

Mineral Industry Surveys

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TIN IN JANUARY 2010

Domestic consumption of primary tin in January 2010 was estimated to be 2,020 metric tons (t), compared with 2,150 t in December 2009, and 1,930 t in January 2009. Imports for consumption of tin in January 2010 were 1,530 t compared with 2,490 t in December 2009 and 3,430 t in January 2009.

The Platts Metals Week average composite price for tin in January 2010 was \$10.87 per pound, compared with \$9.58 per pound in December 2009 and \$7.12 per pound in January 2009.

Statistics from APEAL (the Association of European Producers of Steel for Packaging) (Brussels, Belgium) indicated that 70.4% of steel packaging (principally tinplated cans) was recycled in Europe in 2008. This represented 2.5 million metric tons of food and beverage cans being recycled in 2008. This placed recycling rates for steel above those of other packaging materials such as glass (62%), beverage cartons (33%), and plastic (29%). In 2008, the recycling rate for steel packaging continued to grow throughout Europe, rising by 1.4% from the 2007 total. Belgium was once again Europe's recycling champion, where 93% of steel packaging was recycled. Germany, Luxembourg, and the Netherlands followed closely behind, recycling more than 87% of their steel containers. At the opposite end of the scale, the lowest rates were recorded in Estonia (36%) and Poland and Slovenia (21% each) (ITRI Ltd., 2009c).

Following an investigation which began in 2003, the European Commission fined 10 companies a total of \$209 million for participating in price fixing and market sharing cartels for tin stabilizers used in polyvinyl chloride (PVC) products. The 10 companies were found to have participated in a European economic area-wide tin stabilizer cartel between 1987 and 2000. Tin stabilizers are used to avoid decomposition caused by heat during the processing of PVC into final products. They are used mainly in rigid and plasticized PVC. These types of PVC are used in products such as artificial leather, bottles, coatings, credit cards, flooring, packaging, and plastic wallpaper (ITRI Ltd., 2009a)

In Malaysia, wire and cable manufacturer Ho Wah Genting Bhd announced its intention to widen its sales base by securing a concession agreement from the Perak State government to mine tin until 2018 at a 202-hectare site in Pengkalan Hulu,

Grik. Ho Wah planned to spend \$52 million to buy machinery and equipment, which was expected to be in place by 2011. The planned tin mine was designed to have an annual capacity of 1,200 t of tin (ITRI Ltd., 2009b).

According to ITRI Ltd. (Frogmore, United Kingdom) the top 14 world producers of refined tin in 2009 were:

- 1. Yunnan Tin Group Co., Ltd. (China)
- 2. PT Timah Tbk (Indonesia)
- 3. Malaysia Smelting Corp. (Malaysia)
- 4. Minsur S.A. (Peru)
- Thailand Smelting and Refining Co. Ltd. (Thaisacro) (Thailand)
- 6. Yunnan Chengfeng Ltd. (China)
- 7. Empresa Metalúrgica Vinto (EMV) (Bolivia)
- 8. Liuzhou China Tin Group Co. Ltd. (China)
- 9. Metallo Chimique International N.V. (Belgium)
- 10. PT Koba Tin (Indonesia)
- 11. Gejiu Zi-Li Ltd. (China)
- 12. Gold Bell Smelting Corp. Ltd. (China)
- 13. Operaciones Metalúrgica SA (OMSA) (Bolivia)
- 14. Minera Taboca S.A. (Paranapanema Group) (Brazil).

In Bolivia, production by EMV, the state-owned tin smelter, increased by 24% to 11,800 t in 2009 from that in 2008. This is the highest annual production figure achieved at the plant since the late 1990s. This increase resulted from the refurbishment of idled furnace capacity and a growth in tin concentrate supply from the Huanuni Mine. EMV planned to install a new Ausmelt refinery in the next 2 years with a capacity to produce about 18,000 t/yr of tin metal, although it may be a major challenge to obtain sufficient tin ore to operate at full capacity (ITRI Ltd., 2010b).

Silver Standard Resources Inc.'s (Vancouver, British Columbia, Canada) Pirquitas silver mine in Jujuy, Argentina, achieved commercial production effective December 1, 2009. At full production, the mine was expected to produce an average of 10 million ounces of silver and 2,500 t of tin annually (Platts Metals Week, 2009).

Update

On July 2, 2010, the Platts Metals Week composite price for tin was \$10.56 per pound.

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$\label{eq:table 1} \textbf{TABLE 1} \\ \textbf{SALIENT TIN STATISTICS}^1$

(Metric tons, unless otherwise noted)

	20	2009 ^p		
	Year	December	January	
Production, secondary ^{e, 2}	11,500	959	955	
Consumption:				
Primary	21,100	2,150	2,020	
Secondary	10,800	414	634	
Imports for consumption, metal	33,000	2,490	1,530	
Exports, metal	3,170	208	317	
Stocks at end of period	XX	7,450	7,050	
Prices (average cents per pound): ³				
Metals Week composite ⁴	837.08	958.21	1,087.07	
Metals Week New York dealer	641.62	830.71	830.41	
London, standard grade, cash	615.15	704.40	802.23	
Kuala Lumpur	609.34	703.20	805.96	

^eEstimated. ^pPreliminary. XX Not applicable.

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

(Cents per pound)

Period	High	Low	Average	
2009:				
December	1,030.42	926.60	958.21	
Year	1,030.42	647.98	837.08	
2010, January	1,109.84	1,054.27	1,087.07	

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.

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.

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

(Metric tons, unless otherwise noted)

		Tinplate (all forms)				
Period	Tinplate waste (waste, strips, cobbles, etc.) (gross weight)	Gross weight	Tin content	Tin per metric ton of plate (kilograms)	Shipments ²	
2009:					·	
December	993	117,000	628	5.4	135,000	
Year	14,500	1,150,000	6,200	5.4	1,540,000	
2010, January	983	97,400	470	4.8	152,000	

¹Data 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)

	2	2010	
Country or product	Year	December	January
Imports:			
Metal (unwrought tin):			
Bolivia	6,300	758	166
Brazil	1,050	100	
China	1,210	99	
Indonesia	3,220	155	450
Malaysia	169		
Peru	20,300	1,290	701
Singapore	451	51	173
Thailand	15		
United Kingdom	(2)	(2)	
Other	343	34	40
Total	33,000	2,490	1,530
Other (gross weight):			
Alloys	1,230	69	68
Bars and rods	3,020	256	286
Foil, tubes, pipes	55	2	11
Plates, sheets, strip	3,370	829	100
Waste and scrap	80,600	3,940	5,460
Miscellaneous	3,830	283	240
Total	92,100	5,380	6,160
Exports (metal)	3,170	208	317

⁻⁻ Zero

Source: U.S. Census Bureau.

² Source: American Iron and Steel Institute monthly publication.

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

²Less than ½ unit.

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

(Metric tons of contained tin)

	2009 ^p December				2010 January		
Product	Year	Primary	Secondary	Total	Primary	Secondary	Total
Alloys (miscellaneous) ²	1,910	296	W	296	237	W	237
Babbitt	427	21	W	21	16	W	16
Bar tin and anodes	270	22		22	20		20
Bronze and brass	2,110	89	96	185	92	87	179
Chemicals	3,080	258	W	258	285	W	285
Collapsible tubes and foil	W	W	W	W	W	W	W
Solder	6,210	160	8	168	228	237	465
Tinning	318	34		34	25		25
Tinplate ³	6,200	628		628	470		470
Tin powder	193	15	W	15	15	W	15
White metal ⁴	W	W	W	W	W	W	W
Other	379	28	11	39	28	11	39
Total reported	21,100	1,550	114	1,660	1,420	334	1,750
Estimated undistributed consumption ⁵	10,800	600	300	900	600	300	900
Grand total	31,900	2,150	414	2,560	2,020	634	2,650

^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.