

# **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 FEBRUARY 2010**

Domestic consumption of primary tin in February 2010 was estimated to be 2,020 metric tons (t), compared with 2,030 t (revised) in January 2010 and 1,870 t in February 2009. Imports for consumption of tin in February 2010 were 2,650 t compared with 1,530 t in January 2010, and 2,020 t in February 2009.

The Platts Metals Week average composite price for tin in February 2010 was \$10.09 per pound, compared with \$6.93 per pound in February 2009.

CRU Tin Monitor (2009) analyzed the status of undeveloped tin resources. One of the key aspects of the tin supply situation in recent years was that as prices have risen from below \$5,000 per metric ton to a temporary peak of \$25,000 per metric ton, no major new mines have come onstream. Some closed mines (for example, the Renison and Mount Bischoff mines in Australia) have restarted, and investment in expansions in Brazil and Bolivia have taken place, but otherwise new production has tended to come from artisanal and small-scale mines. By 2008 several new mining projects were starting to emerge, but planned investments in projects were then severely affected by the global financial crisis. One new tin-producing mine—the Pirquitas silver-tin-zinc project in Argentina—has just started commercial production of silver and expected to begin tin production early in 2011. The two world leading tin-producing countries, China and Indonesia, appear to have only a few new major tin mining projects on tap for the next few years. So, the study focuses on the main large (more than 10,000 t of contained tin) hard rock deposits in other countries, which could be developed as sources of tin supply. The ore grades of these are generally low, mostly less than 0.4% tin (CRU Tin Monitor, 2009). It may then be several years before the next significant new tin mine starts up.

# Update

On July 9, 2010, the Platts Metals Week composite price for tin was \$10.83 per pound.

# **Reference Cited**

CRU Tin Monitor, 2009, Focus on undeveloped tin resources—Where are the new mines?: CRU Tin Monitor, December, p. 7–8.

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

#### (Metric tons, unless otherwise noted)

			2010	
			2010	
				January -
	2009 <sup>p</sup>	January	February	February
Production, secondary <sup>e, 2</sup>	11,500	955	955	1,910
Consumption:				
Primary	21,100	2,030 <sup>r</sup>	2,020	4,040
Secondary	10,800	648 <sup>r</sup>	653	1,300
Imports for consumption, metal	33,000	1,530	2,650	4,180
Exports, metal	3,170	317	315	632
Stocks at end of period	XX	7,030 <sup>r</sup>	7,080	XX
Prices (average cents per pound): <sup>3</sup>				
Metals Week composite <sup>4</sup>	837.08	1,087.07	1,008.92	XX
Metals Week New York dealer	641.62	830.41	767.63	XX
London, standard grade, cash	615.15	741.45	795.10	XX
Kuala Lumpur	609.34	805.96	742.07	XX

<sup>e</sup>Estimated. <sup>p</sup>Preliminary. <sup>r</sup>Revised. 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	

<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>

		Tinplate (all forms)					
	Tinplate waste (waste, strips,			Tin per metric ton			
	cobbles, etc.)	Gross	Tin	of plate			
Period	(gross weight)	weight	content	(kilograms)	Shipments <sup>2</sup>		
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		

#### (Metric tons, unless otherwise noted)

<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)

		2010		
				January -
	2009	January	February	February
Country or product				
Imports:				
Metal (unwrought tin):				
Bolivia	6,300	166	622	788
Brazil	1,050		25	25
China	1,210		41	41
Indonesia	3,220	450	170	620
Malaysia	169			
Peru	20,300	701	1,670	2,370
Singapore	451	173		173
Thailand	15			
Other	343	40	126	166
Total	33,000	1,530	2,650	4,180
Other (gross weight):				
Alloys	1,230	68	97	165
Bars and rods	3,020	286	348	634
Foil, tubes, pipes	55	11	1	12
Plates, sheets, strip	3,370	100		100
Waste and scrap	80,600	5,460	4,790	10,200
Miscellaneous	3,830	240	172	412
Total	92,100	6,160	5,400	11,600
Exports (metal)	3,170	317	315	632

-- Zero.

<sup>1</sup>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<sup>1</sup>

			2010					
	2009 <sup>p</sup>	January			February			January -
Product		Primary	Secondary	Total	Primary	Secondary	Total	February
Alloys (miscellaneous) <sup>2</sup>	1,910	237	W	237	237	W	237	506
Babbitt	427	16	W	16	16	W	16	38
Bar tin and anodes	270	20		20	20		20	40
Bronze and brass	2,110	81 <sup>r</sup>	87	168 <sup>r</sup>	55	75	130	298
Chemicals	3,080	334 <sup>r</sup>	W	334 <sup>r</sup>	334	W	334	673
Collapsible tubes and foil	W	W	W	W	W	W	W	W
Solder	6,210	200 r	237	437 <sup>r</sup>	195	237	432	869
Tinning	318	25		25	25		25	51
Tinplate <sup>3</sup>	6,200	470		470	456		456	926
Tin powder	193	15	W	15	15	W	15	32
White metal <sup>4</sup>	W	W	W	W	W	W	W	W
Other	379	28	25 <sup>r</sup>	53 <sup>r</sup>	63	42	105	113
Total reported	21,100	1,430 <sup>r</sup>	348 <sup>r</sup>	1,780 <sup>r</sup>	1,420	353	1,770	3,550
Estimated undistributed consumption <sup>5</sup>	10,800	600	300	900	600	300	900	1,800
Grand total	31,900	2,030 r	648 <sup>r</sup>	2,680 r	2,020	653	2,670	5,350

## (Metric tons of contained tin)

<sup>p</sup>Preliminary. <sup>r</sup>Revised. 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>Includes terne metal.

<sup>3</sup>Includes secondary pig tin and tin components of tinplating chemical solutions.

<sup>4</sup>Includes pewter, britannia metal, and jewelers' metal.

<sup>5</sup>Estimated consumption of plants reporting on an annual basis.