

# Mineral Industry Surveys

**For information, contact:**

C. Schuyler Anderson, Tin Commodity Specialist  
 National Minerals Information Center  
 U.S. Geological Survey  
 989 National Center  
 Reston, VA 20192  
 Telephone: (703) 648-4985, Fax: (703) 648-7757  
 Email: csanderson@usgs.gov

Linda M. Barnes (Data)  
 Telephone: (703) 648-7986  
 Fax: (703) 648-7975  
 Email: lwhite@usgs.gov

**Internet:** <http://minerals.usgs.gov/minerals/>

## TIN IN DECEMBER 2015

Domestic reported consumption of primary tin in December 2015 was 1,950 metric tons (t), slightly more than that in November 2015 and in December 2014. Monthly consumption of primary tin has remained relatively stable since May 2014 (fig. 1). Total refined tin imports for December 2015 were 2,330 t, a decrease of 17% from those in November 2015. Peru, Bolivia, Malaysia, Indonesia, and Brazil were, in descending order by tonnage, the leading sources of refined tin imports in December (table 4).

The Platts Metals Week average New York dealer price of Grade A tin for December was \$6.92 per pound, essentially unchanged from the November price of \$6.95 per pound, and a decrease of 26% from the December 2014 average price of \$9.31 per pound (table 2). The price of tin has trended downward since April 2014, and the December 2015 average price was 37% lower than the April 2014 average price (fig. 2).

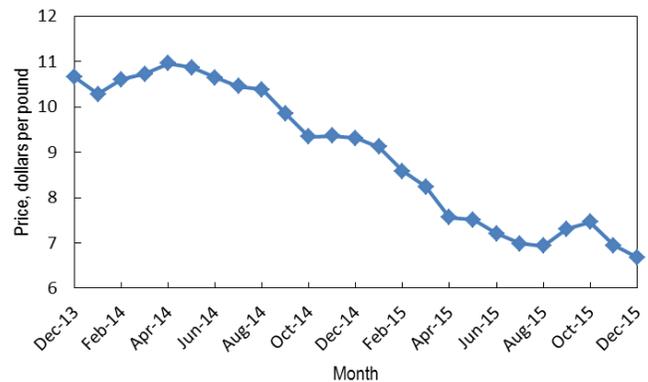


Figure 2: New York dealer prices for tin from December 2013 through December 2015. Source: Platts Metals Week.

Once fully reported, exports of tin from Indonesia were expected to have fallen below 70,000 t in 2015, having decreased from 101,000 t in 2012, 88,000 t in 2013, and 70,000 t in 2014. The downward trend was attributed to low tin prices and to new Indonesian export certification rules in 2015 aimed at reducing smuggling and the environmental impact of mining and improving sustainability (ITRI Ltd., 2015b).

Chinese domestic tin prices rose by more than 20% from 83,000 yuan (\$12,800) per metric ton to 100,000 yuan (\$15,400) per metric ton in December. The increase was reportedly owing to changes in the structure of China's tin supply. Local concentrate supplies were reportedly tight following the closure of private mines in Yunnan Province as well as high-cost operations of government-owned Yunnan Tin. China's tin mine production is estimated by ITRI to have decreased by more than 10,000 t in 2015 (Dragomanovich, 2015).

On December 14, the Hong Kong Exchanges and Clearing (HKEx) launched new 1-ton tin futures contracts. The contracts are based on LME prices, and settle on a monthly, cash basis in yuan. This is the second exchange in Asia to launch tin contracts in 2015, with the Shanghai Futures Exchange having launched a tin contract in late March (ITRI Ltd., 2015a).

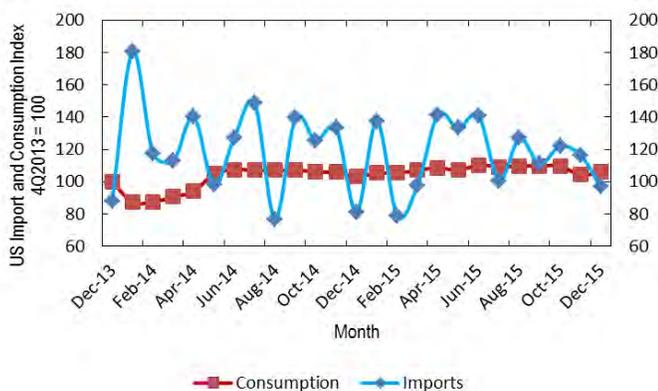


Figure 1: U.S. consumption of primary tin and U.S. imports of refined tin from December 2013 through December 2015, indexed to the fourth quarter of 2013. Source: U.S. Geological Survey.

The Australian company Metalicity Ltd. filed for three exploration licenses in Western Australia, prospecting for lithium, tantalum, and tin. The licenses cover 450 square kilometers and are close to Global Advanced Metals Pty Ltd.'s Wodgina operations and Pilbara Minerals Ltd.'s Pilangoora operations, which have hard rock resources of tantalum and lithium-tantalum, respectively (Macmillan, 2015).

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## References Cited

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- ITRI Ltd., 2015b, Indonesia's 2015 exports likely to be below 70,000 tonnes: Frogmore, United Kingdom, ITRI Ltd. news release, December 8. (Accessed March 8, 2016, at <https://www.itri.co.uk/market-analysis/news-2/indonesia-s-2015-tin-exports-likely-to-be-below-70000-tonnes>.)
- Macmillan, Angus, 2015, Metalicity lodges licenses for Sn, Ta, Li exploration: Metal-Pages, December 30. (Accessed March 8, 2016, via <http://www.metal-pages.com/>.)

TABLE 1  
SALIENT TIN STATISTICS<sup>1</sup>

(Metric tons, unless otherwise noted)

	2014 <sup>p</sup>	2015		
		November	December	January–December <sup>2</sup>
Production, secondary <sup>e,3</sup>	11,100	880	885	10,600
Reported consumption:				
Primary	23,300	1,920 <sup>r</sup>	1,950	23,700
Secondary	2,920	241	241	2,890
Imports for consumption, refined tin	35,600	2,800	2,330	33,600
Exports, refined tin and tin alloys	5,700	133	112	3,350
Stocks at end of period	6,970	6,930 <sup>r</sup>	6,940	6,940
Prices (average cents per pound): <sup>4</sup>				
Metals Week New York dealer, Grade A	1,023.05	694.75	691.67	756.43
London Metal Exchange cash	993.75	668.35	666.51	729.18
Kuala Lumpur	992.53	NA	NA	NA

<sup>e</sup>Estimated. <sup>p</sup>Preliminary. <sup>r</sup>Revised. NA Not available.

<sup>1</sup>Data are rounded to no more than three significant digits, except prices.

<sup>2</sup>May include revisions to previously published data.

<sup>3</sup>Includes tin recovered from alloys and tinplate. The detinning of tinplate (coated steel) yields only a small part of the total.

<sup>4</sup>Source: Platts Metals Week.

TABLE 2  
AVERAGE TIN PRICES

(Cents per pound)

Period	Metals Week New York dealer, Grade A	London Metal Exchange cash	Kuala Lumpur
2014:			
December	930.88	899.03	896.34
January–December	1,023.05	993.75	992.53
2015:			
January	912.21	882.38	NA
February	858.03	829.36	NA
March	823.67	791.68	NA
April	756.00	724.80	NA
May	751.13	717.52	NA
June	720.56	680.84	NA
July	698.89	678.30	NA
August	693.67	690.31	NA
September	730.50	701.66	NA
October	746.11	718.42	NA
November	694.75	668.35	NA
December	691.67	666.51	NA
January–December	756.43	729.18	NA

NA Not available.

Source: Platts Metals Week.

TABLE 3  
TINPLATE PRODUCTION AND SHIPMENTS IN THE UNITED STATES<sup>1</sup>

(Metric tons, unless otherwise noted)

Period	Tinplate waste production (strips, cobbles, etc.) (gross weight)	Tinplate (all forms)				Shipments <sup>2</sup> (gross weight)
		Production		Tin per metric ton of plate (kilograms)		
		Gross weight	Tin content			
<b>2014:</b>						
December	3,110	65,800	384	5.8	85,000	
January–December	29,300	831,000	4,710	5.7	1,300,000	
<b>2015:</b>						
January	4,600	78,500	467	5.9	110,000	
February	3,800	57,900	463	8.0	85,600	
March	4,450	67,000	483	7.2	103,000	
April	4,210	75,400	507	6.7	106,000	
May	4,210	68,800	499	7.3	95,100	
June	3,510	76,000	501	6.6	97,000	
July	3,450	76,200	516	6.8	101,000	
August	3,260	75,900	513	6.8	95,400	
September	3,250	71,600	501	7.0	95,400	
October	3,140	74,700	504	6.7	97,400	
November	2,930	47,000	422	9.0	62,100	
December	3,010	59,100	466	7.9	74,900	
January–December	43,800	828,000	5,840	7.2	1,120,000	

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

<sup>2</sup>Source: American Iron and Steel Institute monthly publication.

TABLE 4  
U.S. TIN IMPORTS FOR CONSUMPTION AND EXPORTS<sup>1</sup>

(Metric tons)

Country or product	2014	2015		
		November	December	January– December <sup>2</sup>
<b>Imports:</b>				
<b>Metal (refined tin):</b>				
Belgium	219	2	--	920
Bolivia	4,550	430	465	6,280
Brazil	3,030	157	325	2,950
China	3,470	40	--	1,230
Indonesia	8,140	766	331	5,210
Malaysia	6,050	877	375	9,990
Peru	9,260	520	701	6,600
Singapore	375	--	100	225
Thailand	291	--	--	20
Other	218	4	37	199
<b>Total</b>	<b>35,600</b>	<b>2,800</b>	<b>2,330</b>	<b>33,600</b>
<b>Other (gross weight):</b>				
Alloys	1,570	337	298	2,720
Bars and rods	1,890	97	38	1,220
Foil, tubes, pipes	90	2	3	109
Plates, sheets, strip	116	3	9	90
Waste and scrap	49,700	1,480	1,060	32,700
Miscellaneous <sup>3</sup>	2,240	90	94	1,440
Exports (unwrought tin and tin alloys)	5,700	133	112	3,350

-- Zero.

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

<sup>2</sup>May include revisions to previously published data.

<sup>3</sup>Includes tin powders and flakes (HTS code 8007.00.3200) and other articles of tin not elsewhere specified or included (HTS code 8007.00.5000).

Source: U.S. Census Bureau.

TABLE 5  
REPORTED CONSUMPTION OF TIN IN THE UNITED STATES, BY FINISHED PRODUCT<sup>1</sup>

(Metric tons of contained tin)

Product	2015							
	2014 <sup>2</sup>	November			December			January– December <sup>2</sup>
		Primary	Secondary	Total	Primary	Secondary	Total	
Alloys (miscellaneous) <sup>3</sup>	3,560	216	2	218	214	2	216	2,640
Babbitt	340	22	W	22	22	W	22	305
Bronze and brass	1,710	59	87	146	60	87	147	1,760
Chemicals	5,440	446	W	446	429	W	429	5,440
Solder	4,160	227	W	227	227	W	227	4,240
Tinning	584	31	--	31	34	--	34	392
Tinplate <sup>4</sup>	5,680	422 <sup>r</sup>	W	422 <sup>r</sup>	466	W	466	5,840
Other <sup>5</sup>	4,740	495	151	646	495	151	646	6,020
Total reported	26,200	1,920 <sup>r</sup>	241	2,160 <sup>r</sup>	1,950	241	2,190	26,600

<sup>2</sup>Preliminary. <sup>r</sup>Revised. W Withheld to avoid disclosing company proprietary data; included with "Other." -- Zero.

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

<sup>2</sup>May include revisions to previously published data.

<sup>3</sup>Includesterne metal.

<sup>4</sup>Includes secondary pig tin and tin components of tinplating chemical solutions.

<sup>5</sup>Includes britannia metal, collapsible tubes and foil, jewelers' metal, pewter, tin powder, type metal and white metal.