

Mineral Industry Surveys

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LEAD IN JANUARY 2021

Domestic mine production (recoverable) of lead in January was 28,300 metric tons (t). Average daily mine production in January was 913 t, 3% less than that in the previous month but 24% more than that in January 2020.

Total secondary refined lead production in January was 99,900 t, slightly more than that in the previous month and slightly less than that in January 2020 (fig. 1; tables 1, 2).

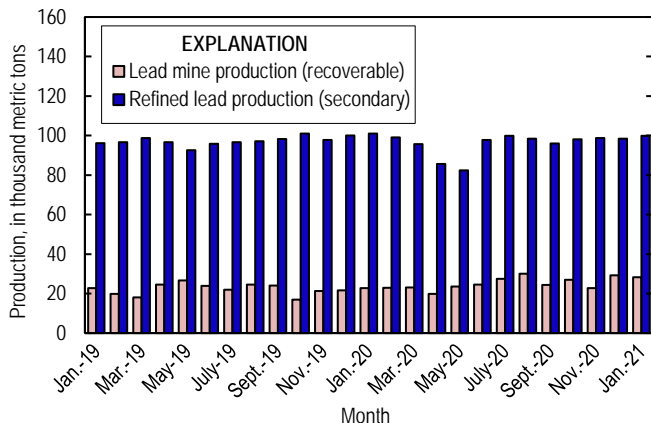


Figure 1. U.S. production of lead from January 2019 through January 2021. Source: U.S. Geological Survey.

The United States is a significant exporter of lead concentrates. U.S. exports of lead in ores and concentrates in January 2021 were 14,500 t, 13% more than those in January 2020. Leading destinations were the Republic of Korea (33%), the Netherlands (27%), Germany (25%), and Canada (14%) (table 8).

Prices and Stocks

The average London Metal Exchange, Ltd. (LME) cash price for lead in January was 91.4 cents per pound, essentially unchanged from that in the previous month and 5% more than that in January 2020 (table 3). The S&P Global Platts Metals Week average North American Market price for lead in January 2021 was \$1.01 per pound, essentially unchanged from that in the previous month and 5% more than that in January 2020.

The North American premium to the LME cash price in January 2021 averaged 9.59 cents per pound, 4% more than that in December 2020 and 5% more than that in January 2020 (fig. 2, table 3).

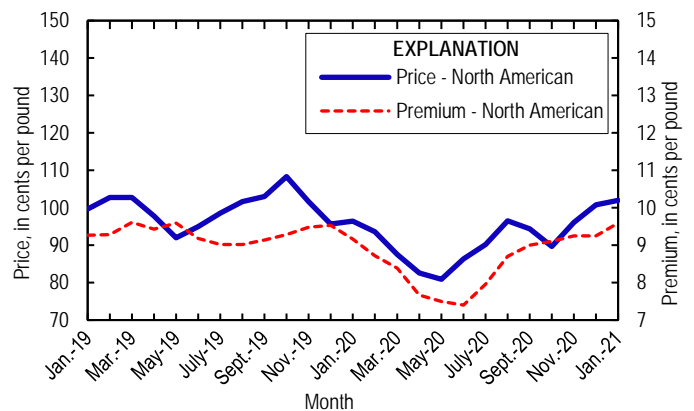


Figure 2. Average monthly North American price and premium for refined lead metal from January 2019 through January 2021. Source: S&P Global Platts Metals Week.

The Platts average U.S. used lead-acid batteries (Midwest) price in January 2021 was 32.8 cents per pound, 3% more than that in December and 11% less than that in January 2020 (table 3). Most secondary lead is recovered from used lead-acid batteries.

Global LME lead stocks at the end of January 2021 were 96,775 t, 27% less than those at the end of December 2020 and 45% more than those at the end of January 2020 (table 11).

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TABLE 1
SALIENT LEAD STATISTICS IN THE UNITED STATES¹

(Metric tons, lead content, unless otherwise specified)

	2019 ^{a, 2}	2020 ²			2021 January
		January	December	January– December	
Production:					
Mine (recoverable)	266,000	22,800	29,200	297,000	28,300
Secondary refinery, reported by smelters/refineries	1,170,000	101,000	98,400	1,150,000	99,900
Consumption of refined lead, apparent ^{e, 3}	1,640,000	141,000	121,000	1,520,000	142,000
Imports for consumption:					
Ore and concentrate	8	--	--	(4)	--
Bullion	75	--	--	313	--
Unwrought	501,000	42,000	24,000	382,000	44,100
Exports:					
Ore and concentrate	259,000	12,800	18,800	265,000	14,500
Bullion (gross weight)	1,230	38	386	2,460	396
Unwrought (gross weight)	25,500	1,580	1,480	16,600	1,640
S&P Global Platts Metals Week North American Market price (cents per pound)	99.91	96.46	100.81	91.25	100.98

^aEstimated. ^bPreliminary. -- 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.

³Secondary refinery production plus imports for consumption of unwrought lead minus domestic exports of unwrought lead.

⁴Less than ½ unit.

TABLE 2
MINE AND SECONDARY REFINERY PRODUCTION OF LEAD
IN THE UNITED STATES¹

(Metric tons)

Period	Mine		Secondary refinery ^c
	Lead in concentrate	Recoverable	
2020:			
January	23,500	22,800	101,000
February	23,500	22,900	99,100
March	23,700	23,100	95,600
April	20,300	19,800	85,700
May	24,200	23,500	82,300
June	25,300	24,600	97,800
July	28,300	27,500	99,900
August	30,900	30,100	98,400
September	25,100	24,400	96,000
October	27,600	26,900	98,100
November	23,300	22,700	98,700
December	30,100	29,200	98,400
January–December	306,000	297,000	1,150,000
2021, January	29,100	28,300	99,900

^cEstimated.

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

TABLE 3
MONTHLY AVERAGE LEAD PRICES

	North American Market ¹ ¢/lb	London Metal Exchange cash		Used lead-acid batteries ² ¢/lb
		¢/lb	\$/t	
2020:				
January	96.46	87.30	1,924.69	36.75
February	93.63	84.90	1,871.75	36.44
March	87.50	79.11	1,744.14	34.78
April	82.59	74.91	1,651.53	32.50
May	80.90	73.40	1,618.16	32.25
June	86.32	78.92	1,739.86	32.00
July	90.16	82.20	1,812.15	32.50
August	96.48	87.78	1,935.20	33.16
September	94.34	85.34	1,881.36	33.98
October	89.71	80.61	1,777.07	31.50
November	96.09	86.84	1,914.48	28.63
December	100.81	91.56	2,018.60	31.68
January–December	91.25	82.74	1,824.08	33.01
2021, January	100.98	91.40	2,014.93	32.75

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

²S&P Global Platts 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: S&P Global Platts Metals Week.

TABLE 4
CONSUMPTION OF PURCHASED LEAD-BASE SCRAP IN JANUARY 2021¹

(Metric tons, gross weight)

Item	Stocks December 31, 2020	Net receipts	Consumption	Stocks January 31, 2021
Battery-lead	W	79,300	74,700	W
Other ²	W	5,790	5,760	W
Total	9,390	85,100	80,500	14,000
Percent change from preceding month ³	XX	-1.9	-5.4	49.5

W Withheld to avoid disclosing company proprietary data; included in "Total." 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 5
LEAD, TIN, AND ANTIMONY RECOVERED FROM
LEAD-BASE SCRAP IN JANUARY 2021¹

(Metric tons)

Product recovered	Secondary metal content		
	Lead	Tin	Antimony
Soft and calcium lead	83,600	--	--
Remelt lead	W	--	--
Antimonial lead	15,900	W	W
Other ²	W	W	--
Total lead-base	99,900	178	W

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 6
U.S. APPARENT CONSUMPTION OF LEAD¹

(Metric tons)

Period	Production	Imports ^{2,3}	Exports ^{2,3}	Apparent consumption ⁴
2020: ^p				
January	101,000	42,000	1,580	141,000
February	99,100	26,400	1,290	124,000
March	95,600	33,400	1,460	128,000
April	85,700	41,100	1,290	126,000
May	82,300	27,300	909	109,000
June	97,800	34,800	1,370	131,000
July	99,900	27,400	1,700	126,000
August	98,400	23,900	1,430	121,000
September	96,000	24,300	1,420	119,000
October	98,100	49,300	1,260	146,000
November	98,700	28,500	1,430	126,000
December	98,400	24,000	1,480	121,000
January–December	1,150,000	382,000	16,600	1,520,000
2021, January	99,900	44,100	1,640	142,000

^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.

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

(Metric tons, gross weight, unless otherwise specified)

Class	2019 ²	2020 ²			2021 January
		January	December	January– December	
Ores and concentrate (lead content)	259,000	12,800	18,800	265,000	14,500
Bullion	1,230	38	386	2,460	396
Unwrought:					
Refined lead	9,450	172	40	642	182
Refined lead containing antimony as the principal alloying element	651	18	45	534	30
Lead alloys	13,700	1,310	1,210	14,300	1,360
Other	1,620	76	180	1,140	62
Total	25,500	1,580	1,480	16,600	1,640
Wrought:					
Bars, rods, profiles, and wire	615	20	36	559	28
Pipes and tubes, including fittings	167	3	--	87	39
Plates, sheets, strip, foil	3,460	278	517	2,760	208
Other	2,360	183	138	2,360	273
Total	6,600	484	691	5,770	548
Powders and flakes	297	36	25	203	4
Tetraethyl lead and tetramethyl lead	507	25	4	145	3
Waste and scrap:					
Spent lead-acid storage batteries for starting engines (units)	27,300,000	2,350,000	2,500,000	27,500,000	2,650,000
Lead waste and scrap obtained from lead-acid storage batteries	--	--	--	--	--
Other lead waste and scrap	39,100	4,260	2,690	46,900	2,050

-- Zero.

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

²May include revisions to previously published data.

Source: U.S. Census Bureau.

TABLE 8
U.S. EXPORTS OF LEAD ORES AND CONCENTRATES, BY COUNTRY OR LOCALITY¹

(Metric tons, lead content)

Country or locality	2019 ²	2020 ²			2021 January
		January	December	January– December	
Australia	--	--	--	15,700	--
Canada	52,400	839	3,890	27,500	2,090
China	62,300	--	3,640	82,600	--
Dominican Republic	34	--	--	4	--
Germany	--	--	--	8,060	3,610
Indonesia	5	--	--	20	--
Italy	23,400	7,920	--	16,000	--
Japan	25,100	--	--	20,800	44
Korea, Republic of	51,300	--	3,570	49,900	4,730
Laos	11	--	--	--	--
Mexico	24,700	65	7,550	15,800	32
Netherlands	15,000	4,000	--	27,200	3,980
Peru	--	--	106	106	--
Thailand	3,390	--	--	1,190	--
Vietnam	1,760	8	--	30	--
Total	259,000	12,800	18,800	265,000	14,500

-- Zero.

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

²May include revisions to previously published data.

Source: U.S. Census Bureau.

TABLE 9
U.S. IMPORTS FOR CONSUMPTION OF LEAD, BY CLASS¹

(Metric tons, gross weight, unless otherwise specified)

Class	2020 ²				2021 January
	2019 ²	January	December	January– December	
Ores and concentrate (lead content)	8	--	--	(3)	--
Bullion (lead content)	75	--	--	313	--
Unwrought:					
Refined lead	406,000	34,500	17,100	314,000	36,000
Refined lead containing antimony as the principal alloying element (lead content)	27,000	2,040	2,130	22,800	3,000
Lead alloys (lead content)	23,200	1,350	1,980	18,600	802
Other (lead content)	44,000	4,130	2,780	27,300	4,330
Total	501,000	42,000	24,000	382,000	44,100
Wrought:					
Bars, rods, profiles, and wire	3,420	206	249	4,810	541
Pipes and tubes, including fittings	77	--	4	100	2
Plates, sheets, strip, foil	1,760	129	110	1,350	137
Other	2,770	167	229	2,050	169
Total	8,020	502	591	8,310	849
Powders and flakes	315	38	(3)	183	19
Tetraethyl lead and tetramethyl lead	139	46	11	278	2
Waste and scrap:					
Spent lead-acid storage batteries for starting engines (units)	528,000	58,900	100,000	990,000	46,100
Lead waste and scrap obtained from lead-acid storage batteries (lead content)	2,320	125	254	2,120	231
Other lead waste and scrap (lead content)	2,100	360	233	2,360	199

-- Zero.

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

²May include revisions to previously published data.

³Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 10
U.S. IMPORTS FOR CONSUMPTION OF UNWROUGHT LEAD, BY COUNTRY OR LOCALITY¹

(Metric tons, lead content)

Material and country or locality of origin	2019 ²	2020 ²		January– December	2021 January
		January	December		
Refined lead:					
Argentina	4,300	428	--	1,800	--
Australia	--	--	--	15,900	--
Brazil	9,920	2,120	142	15,500	382
Burma	1,500	--	--	750	--
Canada	159,000	13,000	10,100	113,000	8,750
China	101	--	--	--	--
Colombia	801	--	--	900	--
Dominican Republic	50	--	--	130	103
Ecuador	19,800	1,630	202	7,190	100
Germany	50	--	--	--	--
Ghana	--	--	790	1,610	493
Hong Kong	100	--	--	--	--
India	4,090	1,630	--	3,760	--
Indonesia	--	--	--	76	--
Israel	2,200	--	--	2,050	--
Italy	--	--	--	--	(4)
Japan	--	--	--	299	--
Kazakhstan	17,800	--	219	13,400	780
Korea, Republic of	76,000	1,720	--	48,800	18,800
Mexico	96,700	6,770	5,310	67,000	6,220
Nigeria	994	771	50	7,140	--
Panama	400	--	--	--	--
Peru	3,030	425	50	1,900	100
Russia	6,070	5,790	--	11,200	201
South Africa	20	--	20	20	--
Sri Lanka	--	200	--	200	--
Thailand	1,250	--	99	291	--
United Kingdom	404	--	98	590	98
Venezuela	2,080	24	--	245	--
Total	406,000	34,500	17,100	314,000	36,000
Other unwrought lead:³					
Argentina	2,080	--	--	--	--
Australia	--	--	47	47	--
Bolivia	183	--	--	--	--
Brazil	276	81	--	208	--
Canada	86,800	7,260	6,280	63,600	7,660
Chile	--	--	--	299	--
China	2	--	--	--	--
Colombia	--	--	--	20	--
Costa Rica	19	--	--	--	--
Denmark	--	--	--	(4)	--
Dominican Republic	--	--	153	1,070	153
Ecuador	378	--	--	318	--
France	--	--	13	43	--
Germany	1	--	--	--	--
Ghana	--	--	--	198	--
India	321	37	68	644	23
Korea, Republic of	14	--	--	10	17
Mexico	2,700	132	63	1,230	15
Panama	--	--	149	149	149
Paraguay	49	--	--	--	--
Peru	221	--	--	--	--
Russia	(4)	--	4	4	--
Sweden	11	--	--	--	--
Taiwan	(4)	--	--	--	--

See footnotes at end of table.

TABLE 10—Continued
 U.S. IMPORTS FOR CONSUMPTION OF UNWROUGHT LEAD, BY COUNTRY OR LOCALITY¹

(Metric tons, lead content)

Material and country or locality of origin	2019 ²	2020 ²		January– December	2021 January
		January	December		
Other unwrought lead—Continued: ³					
United Kingdom	1,040	--	90	615	93
Venezuela	185	--	26	211	27
Total	94,300	7,510	6,890	68,700	8,130
Grand total	501,000	42,000	24,000	382,000	44,100

-- Zero.

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

²May include revisions to previously published data.

³Includes 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.

⁴Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 11
LONDON METAL EXCHANGE (LME) STOCKS OF LEAD, END OF PERIOD

(Metric tons)

Period	United States	Asia	Europe	Total
2020:				
January	--	26,000	40,800	66,800
February	--	25,750	42,350	68,100
March	--	26,250	44,650	70,900
April	3,725	26,100	43,825	73,650
May	5,875	25,625	44,325	75,825
June	5,875	24,625	36,000	66,500
July	7,725	28,450	81,975	118,150
August	7,250	33,775	83,875	124,900
September	6,825	34,350	95,825	137,000
October	6,325	33,600	84,475	124,400
November	4,425	33,200	75,075	112,700
December	1,550	35,125	96,500	133,175
2021, January	--	21,375	75,400	96,775

-- Zero.

Source: London Metal Exchange, Ltd.