

# Mineral Industry Surveys

---

**For information, contact:**

James F. Carlin, Jr., Tin Commodity Specialist  
U.S. Geological Survey  
989 National Center  
Reston, VA 20192  
Telephone: (703) 648-4985, Fax: (703) 648-7757  
E-mail: jcarlin@usgs.gov

Linda M. White (Data)  
Telephone: (703) 648-7986  
Fax: (703) 648-7975  
E-mail: lwhite@usgs.gov

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

## TIN IN NOVEMBER 2010

Domestic consumption of primary tin in November 2010 was estimated to be 1,970 metric tons (t), a 5% decrease from that in October 2010 and a slight increase from that in November 2009. In the first 11 months of 2010, tin imports for consumption totaled 32,500 t, a 7% increase from those in the comparable period of 2009. During the first 11 months of 2010, the leading sources of tin imports in descending order, were Peru, Bolivia, Malaysia, Indonesia, and Singapore.

The Platts Metals Week average composite price of tin in November 2010 was \$15.38 per pound, compared with \$15.82 per pound in October 2010, and \$9.21 in November 2009.

The historically high tin price brought forth considerable activity from junior mining companies regarding potential projects. In Australia, Minemakers Ltd. (West Perth, Western Australia) announced plans to spin off its tin and tungsten assets in Tasmania into a separate company known as TNT Mines Ltd. The assets included the Aberfoyle and Storeys Creek Mines, the Anchor and Royal George tin mines, the Lutwyche tin and tungsten deposit, and the Royal George tin deposit. The company expected to raise \$10 million through the spinoff. Carpentaria Exploration Ltd. (Brisbane, Queensland) announced that it would acquire the Yanco Glen project in New South Wales, from Wolf Minerals Ltd. (West Perth) for 250,000 shares of Carpentaria stock. Yanco Glen was a prospect for tin, tungsten, and other base metals. The acquisition adds to Carpentaria's nearby Euriovie tin discovery.

Stellar Resources Ltd. (Melbourne, Victoria) raised \$21 million, which was expected to be used to resume drilling at its Gourlays deposit on the west coast of Tasmania and to carry out resource evaluation work at the nearby Heemskirk project, which it jointly owns with Gippsland Ltd. (Claremont, Western Australia). Magna Mining NL (West Perth) signed an agreement with Troygold Investments Pty Ltd. (Buddina, Queensland) to help develop a tin tailings project in Russia (ITRI Ltd., 2010).

Solid Resources Ltd. (Sherwood Park, Alberta, Canada) announced that Spain's Ministry of Industry, Tourism and Trade would cover 20% of the cost of the current year's exploration program at the Doade-Presqueira property in the northwestern corner of Spain, which was the maximum allowable. Earlier

drilling in 2003–05 identified lithium, tantalum, and tin in potentially economic quantities (ITRI Ltd., 2010).

Venture Minerals Ltd. (Subiaco, Western Australia, Australia) announced that drilling at its Mt. Lindsay tin-tungsten project in Tasmania increased the estimates of contained tin by 28%. The latest resource included a series of zones in skarn mineralization, extending over a strike length of 3.9 kilometers. The drilling and resource estimate were completed in preparation for a prefeasibility study for which the firm was fully funded with \$28 million in cash following a recent funding campaign. Venture estimated indicated tin reserves at Mt. Lindsay to be 6.2 million metric tons (Mt) at a grade of 0.4% tin and inferred tin reserves to be 4.2 Mt at a grade of 0.4% tin (Mining Journal, 2010).

Once one of the world's leading tin mine producers, Thailand, has experienced markedly lower tin mine output in recent decades; however, Thailand's tin concentrates production almost tripled in the first half of 2010 compared with production in the comparable period of 2009, to 148 t. Tongkah Harbour Public Company Ltd. (Bangkok, Thailand) was Thailand's last major tin miner before ceasing its offshore dredging activities in April 2005, reportedly because of high royalty fees of 24% on its tin production. Subsequently, the company lobbied for a reduction in royalty fees on tin production, which was approved late in 2007 and stood at 6% in November 2010. The country has one of the world's leading tin smelters, Thailand Smelting and Refining Co. Ltd. (Thaisarco) (Phuket, Thailand), part of the AMC Group (London, United Kingdom). Thaisarco produced and exported 19,300 t of tin materials in 2009, and 10,600 t in the first half of 2010. A shortage of imported tin concentrate limited the company's operations to 57% of production capacity [20,000 metric tons per year (t/yr) out of 35,000 t/yr] (Vibulsrisajja and Nuntapong, 2010).

### Update

On February 25, 2011, the Platts Metals Week composite price for tin was \$18.98 per pound.

## References Cited

ITRI Ltd., 2010, Tin projects round-up: Frogmore, United Kingdom, ITRI Ltd. news release, November 24. (Accessed December 8, 2010, at

[http://www.itri.co.uk/pooled/articles/BF\\_NEWSART/view.asp?Q=BF\\_NEWSART\\_321499](http://www.itri.co.uk/pooled/articles/BF_NEWSART/view.asp?Q=BF_NEWSART_321499).)

Mining Journal, 2010, Mt. Lindsay tin boost: Mining Journal, November 26, p. 10.

Vibulsrisajja, Napasagorn, and Nuntapong, Tummakajorn, 2010, Unfulfilled potential: Mining Journal, November 5, p. 8–9.

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

(Metric tons, unless otherwise noted)

	2010			
	2009 <sup>p</sup>	October	November	January - November
Production, secondary <sup>e,2</sup>	11,500	922	922	10,100
Consumption:				
Primary	21,100	2,080	1,970	22,400
Secondary	10,800	650	649	7,130
Imports for consumption, metal	33,000	3,120	3,750	32,500
Exports, metal	3,170	598	598	5,210
Stocks at end of period	XX	7,090	7,100	XX
Prices (average cents per pound): <sup>3</sup>				
Metals Week composite <sup>4</sup>	837.08	1,582.37	1,538.48	XX
Metals Week New York dealer	641.62	1,222.69	1,193.94	XX
London, standard grade, cash	615.15	1,194.09	1,156.28	XX
Kuala Lumpur	609.34	1,189.24	1,157.03	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
September	1,719.49	1,270.89	1,383.55
October	1,635.05	1,489.53	1,582.37
November	1,626.34	1,460.52	1,538.48

<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
September	1,390	102,000	491	4.8	184,000
October	1,360	92,300	478	5.2	168,000
November	1,940	72,000	423	5.9	145,000

<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	2010			
	2009	October	November	January - November <sup>2</sup>
<b>Imports:</b>				
<b>Metal (unwrought tin):</b>				
Bolivia	6,300	439	764	5,700
Brazil	1,050	--	--	75
Chile	121	59	79	641
China	1,210	40	90	727
Indonesia	3,220	355	235	3,470
Malaysia	169	566	1,150	4,480
Peru	20,300	1,020	1,180	15,200
Singapore	451	141	100	996
Thailand	15	445	155	905
Vietnam	--	41	--	225
Other	222	6	1	102
<b>Total</b>	<b>33,000</b>	<b>3,120</b>	<b>3,750</b>	<b>32,500</b>
<b>Other (gross weight):</b>				
Alloys	1,230	129	175	1,180
Bars and rods	3,020	322	225	3,000
Foil, tubes, pipes	55	9	1	78
Plates, sheets, strip	3,370	5	9	130
Waste and scrap	80,600	4,300	3,700	53,000
Miscellaneous	3,830	280	292	3,280
<b>Total</b>	<b>92,100</b>	<b>5,040</b>	<b>4,400</b>	<b>60,700</b>
<b>Exports (metal)</b>	<b>3,170</b>	<b>598</b>	<b>598</b>	<b>5,210</b>

-- 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						
		October			November			January - November <sup>2</sup>
		Primary	Secondary	Total	Primary	Secondary	Total	
Alloys (miscellaneous) <sup>3</sup>	1,910	237	W	237	236	W	236	2,850
Babbitt	427	15	W	15	15	W	15	202
Bar tin and anodes	270	20	--	20	20	--	20	219
Bronze and brass	2,110	113	89	202	92	88	180	1,990
Chemicals	3,080	350	W	350	319	W	319	3,620
Collapsible tubes and foil	W	W	W	W	W	W	W	W
Solder	6,210	196	237	433	196	237	433	4,770
Tinning	318	27	--	27	28	--	28	307
Tinplate <sup>4</sup>	6,200	478	--	478	423	--	423	5,140
Tin powder	193	15	W	15	15	W	15	176
White metal <sup>5</sup>	W	W	W	W	W	W	W	W
Other	379	27	25	52	28	25	53	388
Total reported	21,100	1,480	350	1,830	1,370	349	1,720	19,700
Estimated undistributed consumption <sup>6</sup>	10,800	600	300	900	600	300	900	9,900
Grand total	31,900	2,080	650	2,730	1,970	649	2,620	29,600

<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>Includesterne 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.