

# Mineral Industry Surveys

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## TIN IN AUGUST 2010

Domestic consumption of primary tin in August 2010 was estimated to be 2,090 metric tons (t), slightly higher than that in July 2010 and 14% higher than that in August 2009. Imports of refined tin were 22,000 t in the first 8 months of 2010, 6% lower than those in the comparable period of 2009. Peru, Bolivia, and Indonesia, in decreasing order, were the leading sources of tin imports in the first 8 months of 2010.

The Platts Metals Week average composite price of tin in August 2010 was \$12.56 per pound, compared with \$11.09 per pound in July 2010 and \$9.10 per pound in August 2009.

ITRI Ltd. (Frogmore, United Kingdom) signed an official "Protocole d' Accord" with the Ministry of Mines of Congo (Kinshasa) regarding cooperation on the implementation of Phase 2 of the ITRI Tin Supply Chain Initiative (ITSCI) and the selection of mine sites for the pilot trial. By signing the agreement with ITRI, the Ministry of Mines expected to ensure that ITRI and its representatives and partners in the project are given fullest cooperation in the field from all relevant Government departments and services. Initial pilot sites were selected at Bisie in North Kivu Province and Nyabibwe in South Kivu Province. Bisie was considered a key site for cassiterite, while Nyabibwe was an important site for both cassiterite and columbium and tantalum minerals. Work at Nyabibwe was to be carried out in cooperation with the Federal Institute for Geosciences and Natural Resources (BGR) (Hannover, Germany), an organization that was also starting a project on the implementation of mine certification standards. ITRI has been working since early 2009 on traceability of cassiterite from Congo (Kinshasa). The first phase of the ITSCI program has been operating for almost a year and ensured that all official export and evaluation documentation would be available with mineral shipments for export. Phase 2 would begin to track minerals and provide verifiable provenance information from individual mine sites in eastern Congo (Kinshasa). Participation in the ITSCI program was open to any non-ITRI smelter companies that would be willing to follow the requirements and levy-collection procedures that have been established. However, cassiterite of Congo (Kinshasa) origin purchased by non-ITRI smelters currently remains outside the ITSCI program (ITRI Ltd., 2010b).

Yunnan Tin Group (Gejiu City, Yunnan Province, China), the world's leading tin producer, announced plans to at least double

tin ore throughput from its Laochang ore deposit to 3,000 metric tons per day (t/d) during the next 9 years. The company was planning a three-stage process for the expansion of the Laochang field, its leading mine. The first stage would take the mine's ore treatment rate to 1,500 t/d by 2012. The second-stage expansion would take output to 2,000 t/d by 2014, and the ultimate goal of 3,000 t/d would be achieved by 2019. Yunnan also planned to boost mine production by the development of the Wuchangping project in Hunan Province. Yunnan Tin produced 55,900 t of refined tin in 2009, but more than one-half of its production came from outside purchases of tin feedstock (ITRI Ltd., 2010c).

Consolidated Tin Mines Ltd. (Cairns, North Queensland, Australia) announced the results of new metallurgical test work for its Mt. Garnet project in Queensland, Australia, which suggest that it could recover more tin into concentrates than previously estimated. New studies suggest tin recoveries of 68% in ore processing, which would result in tin-in-concentrate production of 3,180 metric tons per year (t/yr) at an initial ore throughput of 700,000 t/yr. Eventual ore throughput could be 1 million metric tons per year. The Mt. Garnet project has a reported resource of 5.27 million metric tons (Mt) at 0.64% tin. This includes a measured resource of 1.2 Mt at 0.82% tin and an indicated resource of 824,000 t at 0.73% tin (ITRI Ltd., 2010a).

## Update

On December 3, 2010, the Platts Metals Week composite price for tin was \$15.27 per pound.

## References Cited

- ITRI Ltd., 2010a, Consolidated Tin increases production estimates, looks for Chinese partners: Frogmore, United Kingdom, ITRI Ltd. news release, June 22. (Accessed July 7, 2010, at [http://www.itri.co.uk/pooled/articles/BF\\_NEWSART/view.asp?Q=BF\\_NEWSART\\_319827](http://www.itri.co.uk/pooled/articles/BF_NEWSART/view.asp?Q=BF_NEWSART_319827).)
- ITRI Ltd., 2010b, DRC Ministry of Mines reconfirms official support: Frogmore, United Kingdom, ITRI Ltd. news release, June 11. (Accessed July 12, 2010, at [http://www.itri.co.uk/pooled/articles/BF\\_NEWSART/view.asp?Q=BF\\_NEWSART\\_319685](http://www.itri.co.uk/pooled/articles/BF_NEWSART/view.asp?Q=BF_NEWSART_319685).)
- ITRI Ltd., 2010c, Yunnan Tin to expand mine production: Frogmore, United Kingdom, ITRI Ltd. news release, June 23. (Accessed July 7, 2010, at [http://www.itri.co.uk/pooled/articles/BF\\_NEWSART/view.asp?Q=BF\\_NEWSART\\_319840](http://www.itri.co.uk/pooled/articles/BF_NEWSART/view.asp?Q=BF_NEWSART_319840).)

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

(Metric tons, unless otherwise noted)

	2009 <sup>p</sup>	2010		
		July	August	January - August
Production, secondary <sup>e, 2</sup>	11,500	955	955	7,640
Consumption:				
Primary	21,100	2,060	2,090	16,300
Secondary	10,800	646	650	5,190
Imports for consumption, metal	33,000	4,770	2,960	22,000
Exports, metal	3,170	494	423	3,520
Stocks at end of period	XX	7,220 <sup>r</sup>	7,130	XX
Prices (average cents per pound): <sup>3</sup>				
Metals Week composite <sup>4</sup>	837.08	1,108.82	1,255.84	XX
Metals Week New York dealer	641.62	851.22	976.61	XX
London, standard grade, cash	615.15	831.72	940.21	XX
Kuala Lumpur	609.34	818.84	931.34	XX

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

<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>3</sup>Source: Platts Metals Week.

<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.

TABLE 2  
METALS WEEK COMPOSITE PRICE<sup>1</sup>

(Cents per pound)

Period	High	Low	Average
2009	1,030.42	647.98	837.08
2010:			
January	1,109.84	1,054.27	1,087.07
February	1,042.04	937.69	1,008.92
March	1,108.16	1,041.15	1,073.64
April	1,162.79	1,110.30	1,142.59
May	1,113.10	1,055.20	1,078.52
June	1,106.45	981.80	1,061.52
July	1,191.97	1,056.29	1,108.82
August	1,300.35	1,198.00	1,255.84

<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.

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

(Metric tons, unless otherwise noted)

Period	Tinplate waste (waste, strips, cobble, etc.) (gross weight)	Tinplate (all forms)			Shipments <sup>2</sup>
		Gross weight	Tin content	Tin per metric ton of plate (kilograms)	
2009	14,500	1,150,000	6,200	5.4	1,540,000
2010:					
January	983	97,400	470	4.8	152,000
February	1,090	91,800	456	5.0	153,000
March	1,270	92,400	472	5.1	211,000
April	1,660	94,200	470	5.0	172,000
May	1,030	97,600	461	4.7	166,000
June	1,280	129,000	455	3.5	168,000
July	1,690	98,400	479	4.9	155,000
August	1,650	107,000	488	4.5	181,000

NA Not available.

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

<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	2009	2010		
		July	August	January - August <sup>2</sup>
<b>Imports:</b>				
<b>Metal (unwrought tin):</b>				
Bolivia	6,300	818	642	3,950
Brazil	1,050	--	--	75
China	1,210	133	1	529
Indonesia	3,220	293	364	2,550
Malaysia	169	1,220	535	1,830
Peru	20,300	2,230	1,000	11,500
Singapore	451	49	129	665
Thailand	15	--	215	265
Other	343	26	74	618
<b>Total</b>	<b>33,000</b>	<b>4,770</b>	<b>2,960</b>	<b>22,000</b>
<b>Other (gross weight):</b>				
Alloys	1,230	119	100	756
Bars and rods	3,020	281	220	2,210
Foil, tubes, pipes	55	2	12	51
Plates, sheets, strip	3,370	4	1	112
Waste and scrap	80,600	4,190	5,140	40,100
Miscellaneous	3,830	357	452	2,270
<b>Total</b>	<b>92,100</b>	<b>4,950</b>	<b>5,920</b>	<b>45,500</b>
Exports (metal)	3,170	494	423	3,520

-- 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 previous month(s) data.

Source: U.S. Census Bureau.

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

(Metric tons of contained tin)

Product	2009 <sup>P</sup>	2010						January - August <sup>2</sup>
		July			August			
		Primary	Secondary	Total	Primary	Secondary	Total	
Alloys (miscellaneous) <sup>3</sup>	1,910	236	W	236	237	W	237	2,100
Babbitt	427	15	W	15	15	W	15	149
Bar tin and anodes	270	20	--	20	20	--	20	159
Bronze and brass	2,110	114	84	198	117	89	206	1,400
Chemicals	3,080	330	W	330	346	W	346	2,620
Collapsible tubes and foil	W	W	W	W	W	W	W	W
Solder	6,210	196	237	432	196	237	432	3,470
Tinning	318	27	--	27	26	--	27	222
Tinplate <sup>4</sup>	6,200	479	--	479	488	--	479	3,750
Tin powder	193	15	W	15	15	W	15	128
White metal <sup>5</sup>	W	W	W	W	W	W	W	W
Other	379	28	25	53	28	25	50	298
Total reported	21,100	1,460	346	1,810	1,490	350	1,840	14,300
Estimated undistributed consumption <sup>6</sup>	10,800	600	300	900	600	300	900	7,200
Grand total	31,900	2,060	646	2,710	2,090	650	2,740	21,500

<sup>P</sup>Preliminary. 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 previous month(s) data.

<sup>3</sup>Includes terne metal.

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

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

<sup>6</sup>Estimated consumption of plants reporting on an annual basis.