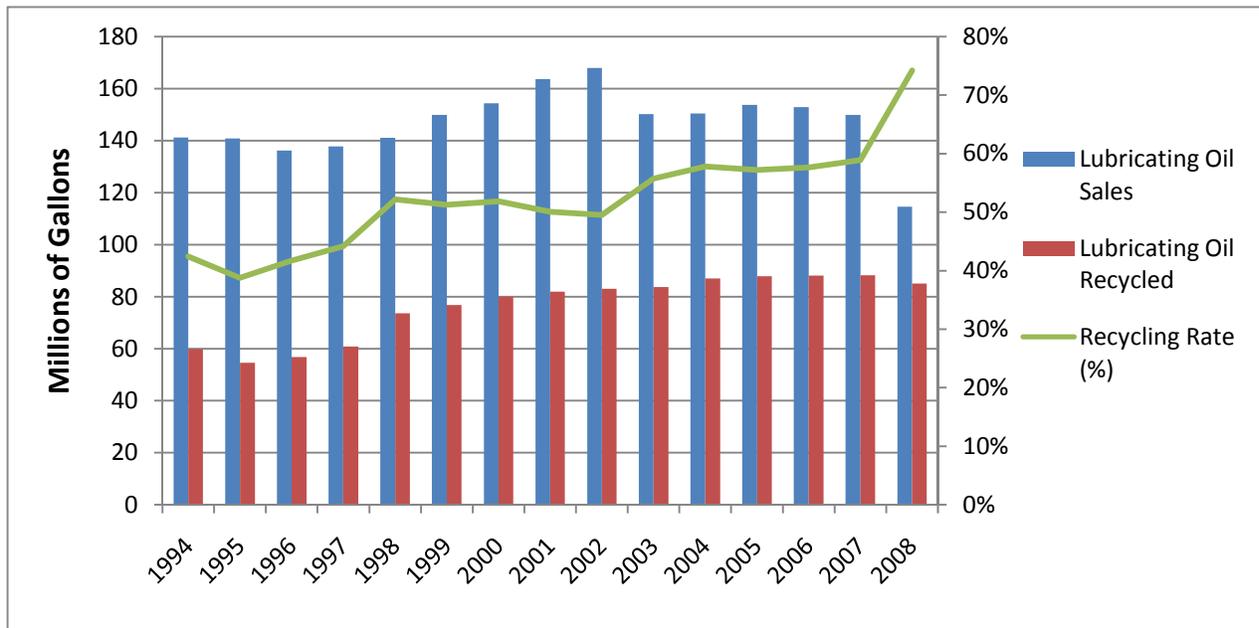
Used lubricating oil recycling rate (continued).

The increased recycling rate is attributed to the sharp decline in oil sales for 2008, as the amount of used lubricating oil being collected has remained fairly steady.

Adjustments. The volumes for oil sales and used lubricating oil collections are revised as staff learns of inaccuracies from audits, discussions with reporting entities, and refunds for exemptions. For example, sales reports may be revised as additional sales are reported or refunds for exempt lubricating oils are completed.

No adjustments are made to the recycling rate to account for oil that is lost due to combustion, spills, leaks, and drips during use. It is estimated that between 20 to 40 percent of oil is lost or consumed during usage¹.

Figure 1. Amount of Lubricating Oil Recycled as a Percentage of Sales, 1994–2008 (Calendar Years)



¹ San Francisco State University, "To the Greatest Extent Possible:" Do-It-Yourselfers and the Recovery of Used Oil and Filters, Publication #611-05-008, California Integrated Waste Management Board, Sacramento, October 2005

Public Collection Programs

In California, automotive do-it-yourselfers (DIYers) are estimated to represent 18 percent of the state's households surveyed in 2000-01. Figure 2 and Table 2 show the used oil collection volumes based upon used oil collected from local government-operated household hazardous waste collection programs, curbside collections, and certified used oil collection centers.

Local government programs. CalRecycle provides funding to local governments to assist their local Used Oil programs. These programs often include permanent household hazardous waste collection facilities and household hazardous waste events. Many DIYers bring used oil for recycling to these locally administered programs.

Curbside. The curbside collection program includes used oil placed on the curb by DIYers for pickup by residential waste haulers, and includes door-to-door oil collection programs.

Certified Centers. The used oil reported by certified centers includes oil collected by automotive related businesses including, but not limited to, automotive part stores and professional oil installers. The used oil collected by certified centers includes both oil brought in by DIYers and oil generated on-site. A certified collection center is eligible for the redemption of recycling fees on all lubricating oil generated by their business practice (16 cents per gallon) or collected from the public (40 cents per gallon).

In 2008, a total of 85.0 million gallons of used lubricating oil were recycled. Most of the oil, about 72 percent, is managed by private entities such as companies that perform oil change services or maintain their own fleet of vehicles. The remaining 28 percent of the oil was collected at public collection sites such as local government programs, curbside collection programs, and certified centers.

The combined estimate for all public collection accounts for approximately 23.5 million gallons of used lubricating oil collected, or 5 percent more than the 22.4 million gallons collected in 2007 (Table 2)

Figure 2. Oil Collected by Public Collection Programs (in Millions of Gallons)

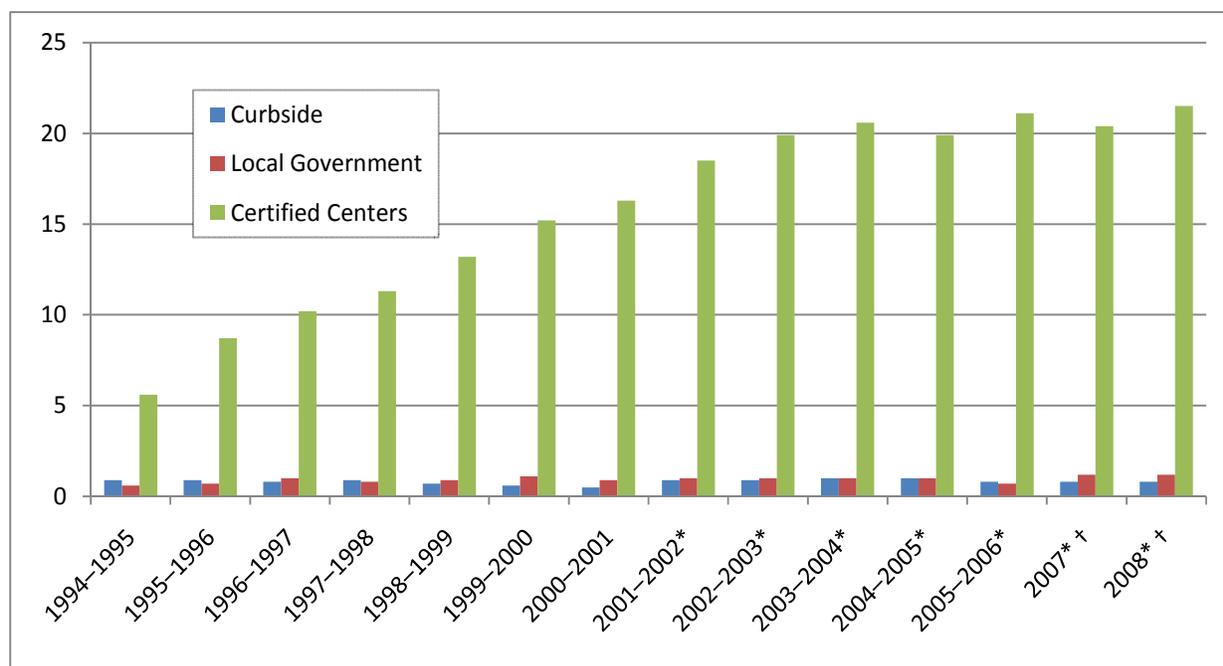


Table 2. Oil Collected by Public Collection Programs (In Millions of Gallons)

	1994- 1995	1995- 1996	1996- 1997	1997- 1998	1998- 1999	1999- 2000	2000- 2001	2001- 2002*	2002- 2003*	2003- 2004*	2004- 2005*	2005- 2006*	2007* †	2008* †
Curbside	0.9	0.9	0.8	0.9	0.7	0.6	0.5	0.9	0.9	1	1	0.8	0.8	0.8
Local Government	0.6	0.7	1	0.8	0.9	1.1	0.9	1	1	1	1	0.7	1.2	1.2
Certified Centers	5.6	8.7	10.2	11.3	13.2	15.2	16.3	18.5	19.9	20.6	19.9	21.1	20.4	21.5
Total Oil	7.1	10.3	12	13	14.8	16.9	17.7	20.4	21.8	22.6	21.9	22.6	22.4	23.5

*Includes certified and non-certified curbside programs

†Starting with 2007, public collection data is now being tracked by calendar year instead of fiscal year