

Mineral Industry Surveys

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LEAD IN JANUARY 2008

Domestic mine production of lead, based on the net quantity of lead recovered from concentrate, was estimated to be 32,400 metric tons in January, according to the U.S. Geological Survey. This was a decrease of about 13% compared with production in December 2007. Secondary refinery production of lead increased about 10% compared with that of the previous month.

According to Platts Metals Week published quotations, the average North American producer price in January was \$1.50 per pound, about a 7% decrease from that of the previous month. The London Metal Exchange cash price in January averaged \$2,607 per metric ton, up slightly from that of the previous month.

The Environment Minister of Western Australia issued a set of conditions that were to be met by Ivernia Inc. (Toronto, Ontario, Canada) before it would be permitted to begin shipping containerized lead concentrate from its Magellan Mine in Australia through the Port of Freemantle for export. These conditions included the establishment of a \$4.6 million bond, the appointment of an independent auditor for container inspection at both the mine and port; the completion of a comprehensive health, hygiene, and environmental management plan; and regular testing along the shipping route. Ivernia accepted all of the conditions but was unable to estimate a date for the recommencement of mining operations at Magellan. Operations at Magellan had been suspended since April 2007 owing to environmental concerns associated with the transport of lead concentrate from the mine (Ivernia Inc., 2008).

Johnson Controls, Inc. (JCI) (Milwaukee, WI) announced that it was planning to increase the prices of its entire line of lead-

acid batteries by 4% in March. The company stated that although lead prices increased throughout 2007, the costs of other key raw materials as well as those associated with production and recycling processes were the main factors behind the price adjustment (Johnson Controls, Inc., 2008).

A new battery design developed by the Commonwealth Scientific and Industrial Research Organisation (CSIRO) was successfully tested in a low-emission hybrid electric vehicle (HEV) in the United Kingdom. The battery, called the UltraBattery and built by the Furukawa Battery Company (Yokohama City, Kanagawa, Japan), was composed of a supercapacitor (an electrochemical capacitor, which is able to store a large amount of energy for quick release) and a lead-acid battery in a single unit. According to CSIRO, the UltraBattery produced more power, had a longer lifecycle, and cost significantly less than other common battery types used in HEVs (CSIRO, 2008).

References Cited

- CSIRO, 2008, Ultrabattery sets new standard for HEVs: Canberra, Australia, Commonwealth Scientific and Industrial Research Organisation news release, January 17, 2 p.
- Ivernia Inc., 2008, Magellan welcomes Minister's decision on containerized shipments: Toronto, Ontario, Canada, Ivernia Inc. news release, January 17, 3 p.
- Johnson Controls, Inc., 2008, Johnson Controls to implement price increase for batteries: Milwaukee, WI, Johnson Controls, Inc. new release, January 4, 1 p.

TABLE 1
SALIENT LEAD STATISTICS IN THE UNITED STATES¹

(Metric tons, lead content, unless otherwise specified)

	2006	2007			2008 January
		January	December	January- December	
Production:					
Mine (recoverable)	419,000	32,400	37,100 ^r	434,000 ^r	32,400 ^e
Secondary refinery:					
Reported by smelters/refineries	1,150,000	96,800	92,500	1,170,000	102,000
Estimated	--	978	925	11,700	1,020
Recovered from copper-base scrap ^e	8,990	1,250	1,250	15,000	1,250
Total secondary	1,160,000	99,000	94,600	1,200,000	104,000
Stocks, end of period:					
Secondary smelters and consumers	53,700	49,900	63,100 ^r	63,100 ^r	53,100
Imports for consumption:					
Ore and concentrate	539	149	316	1,990	20
Refined metal	331,000	20,000	22,800	264,000	24,400
Consumption:					
Reported	1,560,000	126,000	123,000 ^r	1,500,000 ^r	129,000
Undistributed ^e	--	4,040	3,700 ^r	45,100 ^r	3,880
Total	1,560,000	130,000	127,000 ^r	1,550,000 ^r	133,000
Exports:					
Ore and concentrate	298,000	5,220	18,900	300,000	10,100
Bullion	197	13	23	170	16
Wrought and unwrought lead	68,500	2,690	6,030	56,400	5,770
TEL/TML preparations, based on lead compounds	9,520	458	68	2,740	249
Exports (gross weight): Scrap	121,000	8,630	14,800	129,000	14,300
Platts Metals Week North American producer price (cents per pound)	77.40	86.71	160.63	123.84	150.03

^eEstimated. ^rRevised. -- 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 cents/lb	LME		Sterling exchange rate dollars/£
		\$/metric ton	£/metric ton	
2007:				
November	163.42	3,327.01	1,606.69	2.070720
December	160.63	2,595.28	1,287.31	2.016050
Year	123.84	2,579.02	1,288.41	2.001715
2008, January	150.03	2,606.85	1,323.11	1.970238

Source: Platts Metals Week.

TABLE 3
CONSUMPTION OF PURCHASED LEAD-BASE SCRAP¹

(Metric tons, gross weight)

Item	Stocks	Net	Consumption	Stocks
	December 31, 2007	receipts		January 31, 2008
Battery-lead	24,500	109,000	107,000	27,000
Soft lead	W	W	W	W
Drosses and residues	W	W	W	W
Other ²	895	8,050	7,890	1,050
Total	25,300	117,000	114,000	28,100
Percent change from preceding month	XX	+10.9	+8.9	+10.7

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.

TABLE 4
LEAD, TIN, AND ANTIMONY RECOVERED FROM
LEAD-BASE SCRAP IN JANUARY 2008¹

(Metric tons)

Product recovered	Secondary metal content		
	Lead	Tin	Antimony
Soft and calcium lead	50,900	--	--
Remelt lead	W	--	--
Antimonial lead	10,900	(2)	(2)
Other ³	40,100	(2)	(2)
Total lead-base	102,000	140	294

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	2006	2007			2008 January
		January	December	January- December	
Metal products:					
Ammunition, shot and bullets	65,300	7,180	5,060 ^r	75,400 ^r	6,380
Brass and bronze, billet and ingots	2,620	408	365	3,190 ^r	351
Cable covering, power and communication and calking lead, building construction	W	1,230	759 ^r	8,020 ^r	678
Casting metals	29,900	1,630	2,490	29,900	3,830
Sheet lead, pipes, traps and other extruded products	8,560	2,590	2,170 ^r	29,700 ^r	2,270
Solder	7,140	650	584 ^r	7,000 ^r	586
Storage batteries, including oxides	1,400,000	108,000	108,000 ^r	1,300,000 ^r	112,000
Terne metal, type metal, and other metal products ²	24,700	145	1,390	16,700 ^r	1,400
Total metal products	1,530,000	122,000	121,000 ^r	1,470,000 ^r	127,000
Other oxides and miscellaneous	24,500	3,780	2,330	28,000	2,120
Total reported	1,560,000	126,000	123,000 ^r	1,500,000 ^r	129,000
Undistributed ^c	--	4,040	3,700 ^r	45,100 ^r	3,880
Grand total	1,560,000	130,000	127,000 ^r	1,550,000 ^r	133,000

^cEstimated. ^rRevised. W Withheld to avoid disclosing company proprietary data; included in "Metal products: Terne metal, type metal, and other metal products." -- Zero.

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

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

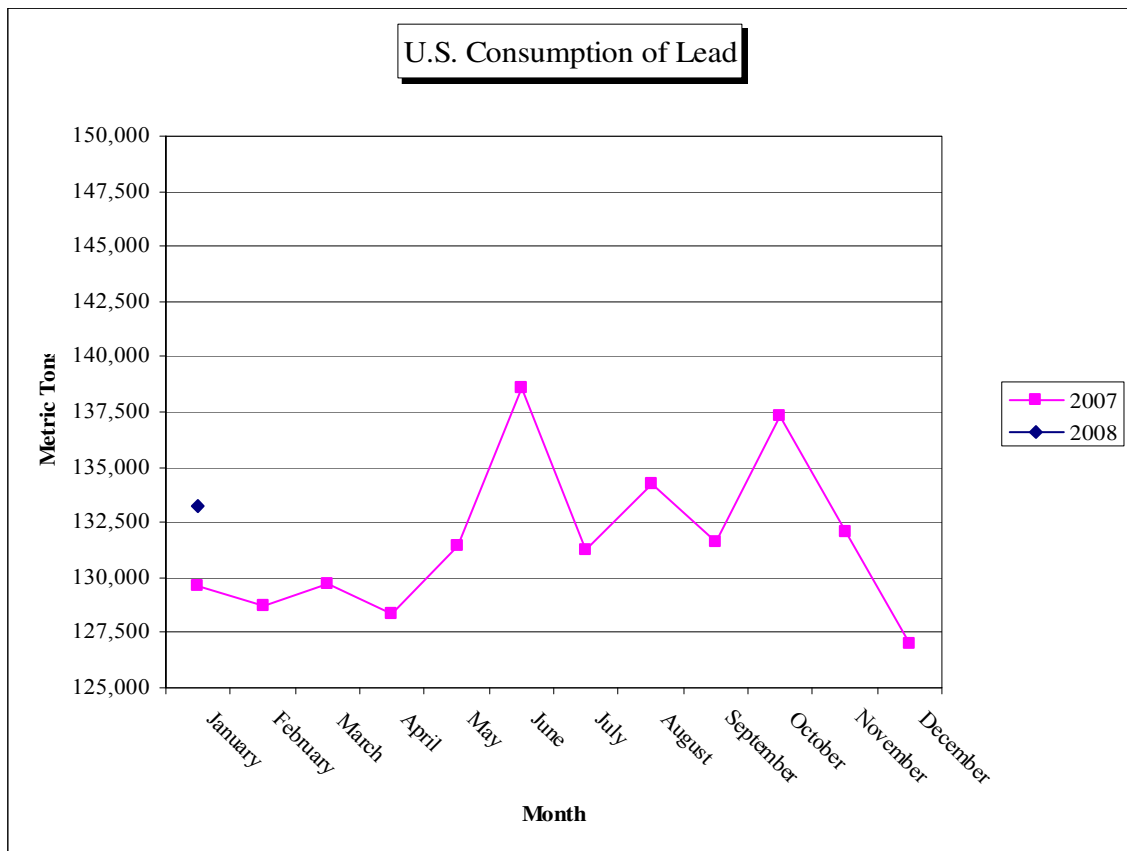


TABLE 6
CONSUMER AND SECONDARY SMELTER STOCKS, RECEIPTS, AND CONSUMPTION OF LEAD¹

(Metric tons, lead content)

Type of material	Stocks		Consumption	Stocks
	December 31, 2007	Net receipts		January 31, 2008
Soft lead	36,600 ^r	59,900	71,400	25,000
Antimonial lead	15,100	27,300	27,200	15,200
Lead alloys	W	W	W	W
Copper-base scrap	W	W	W	W
Total	63,100 ^r	119,000	129,000	53,100

^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)

	2007		2008
	January	Year	January
Lead content:			
Ore and concentrates	5,220	300,000	10,100
Bullion	13	170	16
Materials excluding scrap	2,690	56,400	5,770
TEL/TML preparations, based on lead compounds	458	2,740	249
Total	8,380	359,000	16,100
Gross weight: Scrap	8,630	129,000	14,300

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

Source: U.S. Census Bureau.

TABLE 8
U.S. IMPORTS OF LEAD BY TYPE OF MATERIALS AND BY COUNTRY OF ORIGIN¹

(Metric tons, lead content)

Country of origin	General imports				Imports for consumption			
	2007		2008		2007		2008	
	Year	January	December	January	Year	January	December	January
Base bullion:								
Colombia	1,860	132	189	20	1,860	132	189	20
Other	127	--	127	--	127	--	127	--
Total	1,990	132	316	20	1,990	132	316	20
Pigs and bars:								
Canada	208,000	16,500	17,300	19,900	208,000	16,500	17,300	19,900
Mexico	35,600	1,290	4,560	3,140	35,600	1,290	4,560	3,140
Peru	16,500	2,110	623	656	16,500	2,110	623	656
Other	3,860	129	300	756	3,860	129	300	756
Total	264,000	20,000	22,800	24,400	264,000	20,000	22,800	24,400
Grand total	266,000	20,100	23,100	24,400	266,000	20,100	23,100	24,400

-- Zero.

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

Source: U.S. Census Bureau.