

Mineral Industry Surveys

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TIN IN AUGUST 2004

Domestic consumption of primary tin in August was estimated to be about 1% more than that in July and 3% more than that in August 2003, according to the U.S. Geological Survey. Estimated domestic consumption of primary tin in the first 8 months of 2004 rose slightly compared with that for the comparable period of 2003. The leading tin importers to the United States in the first 7 months were, in descending order: Peru, Malaysia, Indonesia, Bolivia, China, and Brazil.

The Platts Metals Week average composite price for tin in August was \$5.74 per pound, just slightly lower than that in July 2004 and 71% more than that in August 2003.

Australia's largest operating tin mine, the Ardlethan Tin Mine, has been closed and placed in voluntary administration by owner Marlborough Resources NL following a disappointing first 6 months at its new No. 2 processing plant, lower-than-expected tin reserves, and poor hedging results. The owners called in PricewaterhouseCoopers as administrators for its Telminex NL subsidiary following a critical review of its operations. The review revealed that Telminex, which owns and operates Ardlethan in New South Wales, had fewer recoverable reserves than Marlborough previously reported. Mining was halted at Ardlethan because Telminex did not have enough funds to continue operations. Ardlethan reportedly had less than a year of tin ore reserves. Telminex's future depended heavily on exploring and developing deposits around the mine and at other prospective sites in the area, but a recent funding attempt fell short of its goal, leaving the company with insufficient funds to drill the tenements. A new 2,200-metric-ton-per-year (t/yr) processing plant was installed at Ardlethan in February, but operating problems meant that it never came close to operating at capacity, and, in the second quarter, Ardlethan produced only 185,000 kilograms of contained tin. Malaysia Smelting Corp., the largest shareholder in Marlborough, had been accepting all the tin concentrate produced at Ardlethan (American Metal Market, 2004).

Bluestone Tin Ltd., owner of the mothballed Renison Bell Tin Mine in Tasmania, Australia, announced plans to raise \$20 million in an initial public offering of shares ahead of a planned listing on the Australian Stock Exchange. Bluestone hoped to take advantage of the prevailing high tin price to sell 86 million

shares, priced at \$0.20 per share. Bluestone attributed the rising tin price to tin's increasing share of the solder market, as consumer sentiment and legislation was driving markets toward lead-free solders. The company planned to restart production at Renison Bell in November and expected to complete the development of its Collingwood project in Queensland by July 2005. For 2005, Bluestone officials projected production of about 12,000 t/yr of tin concentrate from Renison Bell and about 5,000 t/yr of concentrate from Collingwood, yielding a total of 8,000 to 10,000 t/yr of tin metal (Mining Journal, 2004a).

Tin mineralization has been found near the Elsmore tin project, in New South Wales, Australia, attracting the interest of Malachite Resources NL, which planned to buy the property. The discovery was made at the Sheep Station Hill deposit, which is located to the north of the old Elsmore Tin Mine. When operational, the Elsmore Tin Mine is expected to produce 500 to 1,000 t/yr of tin in ore. The mine has operated intermittently since the 1870s, and Malachite had an option to buy the property, including a mothballed concentrator and existing infrastructure for \$3 million. The company was also involved in exploration of the Mount Ramsay tin deposit in Tasmania, owned by BHP Billiton (CRU Week in the News, 2004§¹).

According to the August/September issue of Barclays Capital Research's "The Commodity Refiner," tin continued to be in a large supply deficit. The report acknowledged that producers were attempting to diminish the imbalance and to take advantage of prevailing high prices. However, the report noted, even a proposed restart of the Renison Mine in Tasmania, closed since mid-2002, would do little to ease at market with limited supply of refined tin over the near term. Even with second quarter production increases of 20% at Thaisarco and 13% at Malaysia Smelting Corp. and PT Koba, the latter of which had its highest output since 1997, Barclays predicted a world shortfall of 11,500 metric tons (t) in 2004 and 10,000 t in 2005, but a surplus of 5,000 t in 2006 (Platts Metals Week, 2004).

¹A reference that includes a section mark (§) is found in the Internet Reference Cited section.

Still another analyst took a different view of tin's continuing price rally and outperformance of other base metals and pointed to the effect of low inventories. From a record high of 39,500 t in August 2002, London Metal Exchange tin stocks fell to 6,800 t by the end of March 2004, equivalent to less than 2 weeks of global consumption. This analyst pointed to the surge in Chinese demand for tin and the European Union ban on the use of lead solders in various electronic devices in 2006 as reasons for increased tin consumption. The consensus estimate for the tin supply deficit in 2003 seemed to be in the range of 15,000 to 20,000 t (Mining Journal, 2004b).

Update

On October 1, 2004, the Platts Metals Week composite price for tin was \$5.82 per pound.

References Cited

- American Metal Market, 2004, Marlborough closes cash-strapped tin mine: American Metal Market, v. 112, no. 35, September 1, p.7.
Mining Journal, 2004a, Renison Bell owner launches IPO: Mining Journal, August 6, p. 15.
Mining Journal, 2004b, Time for tin: Mining Journal, August 27, p. 17.
Platts Metals Week, 2004, Barclays sees deficit until 2006: Platts Metals Week, v. 75, no. 36, September 6, p. 5.

Internet Reference Cited

- CRU Week in the News, 2004 (September 30), TIN, accessed October 1, 2004, via <http://www.crumonitor.com>.

TABLE 1
SALIENT TIN STATISTICS¹

(Metric tons, unless otherwise noted)

	2004			
	2003 ^p	July	August	January- August
Production, secondary ^{e,2}	10,800	900	900	7,200
Consumption:				
Primary	35,200	3,170	3,210	25,300
Secondary	10,800	674	675	5,460
Imports for consumption, metal	37,100	4,860	NA	NA
Exports, metal	3,690	318	NA	NA
Stocks at end of period	6,520	6,290 ^r	6,300	XX
Prices (average cents per pound): ³				
Metals Week composite ⁴	339.84	576.07	573.74	XX
Metals Week New York dealer	218.06	440.88	437.50	XX
London, standard grade, cash	207.00	410.00	409.00	XX
Kuala Lumpur	209.62	407.67	403.02	XX

^eEstimated. ^pPreliminary. ^rRevised. NA Not available. XX Not applicable.

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

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

³Source: Platts Metals Week.

⁴The 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 PRICE¹

(Cents per pound)

Period	High	Low	Average
2003:			
July	335.48	324.04	331.38
August	339.23	332.37	335.84
September	347.80	336.59	340.70
October	366.28	346.47	359.21
November	373.73	356.40	364.20
December	437.61	378.77	404.65
Year	437.61	303.14	339.84
2004:			
January	439.98	424.94	432.53
February	456.45	429.49	442.15
March	549.13	459.43	495.71
April	596.03	561.93	575.65
May	624.98	575.07	592.12
June	622.44	568.24	589.38
July	583.13	565.64	576.07
August	590.50	563.04	573.74

¹The 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 STATES¹

(Metric tons, unless otherwise noted)

Period	Tinplate waste (waste, strips, cobble, etc.) (gross weight)	Tinplate (all forms)			Shipments ²
		Gross weight	Tin content	Tin per metric ton of plate (kilograms)	
2003 ^p	W	2,500,000	7,750	3.1	2,100,000
2004:					
January	W	210,000	663	3.2	167,000
February	W	200,000	615	3.1	169,000
March	2,720	186,000	558	3.0	188,000
April	W	186,000	614	3.3	168,000
May	W	189,000	613	3.3	148,000
June	W	186,000	610	3.3	188,000
July	W	189,000 ^r	616 ^r	3.3 ^r	174,000
August	W	189,000	616	3.3	NA

^pPreliminary. ^rRevised. NA Not available. W Withheld to avoid disclosing company proprietary data.

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

²Source: American Iron and Steel Institute monthly publication.

TABLE 4
U.S. TIN IMPORTS FOR CONSUMPTION AND EXPORTS¹

(Metric tons)

Country or product	2004			
	2003 ^p	June	July	January- July
Imports:				
Metal (unwrought tin):				
Bolivia	5,720	1,000	437	3,300
Brazil	3,000	311	548	2,250
Chile	636	101	--	200
China	4,340	412	984	2,800
Indonesia	3,070	490	497	3,580
Japan	136	--	--	180
Malaysia	490	945	680	3,710
Peru	19,100	1,990	1,620	10,900
Switzerland	(2)	--	--	178
Thailand	--	--	--	300
United Kingdom	143	1	15	56
Other	426	70	81	293
Total	37,100	5,320	4,860	27,800
Other (gross weight):				
Alloys	3,820	535	1,120	3,080
Bars and rods	338	104	22	364
Foil, tubes, pipes	4	(2)	(2)	2
Plates, sheets, strip	270	30	49	344
Waste and scrap	921	136	56	605
Miscellaneous	2,670	149	293	1,420
Total	8,030	954	1,540	5,810
Exports (metal)	3,690	427	318	2,380

^pPreliminary. -- Zero.

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

²Less than 1/2 unit.

Source: U.S. Census Bureau.

TABLE 5
CONSUMPTION OF TIN IN THE UNITED STATES, BY FINISHED PRODUCT¹

(Metric tons of contained tin)

Product	2003 ^P	2004						
		July			August			January-
		Primary	Secondary	Total	Primary	Secondary	Total	August
Alloys (miscellaneous) ²	1,820	247 ^r	W	247 ^r	251	W	251	1,800
Babbitt	235	16	W	16	18	W	18	119
Bar tin and anodes	278	12	W	12	12	W	12	96
Bronze and brass	2,800	87	95	182	88	99	187	1,650
Chemicals	8,410	704	W	704	704	W	704	5,630
Collapsible tubes and foil	W	W	W	W	W	W	W	W
Solder	12,500	775	261	1,040	800	265	1,070	8,510
Tinning	450	36 ^r	--	36 ^r	41	--	41	313
Tinplate ³	7,800	616 ^r	--	616 ^r	616	--	616	4,910
Tin powder	W	W	--	W	W	--	W	W
White metal ⁴	W	W	--	W	W	--	W	W
Other	843	78 ^r	19 ^r	96 ^r	80	11	91	590
Total reported	35,200	2,570	375	2,950	2,610	375	2,990	23,600
Estimated undistributed consumption ⁵	10,800	600	300	900	600	300	900	7,200
Grand total	46,000	3,170	675 ^r	3,850	3,210	675	3,890	30,800

^rRevised. ^PPreliminary. W Withheld to avoid disclosing company proprietary data; included with "Other." -- Zero.

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

²Includes terne metal.

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

⁴Includes pewter, britannia metal, and jewelers' metal.

⁵Estimated consumption of plants reporting on an annual basis.