

Mineral Industry Surveys

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ZINC IN NOVEMBER 2016

Domestic mine production (recoverable) of zinc in November 2016 was 54,200 metric tons (t) (table 2). Average daily mine production in November was 1,810 t, 18% less than that in October and 9% less than that in November 2015 (fig. 1).

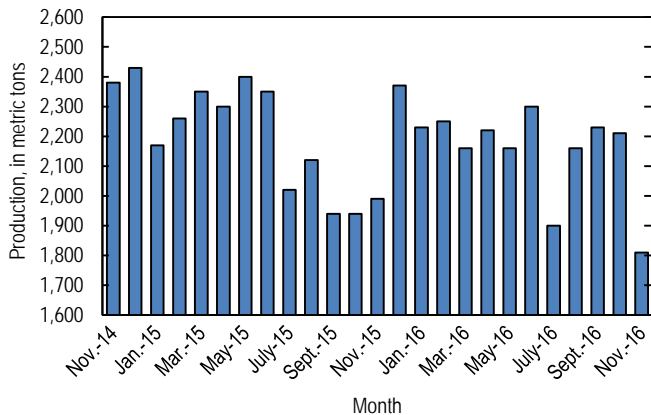


Figure 1. Average daily domestic zinc mine production (recoverable) from November 2014 through November 2016. Source: U.S. Geological Survey.

Global London Metal Exchange Ltd. (LME) stocks of Special High Grade (SHG) zinc decreased by 8,725 t to 442,000 t in November, slightly less than stocks at the end of October 2016 and 19% less than stocks at the end of November 2015 (fig. 2, table 7).

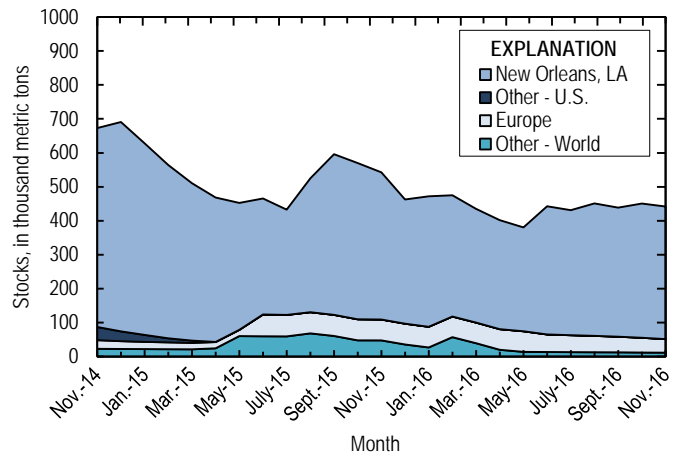


Figure 2. Global LME stocks of Special High Grade zinc, monthend, from November 2014 through November 2016. Source: London Metal Exchange Ltd.

The monthly average Platts Metals Week North American SHG zinc price in November 2016 was \$1.23 per pound, a 10% increase from that in October 2016 and 55% more than that in November 2015. The November average LME cash price for SHG zinc was \$2,568.41 per metric ton, an 11% increase from that in the previous month and 62% more than that in November 2015. The North American premium to the LME cash price in November averaged about 6.3 cents per pound, unchanged from that in October, and despite the increase in prices, 14% below that in November 2015 (fig. 3, table 6). Monthly average SHG zinc prices increased significantly since the beginning of the year, with the October average North American SHG and LME cash prices increasing by about 63% and 70%, respectively, from those in January. Among the LME-traded base metals, zinc has experienced the greatest increase in price coincident with increased investment interest and an increasing production-to-

consumption deficit in the zinc metal market supported by several significant mine closures and production cutbacks. The International Lead and Zinc Study Group forecast that global zinc metal consumption would exceed production by 349,000 t in 2016 and that the market would remain in deficit in 2017 (International Lead and Zinc Study Group, 2016; Onstad, 2016).

References Cited

International Lead and Zinc Study Group, 2016, ILZSG session/forecasts: Lisbon, Portugal, International Lead and Zinc Study Group press release, October 31, 5 p. (Accessed October 31, 2016, via <http://www.ilzsg.org/>)
 Onstad, Eric, 2016, Zinc, nickel to spin wheels next year after sizzling rallies: Reuters, November 7. (Accessed November 7, 2016, at http://www.reuters.com/article/us-metals-base-poll-idUSKBN1321RW?rpc=401&.)

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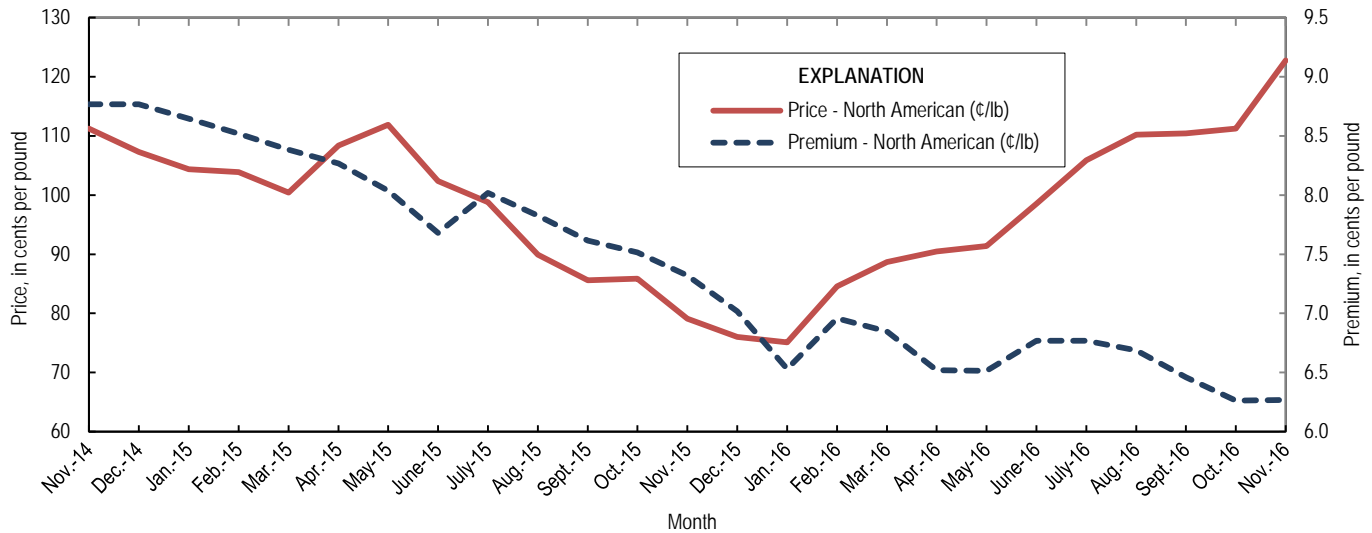


Figure 3. Average monthly North American price and premium for Special High Grade zinc from November 2014 through November 2016. Source: Platts Metals Week.

TABLE 1
SALIENT ZINC STATISTICS¹

(Metric tons, unless otherwise specified)

	2015	2016		
	January– December ^p	October	November	January– November ²
Production:				
Mine, zinc content of concentrate ³	825,000	71,000	56,000	743,000
Mine, recoverable zinc ³	797,000	68,600	54,200	719,000
Smelter, refined zinc ^c	172,000	9,580	9,580	111,000
Consumption of refined zinc, apparent ⁴	931,000	68,900	71,900	721,000
Imports for consumption:				
Ore and concentrate (zinc content)	22	--	--	60
Refined zinc	771,000	60,700	62,700	659,000
Exports:				
Ore and concentrate (zinc content)	709,000	82,700	32,400	597,000
Refined zinc	12,700	1,310	445	49,600
Price:⁵				
London Metal Exchange cash, average, dollars per metric ton	1,932.14	2,313.83	2,568.41	2,037.52
Platts Metals Week North American, average, cents per pound	95.54	111.22	122.77	99.02

^cEstimated. ^pPreliminary. -- 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.

³Reported zinc content in both zinc and lead concentrates.

⁴Smelter production plus imports for consumption minus domestic exports.

⁵Special High Grade Zinc.

TABLE 2
MINE AND SMELTER PRODUCTION OF ZINC
IN THE UNITED STATES¹

(Metric tons)

Period	Mine ²		Smelter ^c
	Zinc content	Recoverable	
2015:			
November	61,800	59,800	14,400
December	76,100	73,600	13,500
January–December	825,000	797,000	172,000
2016:			
January	74,100	71,700	10,600
February	67,300	65,200	10,600
March	69,300	67,000	10,600
April	68,800	66,600	10,600
May	69,100	66,900	10,600
June	71,000	68,600	10,600
July	60,100	58,100	9,580
August	68,500	66,200	9,580
September	68,300	66,000	9,580
October	71,000	68,600	9,580
November	56,000	54,200	9,580
January–November	743,000	719,000	111,000

^cEstimated.

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

²Includes the zinc content in both lead and zinc concentrates.

TABLE 3
U.S. IMPORTS FOR CONSUMPTION OF ZINC¹

(Gross weight, unless otherwise specified)

Material	2015		2016			
	Quantity (metric tons)	Value (thousands)	November		January–November ²	
			Quantity (metric tons)	Value (thousands)	Quantity (metric tons)	Value (thousands)
Ore and concentrate (zinc content)	22	\$48	--	--	60	\$15
Unwrought:						
Refined zinc	771,000	1,620,000	62,700	\$153,000	659,000	1,360,000
Zinc alloys	8,070	17,000	709	1,680	6,940	14,100
Wrought:						
Bars, rods, profiles, wire	3,020	9,620	246	815	2,550	7,780
Plates, sheets, strip, foil	3,680	14,600	303	1,260	3,570	11,800
Ash and residues:						
Hard zinc spelter	--	--	19	27	95	136
Zinc dross and skimmings	4,570	7,370	327	515	3,530	5,190
Other (zinc content)	1,550	983	94	91	940	731
Other:						
Powders, flakes, dust	29,100	91,300	1,800	6,050	26,000	79,900
Waste and scrap	18,000	20,100	1,010	1,210	10,400	11,000
Chemicals:						
Lithopone	1,210	1,630	139	334	2,660	6,200
Zinc oxide	116,000	250,000	7,810	17,000	115,000	220,000
Zinc chloride	154	1,150	8	69	127	1,200
Zinc sulfate	89,000	68,100	5,240	4,230	73,100	54,700
Zinc sulfide	2,460	8,050	191	393	478	1,330

-- Zero.

¹Data are rounded to no more than three significant digits.

²May include revisions to previously published data.

Source: U.S. Census Bureau.

TABLE 4
U.S. IMPORTS OF ZINC, BY TYPE OF MATERIAL AND COUNTRY¹

(Metric tons, gross weight, unless otherwise specified)

Material and country	General imports			Imports for consumption		
	2015	2016		2015	2016	
		November	January–November ²		November	January–November ²
Ore and concentrate (zinc content):						
Canada	19	--	--	19	--	--
Germany	3	--	--	3	--	--
Japan	--	--	10	--	--	10
Korea, Republic of	--	--	50	--	--	50
Total	22	--	60	22	--	60
Refined zinc:						
Australia	45,100	--	26,000	82,400	1,510	29,200
Belgium	1,250	--	--	19,600	--	2,190
Brazil	--	--	--	99	--	--
Canada	479,000	42,700	468,000	479,000	42,700	468,000
China	64	--	5	1,800	--	405
France	--	(3)	(3)	--	(3)	(3)
Germany	(3)	--	4	(3)	--	4
India	2,500	588	588	2,500	588	588
Japan	--	--	--	--	--	397
Korea, Republic of	1,500	--	6	20,900	605	8,830
Latvia	--	--	(3)	--	--	(3)
Mexico	99,000	9,880	80,300	99,000	9,880	80,300
Namibia	--	--	--	--	--	123
Netherlands	--	--	--	2,840	--	346
Peru	31,200	7,450	62,500	31,200	7,450	62,500
Spain	31	--	--	32,000	36	6,190
Sweden	(3)	--	(3)	(3)	--	(3)
Switzerland	--	--	--	28	--	--
Taiwan	32	--	31	32	--	31
United Kingdom	--	--	--	49	--	--
Total	659,000	60,600	637,000	771,000	62,700	659,000
Oxide:						
Australia	26	--	97	26	--	97
Belgium	155	1	11	155	1	11
Canada	71,200	4,980	64,700	71,200	4,980	64,700
China	585	4	408	580	4	407
France	--	--	27	--	--	27
Germany	2,380	103	2,330	2,380	103	2,330
India	202	16	85	202	16	85
Indonesia	1	--	27	1	--	27
Israel	--	--	34	--	--	34
Japan	485	29	325	485	29	325
Mexico	32,500	2,530	31,900	32,500	2,530	31,900
Netherlands	5,790	135	5,250	5,790	135	5,250
Norway	5	--	4	5	--	4
Peru	1,510	19	9,180	1,510	19	9,180
Russia	--	--	11	--	--	11
Switzerland	21	--	8	21	--	8
Taiwan	--	--	10	--	--	10
Thailand	--	--	14	--	--	14
Turkey	417	--	--	417	--	--
United Kingdom	232	--	195	232	--	195
Other (2 countries)	(3)	(3)	14	(3)	(3)	14
Total	116,000	7,810	115,000	116,000	7,810	115,000

-- Zero.

¹Data are rounded to no 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 5
U.S. EXPORTS OF ZINC¹

(Gross weight, unless otherwise specified)

Material	2015		2016			
	Quantity (metric tons)	Value (thousands)	November		January–November ²	
			Quantity (metric tons)	Value (thousands)	Quantity (metric tons)	Value (thousands)
Ore and concentrate (zinc content)	709,000	\$987,000	32,400	\$52,900	597,000	\$911,000
Unwrought:						
Refined zinc	12,700	28,700	445	988	49,600	96,100
Zinc alloys	19,700	50,700	1,510	4,160	15,200	37,900
Wrought:						
Bars, rods, profiles, wire	15,400	25,000	704	1,730	7,430	18,400
Plates, sheets, strip, foil	8,010	28,000	640	1,720	6,330	21,800
Ash and residues:						
Hard zinc spelter	9,580	13,600	1,350	2,500	11,300	16,700
Other (zinc content)	19,600	24,000	1,360	1,990	21,200	27,300
Other:						
Powders, flakes, dust	12,300	38,200	1,200	3,290	11,600	35,900
Waste and scrap	55,200	68,600	1,560	2,440	27,000	34,000
Chemicals:						
Lithopone	1,040	7,200	62	311	1,140	6,430
Zinc oxide	21,800	28,900	4,920	5,250	50,700	50,300
Zinc chloride	419	657	50	66	806	1,060
Zinc sulfate	726	751	61	59	509	778
Zinc sulfide	780	14,100	54	1,410	892	13,100

¹Data are rounded to no more than three significant digits.

²May include revisions to previously published data.

Source: U.S. Census Bureau.

TABLE 6
AVERAGE PRICES FOR SPECIAL HIGH GRADE ZINC

Period	North American ¹	London Metal Exchange cash ²	
	¢/lb.	¢/lb.	\$/t
2015:			
November	79.08	71.76	1,581.96
December	76.04	69.02	1,521.74
January–December	95.54	87.64	1,932.14
2016:			
January	75.11	68.58	1,511.88
February	84.54	77.59	1,710.46
March	88.69	81.84	1,804.32
April	90.48	83.97	1,851.12
May	91.38	84.86	1,870.86
June	98.51	91.74	2,022.59
July	105.85	99.08	2,184.43
August	110.22	103.53	2,282.40
September	110.44	103.98	2,292.44
October	111.22	104.95	2,313.83
November	122.77	116.50	2,568.41
January–November	99.02	92.42	2,037.52

¹Platts Metals Week North American price. Based on the London Metal Exchange cash price plus premium.

²Average of the cash buyer price and the cash seller and settlement price.

Source: Platts Metals Week.

TABLE 7
LONDON METAL EXCHANGE (LME) STOCKS OF SPECIAL HIGH GRADE ZINC, END OF PERIOD

(Metric tons)

Period	United States			Europe	Other	Total LME
	Detroit, MI	New Orleans, LA	Total			
2015:						
November	25	433,375	433,400	61,450	47,750	542,600
December	25	365,725	365,750	61,250	35,700	462,700
2016:						
January	25	384,250	384,275	60,850	26,925	472,050
February	25	357,075	357,100	60,725	57,275	475,100
March	25	334,825	334,850	60,700	39,475	435,025
April	--	321,000	321,000	60,700	20,100	401,800
May	--	305,775	305,775	60,700	13,975	380,450
June	--	377,450	377,450	51,700	13,550	442,700
July	--	368,150	368,150	49,850	13,200	431,200
August	--	390,000	390,000	48,250	12,850	451,100
September	--	380,025	380,025	46,050	12,600	438,675
October	--	395,225	395,225	43,550	11,950	450,725
November	--	390,475	390,475	39,875	11,650	442,000

-- Zero.

Source: London Metal Exchange, Ltd.