

Mineral Industry Surveys

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LEAD IN JULY 2011

Domestic mine production (recoverable) of lead in July was 29,300 metric tons (t), according to the U.S. Geological Survey. Average daily mine production in July was 945 t, up by 4% from that in June. Year-to-date mine production through July 2011 was about 9% less than that of the same period of 2010. Secondary refinery production of lead increased slightly compared with that of the previous month. Secondary refinery production through July 2011 was 8% greater than that in the corresponding period of 2010.

Total imports of lead for consumption through June 2011 were about 9% higher than those in the same period of 2010. Canada (81%) and Mexico (18%) were the principal sources of imported refined lead through June 2011. Total exports of lead, exclusive of scrap, through June 2011 were 23% lower than those through the same period of 2010.

According to Platts Metals Week, the average North American producer price for lead in July 2011 was \$1.29 per pound, up 3% from that of the previous month and 36% higher than that in July 2010. The London Metal Exchange (LME) cash price in July 2011 averaged \$2,682 per metric ton, up 7% from that of the previous month and 46% higher than that in July 2010. Global LME lead stocks at the end of July 2011 were 310,675 t, slightly lower than those at the end of June 2011 and 69% higher than those at month-end July 2010.

Lead-acid battery manufacturer Johnson Controls Inc. (JCI) (Milwaukee, WI) announced that it planned to invest \$138.5

million to convert its battery plant in Toledo, OH, into the company's first Absorbed Glass Mat (AGM) plant in the United States. AGM lead-acid batteries are frequently used in vehicles that are equipped with start-stop technology (sometimes referred to as microhybrids). Start-stop is a technology applied to standard gasoline-powered vehicles that automatically shuts the engine off during idle, reducing fuel consumption and emissions by 5% to 12% and restarts when the driver engages the clutch or releases the brake pedal. This technology requires a battery that is capable of cycling between charged and discharged states more frequently than traditional applications owing to the frequent restarts of the engine. Start-stop technology has become more prevalent in Europe in recent years and was expected to become increasingly available in the North American vehicle market during the next several years. JCI's investment was expected to add capacity to produce 6 million AGM batteries per year by 2013. The company forecast that the global start-stop market would increase by 35 million batteries by 2015 (Platts Metals Week, 2011).

Reference Cited

Platts Metals Week, 2011, JCI to revamp site for start-stop batteries: Platts Metals Week, v. 82, no. 27, July 4, p. 7.

TABLE 1
SALIENT LEAD STATISTICS IN THE UNITED STATES¹

(Metric tons, lead content, unless otherwise specified)

	2010		2011		
	Year ^p	January– July	June	July	January– July
Production:					
Mine (recoverable)	365,000	215,000	27,200 ^r	29,300	196,000
Secondary refinery:					
Reported by smelters/refineries	1,120,000	635,000	98,000	99,700	686,000
Estimated	13,000	7,220	980	997	6,860
Recovered from copper-base scrap ^e	15,000	8,750	1,250	1,250	8,750
Total secondary	1,140,000	651,000	100,000	102,000	701,000
Consumption:					
Reported	1,360,000	793,000	129,000	128,000	860,000
Undistributed ^e	40,900	23,800	3,870	3,890	25,800
Total	1,410,000	817,000	133,000	132,000	886,000
Stocks, end of period, consumers and secondary smelters	67,400	57,600	61,500	62,800	62,800
Imports for consumption:					
Base bullion	602	146	85	NA	234 ³
Refined metal	271,000	165,000	28,700	NA	156,000 ³
Exports:					
Ore and concentrate	299,000	125,000	16,100	NA	67,000 ³
Bullion	199	(2)	--	NA	8 ³
Wrought and unwrought lead	83,300	41,200	3,920	NA	21,800 ³
TEL/TML preparations, based on lead compounds	1,180	537	138	NA	989 ³
Scrap (gross weight)	43,500	167,000	5,010	NA	15,200 ³
Platts Metals Week North American producer price (cents per pound)	108.91	107.58	125.17	128.94	123.61

^eEstimated. ^pPreliminary. ^rRevised. NA Not available. -- Zero.

¹Data are rounded to no more than three significant digits, except prices; may not add to totals shown.

²Less than ½ unit.

³Includes data for January-June only; July 2011 data were not available at time of publication.

TABLE 2
MONTHLY AVERAGE LEAD PRICES

	North American producer price ¢/lb	London Metal Exchange cash		Sterling exchange rate
		\$/metric ton	£/metric ton	\$/£
2010:				
July	95.11	1,836.40	1,201.59	1.528305
August	95.79	2,074.77	1,324.67	1.566257
September	102.24	2,183.69	1,403.42	1.555982
October	114.73	2,379.01	1,500.04	1.585957
November	120.48	2,376.10	1,487.00 ^r	1.597918
December	120.58	2,411.93	1,509.42	1.597918
January–December	108.91	2,147.81	1,390.29 ^r	1.544861
2011:				
January	121.26	2,600.89	1,647.63	1.578565
February	121.21	2,586.05	1,603.29	1.612960
March	121.37	2,623.25	1,623.09	1.616209
April	122.50	2,740.61	1,675.09	1.636088
May	124.83	2,419.54	1,482.37	1.632210
June	125.17	2,511.64	1,548.78	1.621686
July	128.94	2,682.04	1,879.73	1.426819
January–July	123.61	2,594.86	1,637.14	1.589220

^rRevised.

Source: Platts Metals Week.

TABLE 3
CONSUMPTION OF PURCHASED LEAD-BASE SCRAP¹

(Metric tons, gross weight)

Item	Stocks	Net	Consumption	Stocks
	June 30, 2011	receipts		July 31, 2011
Battery-lead	19,700	89,300	88,800	20,200
Soft lead	W	W	W	W
Drosses and residues	W	W	W	W
Other ²	684	5,880	6,040	525
Total	20,400	95,200	94,900	20,700
Percent change from preceding month ³	XX	-3.6	-4.0	+1.4

W Withheld to avoid disclosing company proprietary data; included with "Other." XX Not applicable.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes solder, common babbitt, antimonial lead, cable covering, type metals, and other lead-base scrap.

³Based on unrounded data; preceding monthly data may have been revised.

TABLE 4
LEAD, TIN, AND ANTIMONY RECOVERED FROM
LEAD-BASE SCRAP IN JULY 2011¹

(Metric tons)

Product recovered	Secondary metal content		
	Lead	Tin	Antimony
Soft and calcium lead	53,800	--	--
Remelt lead	W	--	--
Antimonial lead	15,900	(2)	(2)
Other ³	30,000	(2)	(2)
Total lead-base	99,700	133	290

W Withheld to avoid disclosing company proprietary data; included in "Other."

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Withheld to avoid disclosing company proprietary data; included in "Total."

³Includes cable lead, lead-base babbitt, solder, type metals, and other products.

TABLE 5
CONSUMPTION OF LEAD IN THE UNITED STATES¹

(Metric tons, lead content)

Use	2010		2011		
	January– December	January– July	June	July	January– July
Metal products:					
Ammunition, shot and bullets	71,400	43,500	6,540	5,500	42,800
Brass and bronze, billet and ingots	991	1,670	281 ^r	272	1,810
Cable covering, power and communication and caulking lead, building construction	7,430	4,250	562	769	4,960
Casting metals	16,000	8,190	1,210	1,220	8,490
Sheet lead, pipes, traps and other extruded products	28,000	19,300	2,330	2,320	16,000
Solder	14,600	5,120	533	533	4,400
Storage batteries, including oxides	1,190,000	689,000	114,000	114,000	759,000
Terne metal, type metal, and other metal products ²	16,400	8,710	1,230 ^r	1,230	8,880
Total metal products	1,340,000	779,000	127,000	126,000	846,000
Other oxides and miscellaneous	23,100	13,600	2,120	2,120	13,900
Total reported	1,360,000	793,000	129,000	128,000	860,000
Undistributed ^e	40,900	23,800	3,870	3,890	25,800
Grand total	1,410,000	817,000	133,000	132,000	886,000

^eEstimated. ^rRevised.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes lead consumed in bearing metals, foil, collapsible tubes, annealing, plating, galvanizing, and fishing weights.

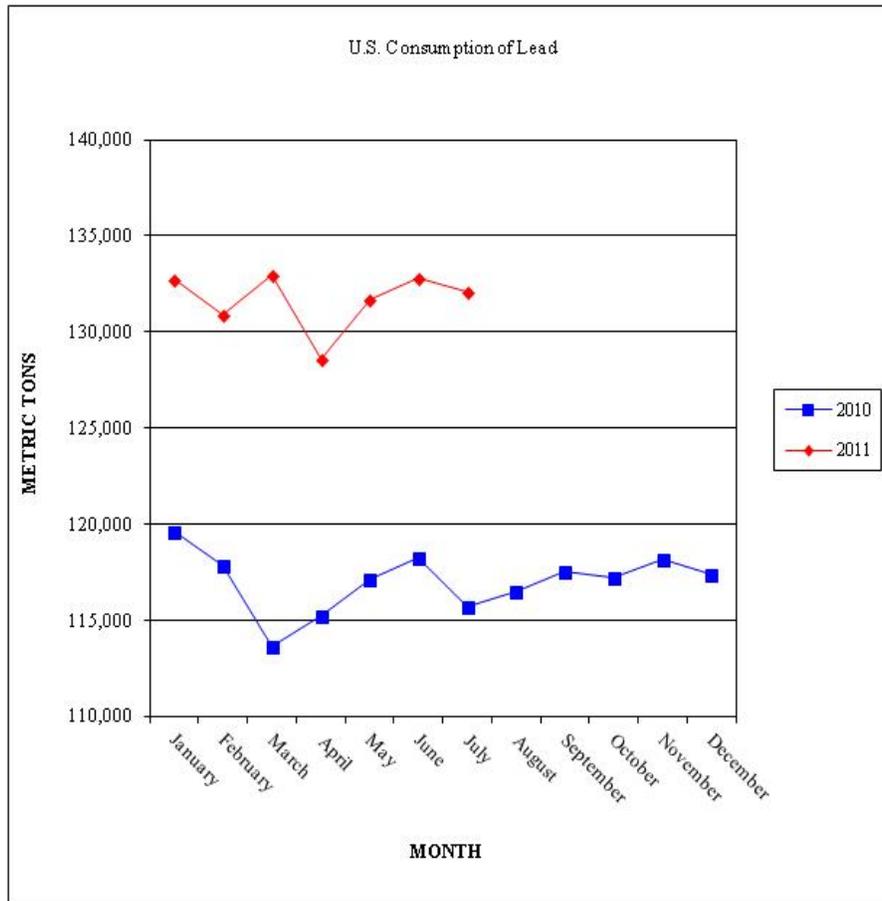


TABLE 6
CONSUMER AND SECONDARY SMELTER STOCKS, RECEIPTS, AND CONSUMPTION OF LEAD¹

(Metric tons, lead content)

Type of material	Stocks	Net receipts	Consumption	Stocks
	June 30, 2011			July 31, 2011
Soft lead	34,900	80,500	79,900	35,400
Antimonial lead	16,800 ^r	30,100	29,200	17,600
Lead alloys	W	W	W	W
Copper-base scrap	W	W	W	W
Total	61,500	129,000	128,000	62,800

^rRevised. W Withheld to avoid disclosing company proprietary data; included in "Total."

¹Data are rounded to no more than three significant digits.

TABLE 7
U.S. EXPORTS OF LEAD, BY CLASS¹

(Metric tons unless otherwise specified)

	2010		2011		
	Year	January–June	May	June	January–June
Lead content:					
Ore and concentrates	299,000	81,600	14,600	16,100	67,000
Bullion	199	--	--	--	8
Materials excluding scrap	83,300	34,500	2,970	3,920	21,800
TEL/TML preparations, based on lead compounds	1,180	442	187	138	989
Total	384,000	117,000	17,800	20,100	89,700
Gross weight, scrap	43,500	32,800	2,460	5,010	15,200
Spent lead-acid batteries, used for starting engines (units)	15,300,000	6,880,000	1,980,000	2,550,000	11,500,000

-- Zero.

¹Data are rounded to more than three significant digits; may not add to totals shown.

Source: U.S. Census Bureau.

TABLE 8
U.S. IMPORTS FOR CONSUMPTION BY TYPE OF MATERIALS AND BY
COUNTRY OF ORIGIN ¹

(Metric tons, lead content)

Country of origin	2010		2011		
	Year	January– June	May	June	January– June
Ore, matte, etc., Canada	411	--	--	--	--
Base bullion:					
Canada	404	--	17	--	35
Mexico	159	108	--	85	199
Other	38	38	--	--	--
Total	602	146	17	85	234
Pigs and bars:					
Canada	237,000	124,000	20,800	22,800	126,000
Mexico	29,400	15,600	5,650	5,350	28,800
Other	4,880	3,690	299	502	1,370
Total	271,000	143,000	26,700	28,700	156,000
Grand total	272,000	143,000	26,700	28,800	156,000

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

Source: U.S. Census Bureau.