

Mineral Industry Surveys

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LEAD IN DECEMBER 2012

Domestic mine production (recoverable) of lead in December was 29,100 metric tons (t). Average daily mine production in December was 938 t, slightly more than that in November. Total lead mine production for the year was 336,000 t, slightly greater than that in 2011. In 2012, increased lead mine production at Red Dog lead-zinc mine in Alaska and Doe Run Resources' mines in Missouri more than offset the loss of lead production from the Lucky Friday Mine in Idaho that was closed for maintenance all year. Secondary refinery production of lead in December was slightly less than that of the previous month but secondary lead production for 2012 was about 5% greater than that in 2011.

Total imports of lead for consumption in December were 61% higher than those in November, primarily owing to a surge in imports of refined lead from Australia. Total lead imports in 2012, were 12% more than in 2011. Canada (69%) and Mexico (16%) were the principal sources of total imported lead in 2012 as they were in 2011. Total exports of lead in 2012 were about 3% lower than those in 2011.

The Platts Metals Week average North American producer price for lead in December 2012 was \$1.15 per pound, essentially unchanged from that of the previous month and slightly higher than that in December 2011. The 2012 annual average producer price for lead was \$1.14 per pound, 6% lower than that in 2011. The London Metal Exchange (LME) cash price in December 2012 averaged \$2,275 per metric ton, a 4% increase from that of the previous month and 13% higher than that in December 2011. The 2012 annual average LME cash price was \$2,062 per metric ton, a 14% decrease from that in 2011. The LME cash price in 2012 ranged between a low of \$1,744 per metric ton on June 27 to a high of \$2,340 per metric ton on December 31. Global LME lead stocks at the end of December 2012 were 317,700 t, a decrease of 12% from those at the end of November and a decrease of 10% from yearend 2011.

According to preliminary data from the International Lead and Zinc Study Group (ILZSG), global lead mine production increased by 11% in 2012 from that of 2011 to 5.18 million metric tons (Mt) owing mostly to a 20% year-on-year increase in Chinese mine production. Global refined lead production in 2012 was 10.6 Mt, essentially unchanged from that in 2011. Refined lead production increases in India, the Republic of Korea, the United Kingdom, and the United States were offset by declines in Australia, Kazakhstan, Morocco, New Zealand, and Spain. Global lead consumption increased slightly in 2012 from that in 2011 owing to increased consumption in India, Japan, Mexico, and the United States. Following several years of substantial annual increases, consumption and production of refined lead in 2012 in China were essentially unchanged from those in 2011. According to preliminary ILZSG data, global production of lead metal exceeded consumption by 64,000 t in 2012, marking the third consecutive year that the lead metal market has been in surplus (International Lead and Zinc Study Group, 2013).

The Battery Council International reported that 125.4 million lead-acid automotive batteries were shipped by North American producers in 2012, a 2% increase from shipments in 2011. Shipments of replacement lead-acid automotive batteries (107.8 million) were slightly greater and shipments of original equipment lead-acid automotive batteries (17.6 million) increased by 14% (Battery Council International, 2013, p. 23–24).

References Cited

Battery Council International, 2013, BCI 2012 monthly shipment report: Chicago, IL, Battery Council International, January 25, 24 p.
International Lead and Zinc Study Group, 2013, Review of trends in 2012—Lead: Lisbon, Portugal, International Lead and Zinc Study Group news release, February 19, 2 p. (Accessed on February 19, 2013, via http://www.ilzsg.org/generic/pages/list.aspx?table=document&ff_aa_document_type=R&from=1.)

TABLE 1
SALIENT LEAD STATISTICS IN THE UNITED STATES¹

(Metric tons, lead content, unless otherwise specified)

	2012			
	2011	November	December	January– December
Production:				
Mine (recoverable)	334,000	27,700	29,100	336,000
Secondary refinery:				
Reported by smelters/refineries	1,130,000	97,900	97,000	1,170,000
Estimated	--	979	970	11,700
Recovered from copper-base scrap ^c	--	1,250	1,250	15,000
Total secondary	1,130,000	100,000	99,200	1,190,000
Consumption:				
Reported	1,440,000	122,000	119,000	1,470,000
Undistributed ^c	--	3,660	3,580	44,500
Total	1,440,000	125,000	123,000	1,520,000
Stocks, end of period, consumers and secondary smelters	46,600	56,000	58,000	58,000
Imports for consumption:				
Base bullion	434	--	251	1,020
Refined metal	313,000	35,600	57,100	349,000
Exports:				
Ore and concentrate	223,000	24,300	4,400	214,000
Bullion	70	--	--	72
Wrought and unwrought lead	47,200	3,640	3,570	53,300
TEL/TML preparations, based on lead compounds	6,270	139	113	1,730
Scrap (gross weight)	31,100	1,700	2,250	25,900
Platts Metals Week North American producer price (cents per pound)	121.70	114.91	115.26	114.16

^cEstimated. -- Zero.

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

TABLE 2
MONTHLY AVERAGE LEAD PRICES

	North American producer price ¢/lb	London Metal Exchange cash		Sterling exchange rate \$/£
		\$/metric ton	£/metric ton	
2011:				
December	113.87	2,018.59	1,292.71	1.561520
Year	121.70	2,401.20	1,548.94	1.550217
2012:				
January	114.17	2,093.74	1,349.68	1.551290
February	114.29	2,125.79	1,345.68	1.579710
March	114.03	2,061.01	1,302.73	1.582068
April	114.03	2,062.67	1,287.68	1.601844
May	113.81	1,998.51	1,283.48	1.557100
June	113.26	1,854.42	1,190.94	1.557100
July	113.34	1,875.97	1,203.77	1.558400
August	113.42	1,895.42	1,205.06	1.572889
September	114.63	2,168.91	1,378.93	1.572889
October	114.81	2,152.96	1,338.53	1.608449
November	114.91	2,179.08	1,364.27	1.597245
December	115.26	2,274.83	1,408.66	1.614895
Year	114.16	2,061.94	1,304.95	1.579490

Source: Platts Metals Week.

TABLE 3
CONSUMPTION OF PURCHASED LEAD-BASE SCRAP¹

(Metric tons, gross weight)

Item	Stocks		Consumption	Stocks
	November 30, 2012	Net receipts		December 31, 2012
Battery-lead	39,000	89,200	88,800	39,400
Soft lead	W	W	W	W
Drosses and residues	W	W	W	W
Other ²	4,320	2,440	2,480	4,290
Total	43,300	91,600	91,300	43,700
Percent change from preceding month ³	XX	+0.2	-1.1	+0.8

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 DECEMBER 2012¹

(Metric tons)

Product recovered	Secondary metal content		
	Lead	Tin	Antimony
Soft and calcium lead	80,600	--	--
Remelt lead	W	--	--
Antimonial lead	15,000	W	W
Other ²	1,460	148	262
Total lead-base	97,000	148	262

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.

²Includes 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	2011	2012		
		November	December	January–December ²
Metal products:				
Ammunition, shot and bullets	69,200	5,310	4,700	69,100
Brass and bronze, billet and ingots	1,620	283	283	3,400
Cable covering, power and communication and caulking lead, building construction	W	231	231	3,800
Casting metals	11,100	880	873	11,600
Sheet lead, pipes, traps and other extruded products	24,200	2,110	2,110	27,600
Solder	6,370	531	531	6,370
Storage batteries, including oxides	1,270,000	108,000	107,000	1,300,000
Terne metal, type metal, and other metal products ³	26,000	1,220	1,230	14,800
Total metal products	1,410,000	119,000	117,000	1,440,000
Other oxides and miscellaneous	24,100	2,960	2,730	31,700
Total reported	1,440,000	122,000	119,000	1,470,000
Undistributed ^c	--	3,660	3,580	44,500
Grand total	1,440,000	125,000	123,000	1,520,000

^cEstimated. W Withheld to avoid disclosing company proprietary data. -- Zero.

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

²May include revisions to previous months' data.

³Includes lead consumed in bearing metals, foil, collapsible tubes, annealing, plating, galvanizing, and fishing weights

U.S. Consumption of Lead

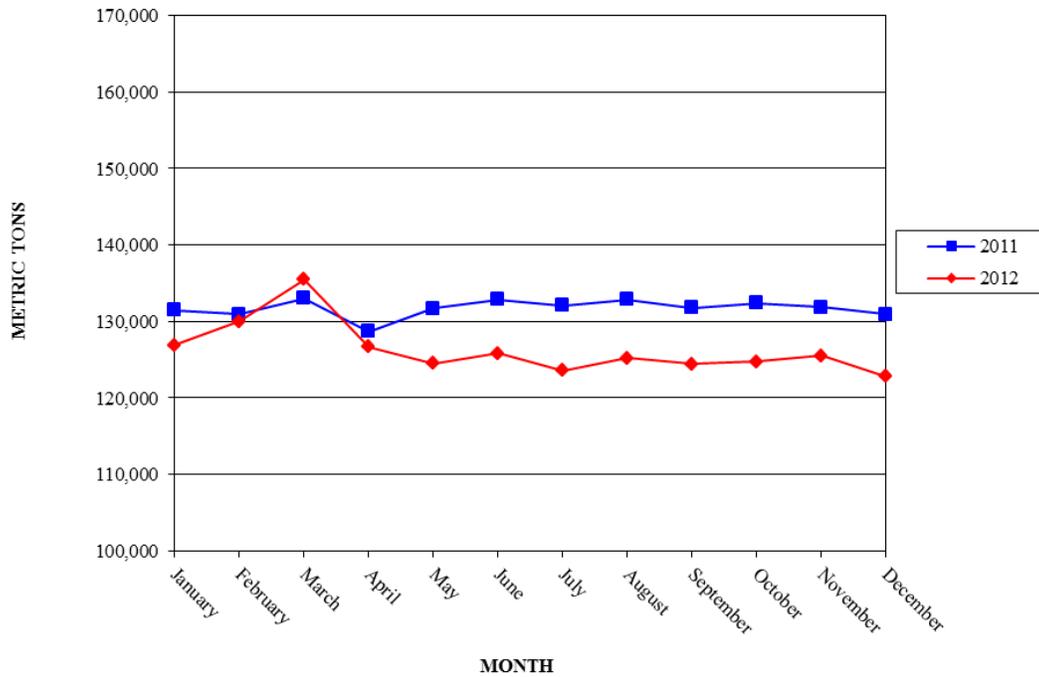


TABLE 6
CONSUMER AND SECONDARY SMELTER STOCKS, RECEIPTS, AND CONSUMPTION OF LEAD¹

(Metric tons, lead content)

Type of material	Stocks	Net receipts	Consumption	Stocks
	November 30, 2012			December 31, 2012
Soft lead	33,500	76,000	76,300	33,100
Antimonial lead	21,000	35,700	33,400	23,300
Lead alloys	W	W	W	W
Copper-base scrap	W	W	W	W
Total	56,000	121,000	119,000	58,000

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)

	2011	2012		January–December
		November	December	
Lead content:				
Ore and concentrates	223,000	24,300	4,400	214,000
Bullion	70	--	--	72
Wrought and unwrought lead	47,200	3,640	3,570	53,300
TEL/TML preparations, based on lead compounds	6,270	139	113	1,730
Total	277,000	28,100	8,080	269,000
Gross weight, scrap	31,100	1,700	2,250	25,900
Spent lead-acid batteries, used for starting engines (units)	25,400,000	1,850,000	1,470,000	22,700,000
-- 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 ORIGIN¹

(Metric tons, lead content)

Material and country of origin	2012			
	2011	November	December	January– December
Ore, matte, etc; Canada	--	--	--	1,530
Base bullion:				
Canada	35	--	--	--
Mexico	199	--	--	695
Venezuela	200	--	251	327
Total	434	--	251	1,020
Pigs and bars:				
Australia	504	--	24,300	24,300
Canada	250,000	20,700	18,700	240,000
China	32	--	--	5,000
Mexico	56,000	7,330	6,890	56,100
Other	7,060 [†]	7,550	7,240	23,200
Total	313,000	35,600	57,100	349,000
Grand total	314,000	35,600	57,400	352,000

[†]Revised. -- Zero.

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

Source: U.S. Census Bureau.