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Mineral Industry Surveys

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TIN IN FEBRUARY 2013

Domestic consumption of primary tin in February 2013 was estimated to be 2,440 metric tons (t), a slight increase from that in January 2013, and a 10% increase from that in February 2012. Imports for consumption in February 2013 were 3,250 t, a decrease of 23% from those in January 2013, and an increase of 28% from those in February 2012.

The Platts Metals Week average composite price of tin in February 2013 was $14.71 per pound, compared with $14.86 per pound in January 2013 and $14.73 per pound in February 2012.

Hartleys Ltd. (Perth, Western Australia, Australia), a financial services company, forecast that world tin consumption would increase moderately in 2013, led by improved tin use in solders, and could exceed tin production. Tin price increases outpaced those of other base metals in 2012, rising by about 24% to $23,500 per metric ton at yearend 2012, from $18,950 per metric ton at the end of 2011. The firm pointed to ongoing tin supply constraints as tin producers in China and Indonesia have cut back output owing to the rising cost of ore extraction. In Indonesia, tin mining operations were mainly offshore and were becoming more expensive owing to higher fuel costs. China has experienced an increasing gap between refined tin consumption and mine output and thus become a net importer of tin. New investment in tin mining projects is required to meet increasing consumption given the predicted near-term decline in supply. Market growth was expected to come mostly from solder, especially owing to the move toward exclusively lead-free solders for electric/electronic applications where the tin content may increase from 70% to almost 100%, and which could require another 20,000 t/yr of tin worldwide (Hack, 2013).

PMC Group, Inc. (Mount Laurel, NJ) completed the acquisition of Dow Chemical Co.'s (Midland, MI) global methyl tin stabilizers and solid lubricants business. The acquisition included organotin and heavy-metal free organic polymer stabilizers, polymer lubricants, and multi-component package production lines. This followed PMC's purchase of Arkema Inc.'s (King of Prussia, PA) worldwide organotin and organophosphine-based polymer stabilizers, catalysts, and fine chemicals business on October 1, 2012. These two acquisitions gave PMC a significant share in the world organotin polyvinylchloride (PVC) stabilizer market. Organotin PVC stabilizers account for an estimated 10% of world tin use (Kettle, 2013; PMC Group Inc., 2013a, b).

Stellar Resources Ltd. (Melbourne, Victoria, Australia) increased its estimate of tin contained within its Heemskirk project in Tasmania by 49% following the completion of a year-long drilling program. The new Joint Ore Reserves Comittee-compliant estimate of total indicated and inferred resources was 6.28 million metric tons of ore grading 1.14% tin and containing 71,600 t of tin. The results were to be included in a prefeasibility study on the project which was due to be completed by June 2013. The resources were comprised of three main deposits—Montana, Queen Hill, and Severn. Most of the increase in the resource estimate was from the Severn ore body, which now accounts for 57% of the total resource. The company noted that Heemskirk had the highest grade resource among projects by the Australian Stock Exchange-listed tin explorers and developers, and was second only to the operating Renison Mine in Australia. The Heemskirk project was 18 kilometers from the Renison Mine (Stellar Resources Ltd., 2013).

Update

On April 26, 2013, the Platts Metals Week composite price for tin was $12.67 per pound.

References Cited

Hack, Claire, 2013, Supply deficit to buoy world tin prices in 2013—Analysts: American Metal Market, v. 121, no. 7–2, p. 5.

Kettle, Peter, 2013, PMC expands ownership of tin stabilisers businesses: Frogmore, United Kingdom, ITRI Ltd. news release, February 21. (Accessed May 2, 2013, https://www.itri.co.uk/index.php?option=com_zoo&task=item&item_id=2676&category_id=3&Itemid=143.)

PMC Group Inc., 2013a, PMC Group acquires Arkema's global organometallic business: Mount Laurel, NJ, PMC Group Inc. news release, February 1. (Accessed May 1, 2013, at http://pmc-group.com/newsroom.htm.)

PMC Group Inc., 2013b, PMC Group acquires Dow's polymer stabilizer and lubricant business: Mount Laurel, NJ, PMC Group Inc. news release, February 1. (Accessed May 1, 2013, at http://pmc-group.com/newsroom.htm.)

Stellar Resources Ltd., 2013, Quarterly report for the period ending March 31, 2013: Melbourne, Victoria, Australia, Stellar Resources Ltd., 10 p. (Accessed May 23, 2013, at http://www.stellarresources.com.au/images/ASX_Announcements/2013/130034srl.pdf.)

TABLE 1
SALIENT TIN STATISTICS[1]

(Metric tons, unless otherwise noted)

		2013		
	2012[p]	January	February	January–February
Production, secondary[e, 2]	11,000	918	918	1,840
Consumption:				
Primary	27,300	2,430	2,440	4,880
Secondary	6,200	529	530	1,060
Imports for consumption, metal	36,900	4,220	3,250	7,460
Exports, metal	5,560	700	547	1,250
Stocks at end of period	6,470	6,670	6,640	6,640
Prices (average cents per pound):[3]				
Metals Week composite[4]	1,283.37	1,485.79	1,471.11	1,411.58
Metals Week New York dealer	989.60	1,145.56	1,125.50	1,136.12
London, standard grade, cash	957.26	1,117.80	1,103.61	1,110.70
Kuala Lumpur	958.44	1,113.79	1,102.99	1,108.83

[e]Estimated. [p]Preliminary.

[1]Data are rounded to no more than three significant digits, except prices.

[2]Includes tin recovered from alloys and tinplate. The detinning of tinplate (coated steel) yields only a small part of the total.

[3]Source: Platts Metals Week.

[4]The Metals Week composite price is a calculated formula, not a market price, that includes fixed and finance charges and a risk factor. It is normally substantially higher than other tin prices.

TABLE 2
METALS WEEK COMPOSITE PRICE[1]

(Cents per pound)

Period	High	Low	Average
2012	1,719.32	1,020.42	1,283.37
2013:			
January	1,515.09	1,438.85	1,485.79
February	1,506.82	1,405.01	1,471.11

[1]The Metals Week composite price is a calculated formula, not a market price, that includes fixed and finance charges and a risk factor. It is normally substantially higher than other tin prices.

Source: Platts Metals Week.

TABLE 3
TINPLATE PRODUCTION AND SHIPMENTS IN THE UNITED STATES[1]

(Metric tons, unless otherwise noted)

Period	Tinplate waste (waste, strips, cobbles, etc.) (gross weight)	Tinplate (all forms) Gross weight	Tin content	Tin per metric ton of plate (kilograms)	Shipments[2]
2012	16,300	922,000	6,020	6.5	1,620,000
2013:					
January	1,440	89,800	506	5.6	131,000
February	1,190	92,500	516	5.6	127,000

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

[2]Source: American Iron and Steel Institute monthly publication.

TABLE 4
U.S. TIN IMPORTS FOR CONSUMPTION AND EXPORTS[1]

(Metric tons)

Country or product	2012	2013 January	2013 February	2013 January–February
Imports:				
Metal (unwrought tin):				
Belgium	625	200	3	203
Bolivia	5,100	1,380	121	1,500
Brazil	2,930	376	51	428
China	174	--	489	489
Indonesia	6,180	759	395	1,150
Malaysia	4,590	100	25	125
Peru	14,500	748	1,590	2,330
Singapore	424	--	--	--
Thailand	1,750	650	575	1,230
Other	677	2	3	5
Total	36,900	4,220	3,250	7,460
Other (gross weight):				
Alloys	1,480	128	103	231
Bars and rods	1,800	135	119	254
Foil, tubes, pipes	83	3	1	4
Plates, sheets, strip	60	20	13	32
Waste and scrap	72,500	4,040	3,910	7,950
Miscellaneous	2,260	316	302	618
Total	78,200	4,640	4,440	9,090
Exports (metal)	5,560	700	547	1,250

-- Zero.

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

Source: U.S. Census Bureau.

TABLE 5
CONSUMPTION OF TIN IN THE UNITED STATES, BY FINISHED PRODUCT[1]

(Metric tons of contained tin)

Product	2012[p]	2013						
		January			February			January–February
		Primary	Secondary	Total	Primary	Secondary	Total	
Alloys (miscellaneous)[2]	7,130	659	4	663	661	4	665	1,330
Babbitt	328	56	W	56	55	W	55	111
Bronze and brass	2,090	90	81	171	92	82	174	345
Chemicals	2,600	241	W	241	249	W	249	490
Solder	1,980	198	W	198	186	W	186	384
Tinning	257	23	--	23	23	--	23	46
Tinplate[3]	5,980	506	W	506	516	W	516	1,020
Other[4]	2,320	60	144	204	60	144	204	408
Total reported	22,700	1,830	229	2,060	1,840	230	2,070	4,130
Estimated undistributed consumption[5]	10,800	600	300	900	600	300	900	1,800
Grand total	33,500	2,430	529	2,960	2,440	530	2,970	5,930

[p]Preliminary. W Withheld to avoid disclosing company proprietary data; included with "Other." -- Zero.

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

[2]Includes terne metal.

[3]Includes secondary pig tin and tin components of tinplating chemical solutions.

[4]Includes bar tin and anodes, collapsible tubes and foil, tinpowder, type metal and white metal.

[5]Estimated consumption of plants reporting on an annual basis.