

Mineral Industry Surveys

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LEAD IN JUNE 2017

Domestic mine production (recoverable) of lead in June was 25,300 metric tons (t). Average daily mine production in June was 844 t, 7% more than that in the previous month. Total secondary refined lead production in June was 105,000 t, which was 4% more than that in the previous month and 21% more than that in June 2016 (fig. 1, table 1).

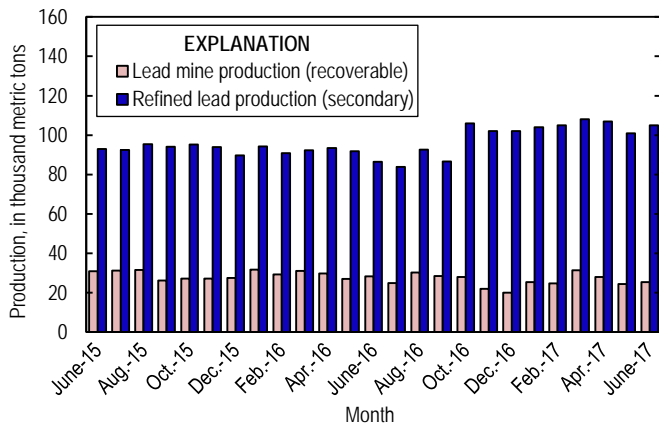


Figure 1. U.S. production of lead from June 2015 through June 2017. Source: U.S. Geological Survey.

The Platts Metals Week average North American Market price for lead in June 2017 was \$1.06 per pound, and the London Metal Exchange, Ltd. (LME) cash price was \$0.97 per pound, which were essentially unchanged from those in the previous month but 22% and 24% more, respectively, than those in June 2016 (fig. 2, table 2). The Platts average U.S. used lead-acid batteries (Midwest) price in June 2017 was \$0.42 per pound, slightly higher than that in May and 24% more than that in June 2016 (table 2). The majority of secondary lead is produced from used lead-acid batteries.

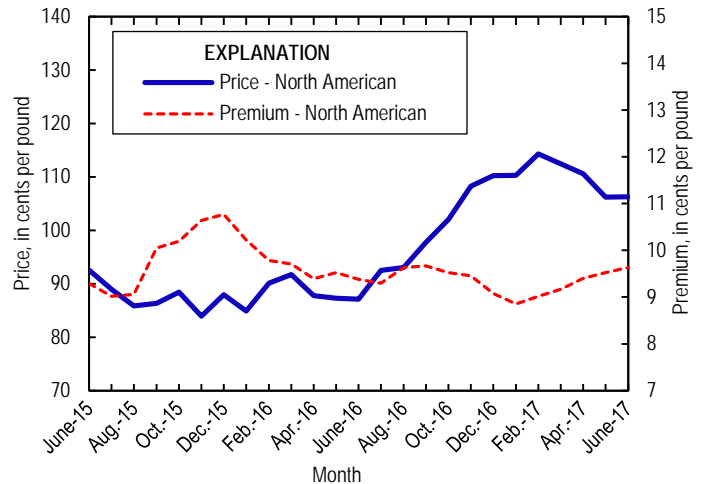


Figure 2. Average monthly North American price and premium for refined lead metal from June 2015 through June 2017. Source: Platts Metals Week.

Global LME lead stocks at the end of June 2017 were 164,150 t, which is 9% lower than those at the end of May 2017 and 11% lower than those at the end of June 2016 (table 10; London Metal Exchange Ltd., 2016, 2017).

References Cited

- London Metal Exchange Ltd., 2016, Lead stocks: London, United Kingdom, London Metal Exchange Ltd., June 30, 3 p.
- London Metal Exchange Ltd., 2017, Lead stocks: London, United Kingdom, London Metal Exchange Ltd., June 30, 3 p.

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TABLE 1
SALIENT LEAD STATISTICS IN THE UNITED STATES¹

(Metric tons, lead content, unless otherwise specified)

	2016		2017		
	January– December ²	January– June	May	June	January– June ²
Production:					
Mine (recoverable)	336,000	177,000	24,400 ^r	25,300	158,000
Secondary refinery:					
Reported by smelters/refineries	1,100,000	536,000	98,500	102,000	615,000
Estimated	11,100	5,430	995	1,030	6,220
Recovered from copper-base scrap ⁶	15,000	7,500	1,250	1,250	7,500
Total secondary	1,120,000	549,000	101,000	105,000	629,000
Consumption of refined lead, apparent ^{6,3}	1,610,000	789,000 ^r	171,000	146,000	964,000
Stocks, end of period, consumers and secondary smelters	101,000	70,000	126,000	128,000	128,000
Imports for consumption:					
Ore and concentrate	3	--	--	--	--
Bullion	237	--	--	--	--
Unwrought	533,000	260,000	72,700 ^r	42,900	349,000
Exports:					
Ore and concentrate	341,000	111,000	15,900	12,700	92,400
Bullion (gross weight)	1,190	694 ^r	317	240	1,030
Unwrought (gross weight)	42,700	18,900	2,090	1,480	14,200
Platts Metals Week North American Market price (cents per pound)	94.39	88.15	106.19	106.27	110.01

⁶Estimated. ^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.

TABLE 2
MONTHLY AVERAGE LEAD PRICES

	North	London Metal Exchange		Used lead-acid
	American Market ¹	cash		batteries ²
	¢/lb	¢/lb	\$/t	¢/lb
2016:				
June	87.11	77.73	1,713.60	33.75
July	92.51	83.21	1,834.36	34.13
August	93.02	83.39	1,838.50	34.50
September	97.74	88.07	1,941.64	33.75
October	102.03	92.51	2,039.50	33.88
November	108.26	98.81	2,178.38	34.10
December	110.24	101.16	2,230.30	34.25
January–December	94.39	84.84	1,870.33	32.46
2017:				
January	110.28	101.43	2,236.25	34.75
February	114.31	105.29	2,321.24	36.94
March	112.44	103.27	2,276.75	38.31
April	110.59	101.19	2,230.78	39.94
May	106.19	96.67	2,131.16	41.00
June	106.27	96.64	2,130.64	41.88
January–June	110.01	100.75	2,221.13	38.80

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 JUNE 2017¹

(Metric tons, gross weight)

Item	Stocks	Net receipts	Consumption	Stocks
	May 31, 2017			June 30, 2017
Battery-lead	52,500	84,200	82,800	53,900
Other ²	4,040	1,960	1,850	4,150
Total	56,500	86,200	84,700	58,100
Percent change from preceding month ³	XX	3.2	0.7	2.7

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 JUNE 2017¹

(Metric tons)

Product recovered	Secondary metal content		
	Lead	Tin	Antimony
Soft and calcium lead	67,600	W	--
Remelt lead	2,760	--	W
Antimonial lead	31,500	W	W
Other ²	480	W	--
Total lead-base	102,000	4,900	5,070

W Withheld to avoid disclosing company proprietary data; included in "Total." -- 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}	Apparent consumption ⁴
2016: ^p				
June	86,500	49,200	2,990	133,000
July	83,900	54,700	5,100	133,000
August	92,600	36,600	4,620	125,000
September	86,700	35,100	3,230	119,000
October	106,000	35,500	3,000	139,000
November	102,000	56,300	4,450	154,000
December	102,000	55,100	3,320	154,000
January–December	1,120,000	532,000	42,700	1,610,000
2017:				
January	104,000	65,700	2,660	167,000
February	105,000	55,500	3,530	157,000
March	108,000	60,800	1,740	167,000
April	107,000	51,800	2,740	156,000
May	101,000	72,700 ^r	2,090	171,000
June	105,000	42,900	1,480	146,000
January–June	629,000	349,000	14,200	964,000

^pPreliminary. ^rRevised.

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.

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

(Metric tons, gross weight, unless otherwise specified)

	2016		2017		
	Year	January–June	May	June	January–June
Ores and concentrate (lead content):	341,000	111,000	15,900	12,700	92,400
Bullion	1,310 ^r	694 ^r	317	240	1,030
Unwrought:					
Refined lead	617	230	1	21	324
Refined lead containing antimony as the principal alloying element	6,020	2,870	--	9	2,150
Lead alloys	35,800	15,800	2,080	1,420	11,600
Other	239	83	10	45	211
Total	42,700	18,900	2,090	1,480	14,200
Wrought:					
Bars, rods, profiles, and wire	1,560	1,090	108	55	637
Pipes and tubes, including fittings	387	348	3	39	138
Plates, sheets, strip, foil	2,440	1,220	421	336	1,380
Other	1,510	824	153	172	1,230
Total	5,900	3,490	685	602	3,390
Powders and flakes	146	65	37	25	112
Tetraethyl lead and tetramethyl lead	302 ^r	138	10	8	73
Waste and scrap:					
Spent lead-acid storage batteries for starting engines (units)	24,200,000	9,230,000 ^r	1,360,000	1,120,000	10,300,000
Lead waste and scrap obtained from lead-acid storage batteries	16,700	8,520	2,440	1,260	9,400
Other lead waste and scrap	29,200	13,000	2,650	2,700	16,200

^rRevised. -- 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. EXPORTS OF LEAD ORES AND CONCENTRATES, BY COUNTRY¹

(Metric tons, lead content)

	2016		2017		
	Year	January– June	May	June	January– June
Australia	--	--	--	--	86
Belgium	8,940	3,740	--	--	--
Canada	48,100	22,000	1,050	1,130	13,900
China	161,000	36,300	14,800	113	37,500
Germany	32,700	10,400	--	3,750	7,470
Italy	17,700	7,350	--	--	7,470
Japan	20,200	1,570	--	7,600	9,330
Korea, Republic of	51,700	28,800	43	--	16,200
Mexico	535	330	38	67	416
Saudi Arabia	--	--	15	--	15
Total	341,000	111,000	15,900	12,700	92,400

-- Zero.

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

TABLE 8
U.S. IMPORTS FOR CONSUMPTION OF LEAD, BY CLASS¹

(Metric tons, gross weight, unless otherwise specified)

	2016		2017		
	Year	January– June	May	June	January– June
Ores and concentrate (lead content):	3	--	--	--	--
Bullion (lead content)	237	--	--	--	--
Unwrought:					
Refined lead	416,000	199,000	61,500	33,000	287,000
Refined lead containing antimony as the principal alloying element (lead content)	40,400	19,200	4,310	3,030	21,200
Lead alloys (lead content)	28,900	15,100	3,290 ^r	1,840	11,600
Other (lead content)	48,100	26,200	3,600	5,010	29,600
Total	533,000	260,000	72,700 ^r	42,900	349,000
Wrought:					
Bars, rods, profiles, and wire	3,360	1,800	152	93	1,480
Pipes and tubes, including fittings	45	18	(2)	4	25
Plates, sheets, strip, foil	1,550	717	211	185	983
Other	3,270	1,460	307	275	1,780
Total	8,230	3,990	670	557	4,270
Powders and flakes	1,310	1,110	16	34	211
Tetraethyl lead and tetramethyl lead	576	284	99	63	404
Waste and scrap:					
Spent lead-acid storage batteries for starting engines (units)	1,070	646	144	97	470
Lead waste and scrap obtained from lead-acid storage batteries (lead content)	1,480	1,000	949	666	3,180
Other lead waste and scrap (lead content)	4,420	2,330	231	192	1,350

^rRevised. -- Zero.

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

²Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 9
U.S. IMPORTS FOR CONSUMPTION OF UNWROUGHT LEAD BY
COUNTRY¹

(Metric tons, lead content)

Material and country of origin	2016		2017		
	Year	January– June	May	June	January– June
Refined lead:					
Argentina	281	--	177	281	993
Australia	3,820	2,480	1,060	96	4,060
Azerbaijan	--	--	191	--	526
Bolivia	511	370	--	205	205
Brazil	8,090	3,660	3,820	305	10,000
Burma	--	--	200	--	800
Canada	176,000	84,500	14,600	14,500	87,000
China	273	273	--	1	1
Colombia	2,020	1,010	--	--	500
Dominican Republic	317	--	123	49	546
Ecuador	4,280	1,730	1,680	1,000	7,730
Germany	1,230	1,230	--	--	--
India	20,200	8,520	10,500	2,820	36,400
Israel	--	--	98	197	741
Kazakhstan	10,600	538	580	615	3,640
Korea, Republic of	89,300	49,900	19,200	571	67,300
Mexico	71,800	29,000	7,520	8,010	50,900
Nigeria	1,040	--	--	--	1,170
Peru	1,410	414	500	--	1,200
Poland	--	--	--	--	51
Russia	13,200	8,950	--	3,110	4,280
Saudi Arabia	608	25	171	--	999
Serbia	--	--	506	502	1,510
South Africa	677	427	150	25	553
Sri Lanka	1,720	950	300	--	1,250
Sweden	4,000	4,000	--	--	--
Thailand	200	--	220	199	2,200
Ukraine	79	--	--	--	--
United Arab Emirates	682	--	--	--	49
United Kingdom	289	191	--	--	227
Venezuela	3,480	819	--	528	1,990
Total	416,000	199,000	61,500	33,000	287,000
Other unwrought lead: ²					
Argentina	20	20	--	--	806
Australia	189	--	--	--	--
Bolivia	75	75	--	--	232
Brazil	368	86	60	--	1,520
Canada	88,600	46,900	7,820	6,730	43,900
Chile	730	730	218	345	898
Costa Rica	--	--	--	--	171
Ecuador	3,710	1,620	1,290	241	1,760
Egypt	24	--	--	--	402
Ghana	246	246	--	98	98
Guatemala	646	--	--	--	--
Honduras	--	--	341	153	690
India	2,210	49	404	--	1,780
Korea, Republic of	10,200	7,740	--	--	--
Mexico	5,350	965	464	151	4,610
Mozambique	590	590	--	--	--
Netherlands	(3)	(3)	--	--	--
Panama	495	297	--	--	--
Paraguay	--	--	102	103	256
Russia	2,020	46	--	1,610	2,960
Senegal	438	438	491	196	981
Spain	619	619	--	--	--

TABLE 9
U.S. IMPORTS FOR CONSUMPTION OF UNWROUGHT LEAD BY
COUNTRY¹

	(Metric tons, lead content)				
Turkey	--	--	(3)	--	1
United Kingdom	--	--	--	233	436
Venezuela	752	188	--	26	317
Vietnam	--	--	--	--	683
Total	117,000	60,600	11,200	9,880	62,500
Grand total	533,000	260,000	72,700	42,900	349,000

-- Zero.

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

²Includes the lead content (Quantity 2) of Harmonized Tariff Schedule of the United States (HTS) codes 7801.91.0000, 7801.99.9030, 7801.99.9050. Excludes bullion.

³Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 10
LONDON METAL EXCHANGE (LME) STOCKS OF LEAD, END OF PERIOD

	(Metric tons)			
Period	United States	Asia	Europe	Total
2016:				
June	--	89,400	95,800	185,000
July	--	89,700	97,400	187,000
August	--	89,900	97,400	187,000
September	--	88,500	102,000	190,000
October	--	85,400	103,000	189,000
November	--	84,300	103,000	188,000
December	--	79,300	116,000	195,000
2017:				
January	--	78,500	111,000	189,000
February	--	77,500	112,000	190,000
March	--	76,700	108,000	184,000
April	--	77,000	92,400	169,000
May	--	71,900	108,000	180,000
June	--	68,200	95,900	164,000

-- Zero.

Source: London Metal Exchange, Ltd.