

Mineral Industry Surveys

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LEAD IN JANUARY 2016

Domestic mine production (recoverable) of lead in January was 29,100 metric tons (t). Average daily mine production in January was 939 t, 6% more than that in the previous month and 3% more than that in January 2015. Secondary refinery production of lead in January was 5% more than that of the previous month, and 4% greater than that in January 2015 (fig. 1).

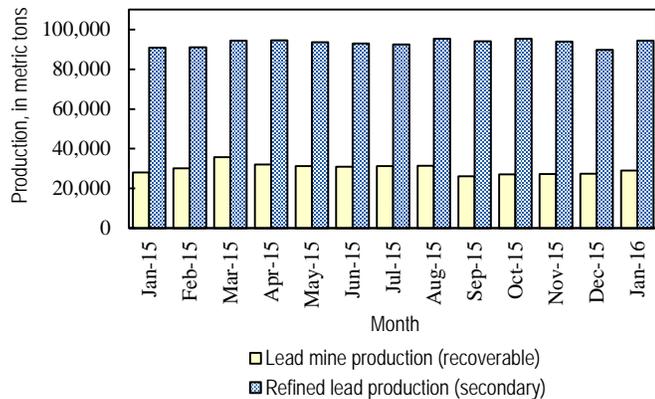


Figure 1. U.S. production of lead from January 2015 through January 2016. Source: U.S. Geological Survey.

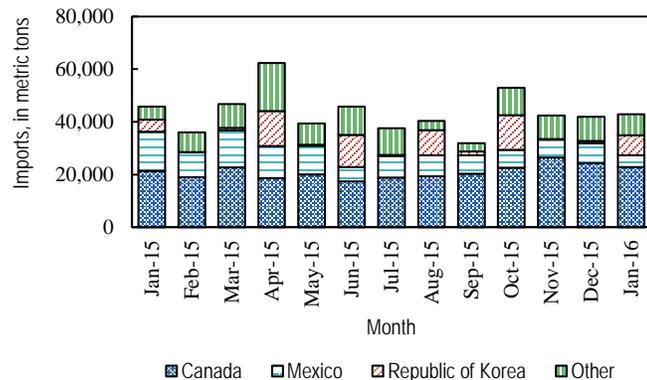


Figure 2. U.S. imports of lead in pigs and bars from January 2015 through January 2016. Source: U.S. Census Bureau.

Total imports of lead for consumption in January 2016 were slightly greater than those in the previous month but 6% less

than those in January 2015. In January, Canada (53%), the Republic of Korea (18%), and Mexico (10%) accounted for the majority of imports of lead in pigs and bars (fig. 2).

Total exports of lead, exclusive of scrap, in January 2016 were 7% less than those in the previous month owing primarily to a 75% decrease in exports of wrought and unwrought lead that was partially offset by increased exports of lead in ore and concentrates. Total lead exports in January were more than twice those in January 2015 owing to a more than two-fold increase in exports of lead in ore and concentrates. China (40%), the Republic of Korea (38%), and Canada (22%) were the leading destinations for ore and concentrates (fig. 3).

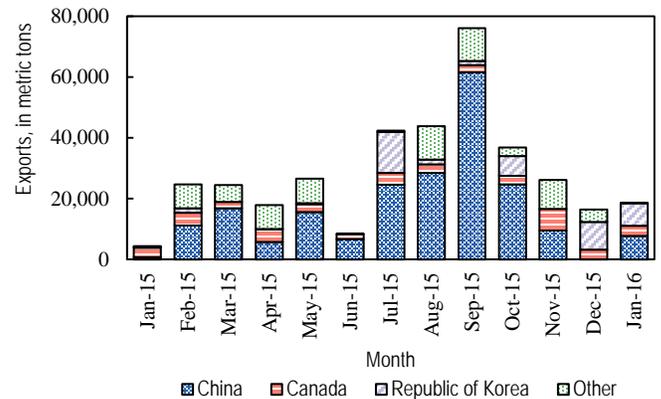


Figure 3. U.S. exports of lead in ore and concentrates from January 2015 through January 2016. Source: U.S. Census Bureau.

The Platts Metals Week average North American Market price for lead in January 2016 was \$0.85 per pound, 3% less than that in the previous month and 10% less than that in January 2015. The London Metal Exchange, Ltd. (LME) cash price of lead in January 2016 averaged \$0.75 per pound, a 3% decrease from that of the previous month and 10% less than that in January 2015. The Platts average U.S. used lead-acid batteries (Midwest) price in January 2016 was \$0.28 per pound, unchanged from that in the previous month and 19% less than that in January 2015. The majority of secondary lead is produced from recycling used lead-acid batteries.

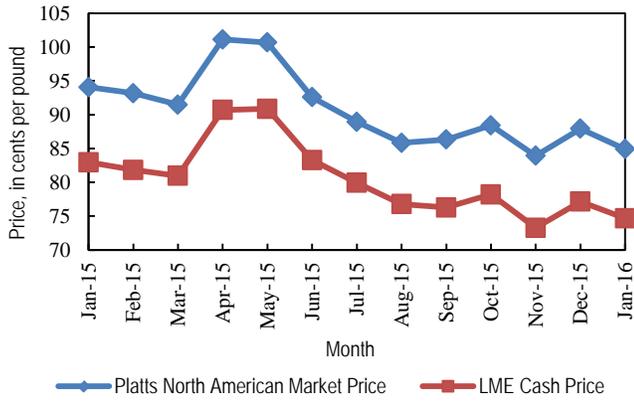


Figure 4. Average monthly prices for refined lead metal from January 2015 through January 2016. Source: Platts Metals Week.

Global LME lead stocks at the end of January 2016 were 188,125 t, a slight decrease (3,525 t) from stocks at the end of December 2015 and 12% less than those at the end of January 2015 (fig. 5).

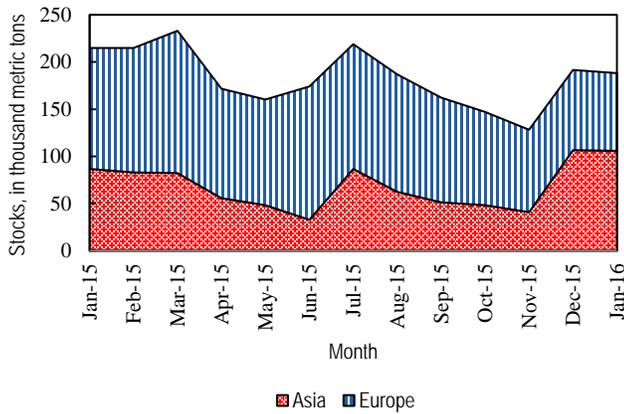


Figure 5. Global LME stocks of lead from January 2015 through January 2016. Source: London Metal Exchange, Ltd.

In late January, Vedanta Resources plc (London, United Kingdom) made the final shipment of zinc from its Lisheen lead-zinc mine in Ireland. The mine and mill were closed in November and December 2015, respectively, owing to the depletion of ore. The mine began operating in 1999 and produced about 38,000 t of lead in concentrate per year (Blamey, 2016).

In early February 2016, Australian mining producer CBH Resources Ltd. [a wholly owned subsidiary of Toho Zinc Co., Ltd. (Japan)] announced that it planned to cut production at its Endeavour lead-silver-zinc mine in New South Wales, Australia, by about 80%, owing to a decline in commodity prices. Production of lead in concentrate in 2016 was expected to be about 5,000 t compared with 22,000 t in 2015 (CRU International Ltd., 2016, p. 4).

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References Cited

- Blamey, Andy, 2016, Vedanta’s Lisheen Mine in Ireland makes final zinc shipment: Platts Metals Daily, v. 5, issue 16, January 25. p. 10–11.
- CRU International Ltd., 2016, CRU Monitor–Lead: London, United Kingdom, CRU International Ltd., February 11, 18 p.

TABLE 1
SALIENT LEAD STATISTICS IN THE UNITED STATES¹

(Metric tons, lead content, unless otherwise specified)

	2015				2016 January
	2014 ^p	January	December	January– December ²	
Production:					
Mine (recoverable)	372,000	28,200	27,400	359,000	29,100
Secondary refinery:					
Reported by smelters/refineries	1,100,000	88,600 ^r	87,600	1,100,000	92,100
Estimated	11,200	895 ^r	885	11,100	931
Recovered from copper-base scrap ^e	15,000	1,250	1,250	15,000	1,250
Total secondary	1,130,000	90,800	89,700	1,120,000	94,300
Consumption of refined lead, apparent ^{e,3}	1,670,000	134,000	129,000	1,590,000	133,000
Stocks, end of period, consumers and secondary smelters	66,300	65,000	64,500	64,500	67,000
Imports for consumption:					
Base bullion	1,180	223	--	343	--
Pigs and Bars	596,000	45,600	41,900	523,000	42,900
Exports:					
Ore and concentrate	357,000	5,470	16,600	349,000	19,600
Bullion	963	--	82	596	127
Wrought and unwrought lead	60,300	3,890	6,160	58,800	1,540
TEL/TML preparations, based on lead compounds	1,090	24	70	724	70
Scrap (gross weight)	36,400	1,830	3,060	46,200	2,510
Platts Metals Week North American Market price (cents per pound)	106.17	94.07	87.92	91.20	84.91

^eEstimated. ^pPreliminary. ^rRevised. -- Zero.

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

²May include revisions to previously published data.

³Smelter production plus imports for consumption minus domestic exports plus stock change.

TABLE 2
MONTHLY AVERAGE LEAD PRICES

	North	London Metal Exchange		Used lead-acid
	American Market ¹	cash		batteries ²
	¢/lb	¢/lb	\$/t	¢/lb
2015:				
January	94.07	82.95	1,828.83	34.50
February	93.16	81.83	1,804.13	32.13
March	91.47	80.95	1,784.55	31.00
April	101.11	90.69	1,999.35	31.50
May	100.66	90.87	2,003.42	32.13
June	92.57	83.28	1,836.03	33.60
July	88.94	79.92	1,762.00	32.88
August	85.83	76.77	1,692.49	31.13
September	86.32	76.27	1,681.56	30.30
October	88.41	78.21	1,724.18	31.00
November	83.92	73.28	1,615.54	29.63
December	87.92	77.15	1,700.87	28.00
Year	91.20	81.02	1,786.08	31.48
2016, January	84.91	74.69	1,646.54	28.00

¹Platts Metals Week North American Market price. Reflects the LME lead cash price plus the Platts premium for 99.97% lead.

²Platts Metals Week assessment for used lead-acid automotive batteries (50% lead) picked up in U.S. Midwest, suitable for delivery to secondary smelters within 30 days.

Source: Platts Metals Week.

TABLE 3
CONSUMPTION OF PURCHASED LEAD-BASE SCRAP IN JANUARY 2016¹

(Metric tons, gross weight)

Item	Stocks	Net	Consumption	Stocks
	December 31, 2015	receipts		January 31, 2016
Battery-lead	42,500	84,100	85,100	41,500
Other ²	4,130	1,880	1,880	4,130
Total	46,700	86,000	87,000	45,700
Percent change from preceding month ³	XX	+1.7	+0.5	-2.1

XX Not applicable.

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

²Includes soft lead, solder, drosses and residues, 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 JANUARY 2016¹

(Metric tons)

Product recovered	Secondary metal content		
	Lead	Tin	Antimony
Soft and calcium lead	71,200	--	--
Remelt lead	W	--	W
Antimonial lead	17,600	W	W
Other ²	3,350	166	324
Total lead-base	92,100	166	324

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
U.S. APPARENT CONSUMPTION OF LEAD¹

(Metric tons)

Period	Production	Imports ^{2,3}	Exports ^{2,3}	Stock change during period	Apparent consumption ⁴
2015: ^p					
January	90,800	45,800	3,730	(1,280)	134,000
February	91,000	36,000	4,420	(1,180)	124,000
March	94,300	46,800	4,610	(506)	137,000
April	94,600	62,300	4,820	539	151,000
May	93,600	39,400	4,490	(1,360)	130,000
June	92,900	45,800	4,180	(326)	135,000
July	92,500	37,600	3,720	(1,640)	128,000
August	95,400	40,400	4,320	6,180	125,000
September	96,300	31,900	4,230	2,610	121,000
October	97,500	52,900	6,450	(933)	145,000
November	96,100	42,400	5,010	(702)	134,000
December	89,700	41,900	5,970	(3,450)	129,000
Year	1,120,000	523,000	55,900	(2,050)	1,590,000
2016, January	94,300	42,900	1,420	2,560	133,000

^pPreliminary.

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

²Import and export data are for Harmonized Tariff Schedule of the United States (HTS) codes 7801.10.0000, 7801.91.0000, 7801.99.9030, 7801.99.9050.

³Source: U.S. Census Bureau.

⁴Smelter production plus imports for consumption minus domestic exports plus stock change.

TABLE 6
U.S. EXPORTS OF LEAD, BY CLASS¹

(Metric tons unless otherwise specified)

	2015		2016	
	Year	January	December	January
Lead content:				
Ore and concentrates	349,000	5,470	16,600	19,600
Bullion	596	--	82	127
Wrought and unwrought lead	58,800	3,890	6,160	1,540
TEL/TML preparations, based on lead compounds	724	24	70	70
Total	409,000	9,390	22,900	21,300
Gross weight, scrap	46,200	1,830	3,060	2,510
Spent lead-acid batteries, used for starting engines (units)	25,900,000	3,050,000	1,420,000	1,610,000

-- Zero.

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

Source: U.S. Census Bureau.

TABLE 7
U.S. IMPORTS FOR CONSUMPTION BY TYPE OF MATERIALS AND BY
COUNTRY OF ORIGIN¹

(Metric tons, lead content)

Material and country of origin	2015			2016
	Year	January	December	January
Base bullion:				
Mexico	203	84	--	--
Venezuela	46	139	--	--
Other	94	--	--	--
Total	343	223	--	--
Pigs and bars:				
Australia	4,750	789	--	2,480
Brazil	--	--	--	301
Canada	251,000	21,200	24,300	22,900
Chile	989	--	989	232
China	1,250	--	444	--
Dominican Republic	50	50	--	--
Ecuador	12,400	595	1,200	550
France	79	--	--	--
Germany	9,630	335	974	735
India	21,700	992	2,650	1,940
Indonesia	1,050	349	--	--
Israel	1,180	--	--	--
Kazakhstan	22,900	--	915	538
Korea, Republic of	57,300	4,600	874	7,590
Mexico	111,000	14,800	7,580	4,450
Netherlands	6,020	--	601	--
Nigeria	522	--	--	--
Panama	848	--	224	--
Russia	10,700	670	96	693
Spain	1,650	--	191	197
Sri Lanka	1,290	175	100	100
Ukraine	275	--	--	--
United Kingdom	2,560	441	--	--
Venezuela	3,930	629	733	236
Other	79	--	--	--
Total	523,000	45,600	41,900	42,900
Grand total	524,000	45,900	41,900	42,900

-- Zero.

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

Source: U.S. Census Bureau.