

# Mineral Industry Surveys

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### **TIN IN MAY 2011**

Domestic consumption of primary tin in May 2011 was estimated to be 2,340 metric tons (t), a slight increase from that in April 2011 and a 16% increase from that in May 2010. For the first 5 months of 2011, imports of refined tin were 16,500 t, an increase of 43% from that in the comparable period of 2010. Peru, Bolivia, and Indonesia, in descending order, were the leading sources of tin imports in the first 5 months of 2011.

The Platts Metals Week average composite price of tin in May 2011 was \$17.53 per pound, compared with \$19.42 per pound in April 2011 and \$10.79 per pound in May 2010.

China Tin Group Co. Ltd. (Guangxi City, Hunan Province, China) and joint-venture partner Unionmet (Singapore) Ltd. (Singapore) entered into an agreement to acquire a 65% stake in PT Yinchenindo Mining Industry for \$10 million. China Tin was China's second leading integrated tin company, producing 14,300 t of refined tin in 2010. PT Yinchenindo operated a tin smelter and held 11 mining permits on Indonesia's Belitung Island. Unionmet was a Singapore-based manufacturer of indium ingots used in flat panel displays (ITRI Ltd., 2011a).

As part of the prospectus for its initial public offering of common stock, Glencore International plc (Baar, Switzerland) commented on its plans for its lead, tin, and zinc operations in Bolivia. Sinchi Wayra, owned by a subsidiary of Glencore, operated five tin mines in Bolivia, which produced about 6,000 metric tons per year (t/yr) of tin concentrate. In 2009, the Bolivian Government passed a new law requiring mining entities to form joint ventures with the Government. Glencore was currently engaged in negotiations regarding this matter, with one of its mines already operating as a joint venture. Glencore also planned to expand production by 2013, which was expected to include a project to reprocess old tailings containing significant levels of tin and zinc at the Colquiri Mine. The project would cost about \$65 million (ITRI Ltd., 2011b).

Based on current reserve estimates, the remaining life of Minsur SA's (Lima, Peru) San Rafael Mine in Puno Province may be only 6 or 7 years, although a vigorous exploration program may extend that. Tin mine output there reached a peak of slightly more than 42,000 t in 2005 and has been declining slowly since then. Beginning in 2013, depletion of the mine reserves may be partially offset by the retreatment of tailings, which contain more than 100,000 t of tin at an average grade of more than 1%. Production from the tailings could be about 7,000 to 8,000 t/yr. Following large-scale pilot plant trials, the company was confident that there would be no technical problems in treating this material and obtaining satisfactory recoveries. Meanwhile, high production capacity utilization of Minsur's Funsur tin smelter near Pisco was being maintained by increased treatment of slags that had been a byproduct of years of smelting. It is possible that Funsur will eventually import concentrates and other raw materials from elsewhere in South America (CRU Tin Monitor, 2011)

#### **Update**

On August 12, 2011, the Platts Metals Week composite price for tin was \$14.60 per pound.

#### **References Cited**

CRU Tin Monitor, 2011, Peru—The world's best mine nears end of life: CRU Tin Monitor, April, p. 9.

ITRI Ltd., 2011a, China Tin invests in Indonesian smelter: Frogmore, United Kingdom, ITRI Ltd. news release, April 2. (Accessed August 18, 2011, at http://www.itri.co.uk/pooled/articles/BF\_NEWSART/view.asp?Q=BF\_NEW SART\_322751.)

ITRI Ltd., 2011b, Glencore reports Colquiri tailings plan: Frogmore, United Kingdom, ITRI Ltd. news release, May 6. (Accessed August 23, 2011, at http://www.itri.co.uk/pooled/articles/BF\_NEWSART/view.asp?Q=BF\_NEW SART\_323029.)

## TABLE 1 SALIENT TIN STATISTICS $^1$

(Metric tons, unless otherwise noted)

			2011	
				January-
	2010 <sup>p</sup>	April	May	May
Production, secondary <sup>e, 2</sup>	11,100	922	922	4,610
Consumption:				
Primary	26,900	2,310	2,340	11,500
Secondary	6,220	521	522	2,610
Imports for consumption, metal	35,300	2,190	2,260	16,500
Exports, metal	5,630	744	698	2,960
Stocks at end of period	6,920	6,750	6,820	6,820
Prices (average cents per pound): <sup>3</sup>				
Metals Week composite <sup>4</sup>	1,239.64	1,942.35	1,752.83	XX
Metals Week New York dealer	954.13	1,499.81	1,327.17	XX
London, standard grade, cash	925.15	1,471.58	1,300.49	XX
Kuala Lumpur	922.17	1,472.58	1,325.89	XX

<sup>&</sup>lt;sup>e</sup>Estimated. <sup>p</sup>Preliminary. XX Not applicable.

 $\label{eq:table 2} \text{METALS WEEK COMPOSITE PRICE}^1$ 

(Cents per pound)

Period	High	Low	Average
2010	1,719.49	937.69	1,239.64
2011:			
January	1,802.34	1,583.57	1,644.54
February	1,937.62	1,798.67	1,885.16
March	1,934.68	1,738.66	1,842.63
April	1,982.96	1,884.94	1,942.35
May	1,615.32	1,967.66	1,752.83

<sup>&</sup>lt;sup>1</sup>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.

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

 $<sup>^2</sup>$ Includes tin recovered from alloys and tinplate. The detinning of tinplate (coated steel) yields only a small part of the total.

<sup>&</sup>lt;sup>3</sup>Source: Platts Metals Week.

<sup>&</sup>lt;sup>4</sup>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.

 ${\bf TABLE~3}$  TINPLATE PRODUCTION AND SHIPMENTS IN THE UNITED STATES  $^1$ 

(Metric tons, unless otherwise noted)

		Tinplate (all forms)			
	Tinplate waste			Tin per	
	(waste, strips,			metric ton	
	cobbles, etc.)	Gross	Tin	of plate	
Period	(gross weight)	weight	content	(kilograms)	Shipments <sup>2</sup>
2010	18,200	1,420,000	6,920	4.9	2,030,000
2011:					
January	1,860	101,000	528	5.2	118,000
February	1,840	95,500	502	5.3	117,000
March	1,750	103,000	514	5.0	156,000
April	1,230	90,900	470	5.2	146,000
May	1,400	104,000	512	4.9	141,000

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits.

 $\label{eq:table 4} \textbf{U.S. TIN IMPORTS FOR CONSUMPTION AND EXPORTS}^{\, 1}$ 

(Metric tons)

			2011	
				January-
Country or product	2010	April	May	$May^2$
Imports:				-
Metal (unwrought tin):				
Belgium		1		254
Bolivia	6,060	208	131	2,200
Brazil	75		50	301
Chile	641			60
China	887	102	70	1,110
Indonesia	3,970	482	469	2,180
Malaysia	4,500			1,790
Peru	16,500	1,270	1,360	6,750
Singapore	996	51	78	204
Thailand	1,310	75	100	1,660
Other	327	2		7
Total	35,300	2,190	2,260	16,500
Other (gross weight):				
Alloys	1,290	112	207	889
Bars and rods	3,190	216	274	1,190
Foil, tubes, pipes	80	15	4	37
Plates, sheets, strip	135		7	12
Waste and scrap	57,300	4,180	3,480	21,200
Miscellaneous	3,540	262	249	1,050
Total	65,500	4,790	4,220	24,300
Exports (metal)	5,630	744	698	2,960

<sup>--</sup> Zero.

Source: U.S. Census Bureau.

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

 $<sup>^{1}\</sup>mathrm{Data}$  are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>2</sup>May include revisions.

 ${\bf TABLE~5}$  CONSUMPTION OF TIN IN THE UNITED STATES, BY FINISHED PRODUCT  $^1$ 

(Metric tons of contained tin)

					2011			
			April			May		January-
Product	2010 <sup>p</sup>	Primary	Secondary	Total	Primary	Secondary	Total	$May^2$
Alloys (miscellaneous) <sup>3</sup>	6,070	562	W	562	563	W	563	2,820
Babbitt	220	17	W	17	16	W	16	95
Bar tin and anodes	239	6		6	6		6	31
Bronze and brass	2,000	167	69	236	192	69	261	1,040
Chemicals	2,590	242	W	242	216	W	216	1,120
Collapsible tubes and foil	W	W	W	W	W	W	W	W
Solder	3,710	172	142	313	171	142	313	1,570
Tinning	331	31		31	22		22	122
Tinplate <sup>4</sup>	6,600	470		470	512		512	2,530
Tin powder	192	15	W	15	15	W	15	80
White metal <sup>5</sup>	W	W	W	W	W	W	W	W
Other	416	28	11	39	28	11	39	154
Total reported	22,400	1,710	221	1,930	1,740	222	1,960	9,560
Estimated undistributed consumption <sup>6</sup>	10,800	600	300	900	600	300	900	4,500
Grand total	33,200	2,310	521	2,830	2,340	522	2,860	14,100

<sup>&</sup>lt;sup>p</sup>Preliminary. W Withheld to avoid disclosing company proprietary data; included with "Other." -- Zero.

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

<sup>&</sup>lt;sup>2</sup>May include revisions.

<sup>&</sup>lt;sup>3</sup>Includes terne metal.

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

<sup>&</sup>lt;sup>5</sup>Includes pewter, britannia metal, and jewelers' metal.

 $<sup>^6\</sup>mbox{Estimated}$  consumption of plants reporting on an annual basis.