science for a changing world

# 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 2009

Domestic consumption of primary tin in November 2009 was estimated to be 1,880 metric tons (t), slightly less than that in October 2009 and 4% lower that that in November 2008. In November, tinplate was the leading usage category for primary tin, followed by chemicals, solders, and alloys. In the first 11 months of 2009, refined tin imports totaled 30,500 t compared with 32,700 t in the comparable period of 2008.

The Platts Metals Week average composite price for tin in November 2009 was $9.21 per pound, compared with $9.12 per pound in October 2009, and $7.08 per pound in December 2008.

The Association of European Producers of Steel for Packaging (Apeal) (Brussels, Belgium) reported that the recycling of packaging steels (mostly tinplate) reached a record 70% in Europe in 2008. About 2.5 million metric tons (Mt) of food and drink cans and other steel containers were recycled, representing a slight increase from that in 2007. Apeal noted that these data make steel the leading recycled packaging material compared with glass (62%), cardboard (33%), and plastic (29%). Belgium was again the recycling leader in Europe, recycling 93% of its steel containers. Germany, Luxembourg, and the Netherlands followed closely behind, each recycling more than 87% of their steel containers (Canmaker, The, 2010).

In January 2010, the London Metal Exchange Ltd. (LME) released annual trading figures for 2009, unveiling the second highest trading volumes in the LME's history. After 4 years of record volume trading, the LME activity remained relatively flat in 2009, with total volume of 111.9 million lots traded, down slightly from the 2008 total of 113.2 million. This followed a 22% growth the previous year. Of the six main primary nonferrous metals contracts, only two—nickel and tin—recorded a growth in activity, with tin recording a 211% increase in volume to 4.6 million lots (of 5 t) (ITRI Ltd., 2010b).

In Indonesia, Bangka Belitung Timah Sejahtera (BBTS), a consortium of several private tin smelters, restarted operations in January 2010 after almost 2 months of closure. Tin ore supplies to the smelters have been limited by severe monsoon weather and increased police activity against illegal small-scale mining. The limited ore supplies led to smelters operating at 10% to 20% of production capacity (ITRI Ltd., 2010a).

### Update

On May 7, 2010, the Platts Metals Week tin composite price was $10.81 per pound.

### References Cited

Canmaker, The, 2010, Steel packaging recycling increases: The Canmaker, v. 23, January, p. 9.
ITRI Ltd., 2010a, Indonesian consortium re-starts smelters: ITRI Ltd. news release, January 19. (Accessed May 11, 2010, at http://www.itri.co.uk/pooled/articles/BF_NEWSART/view.asp?Q=BF_NEWSART_310201.)
ITRI Ltd., 2010b, LME trading volumes down, but tin soars: ITRI Ltd. news release, January 18. (Accessed May 11, 2010, at http://www.itri.co.uk/pooled/articles/BF_NEWSART/view.asp?Q=BF_NEWSART_310201.)

TABLE 1
SALIENT TIN STATISTICS[1]

(Metric tons, unless otherwise noted)

| | | 2009 | | |
|---|---|---|---|---|
| | 2008[p] | October | November | January-November |
| Production, secondary[e, 2] | 11,900 | 994 | 994 | 10,900 |
| Consumption: | | | | |
| Primary | 21,100 | 1,910 | 1,880 | 18,600 |
| Secondary | 10,800 | 736 | 716 | 9,900 |
| Imports for consumption, metal | 36,300 | 2,150 | 2,380 | 30,500 |
| Exports, metal | 9,800 | 497 | 269 | 2,960 |
| Stocks at end of period | XX | 7,520 | 7,470 | XX |
| Prices (average cents per pound):[3] | | | | |
| Metals Week composite[4] | 1,128.97 | 912.46 | 920.65 | XX |
| Metals Week New York dealer | 864.53 | 709.56 | 703.69 | XX |
| London, standard grade, cash | 839.10 | 679.33 | 676.78 | XX |
| Kuala Lumpur | 837.70 | 668.75 | 673.97 | XX |

[e]Estimated. [p]Preliminary. XX Not applicable.
[1]Data are rounded to no more than three significant digits, except prices.
[2]Includes tin recovered from alloys and tinplate. The detinning of tinplate (coated steel) yields only a small part of the total.
[3]Source: Platts Metals Week.
[4]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[1]

(Cents per pound)

| Period | High | Low | Average |
|---|---|---|---|
| 2008 | 1,529.29 | 630.41 | 1,128.97 |
| 2009: | | | |
| January | 748.18 | 688.67 | 711.90 |
| February | 712.54 | 670.97 | 692.57 |
| March | 698.72 | 647.98 | 668.86 |
| April | 781.18 | 661.48 | 725.34 |
| May | 874.60 | 785.83 | 849.13 |
| June | 970.28 | 891.14 | 924.85 |
| July | 909.95 | 780.62 | 864.70 |
| August | 945.24 | 881.50 | 909.91 |
| September | 925.48 | 872.29 | 904.70 |
| October | 933.14 | 894.98 | 915.40 |
| November | 929.94 | 912.46 | 920.65 |

[1]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[1]

(Metric tons, unless otherwise noted)

| Period | Tinplate waste (waste, strips, cobbles, etc.) (gross weight) | Tinplate (all forms): Gross weight | Tin content | Tin per metric ton of plate (kilograms) | Shipments[2] |
|---|---|---|---|---|---|
| 2008 | 30,900 | 2,280,000 | 6,690 | 2.9 | 1,770,000 |
| 2009: | | | | | |
| January | 1,440 | 118,000 | 562 | 4.8 | 103,000 |
| February | 1,170 | 86,500 | 523 | 6.0 | 94,400 |
| March | 1,350 | 96,000 | 547 | 5.7 | 107,000 |
| April | 372 | 87,900 | 527 | 6.0 | 122,000 |
| May | 402 | 78,600 | 479 | 6.1 | 132,000 |
| June | 508 | 73,600 | 452 | 6.1 | 140,000 |
| July | 1,550 | 98,300 | 511 | 5.2 | 136,000 |
| August | 1,710 | 94,500 | 478 | 5.1 | NA |
| September | 1,730 | 96,200 | 498 | 5.2 | 151,000 |
| October | 1,290 | 103,000 | 509 | 4.9 | 145,000 |
| November | 2,040 | 97,300 | 482 | 5.0 | 132,000 |

NA Not available.

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

[2] Source: American Iron and Steel Institute monthly publication.

TABLE 4

U.S. TIN IMPORTS FOR CONSUMPTION AND EXPORTS[1]

(Metric tons)

| Country or product | 2008 | 2009: October | November | January-November |
|---|---|---|---|---|
| Imports: | | | | |
| Metal (unwrought tin): | | | | |
| Bolivia | 4,980 | 151 | 639 | 5,540 |
| Brazil | 1,570 | -- | -- | 951 |
| China | 2,380 | 156 | 90 | 1,110 |
| Indonesia | 2,000 | 240 | 320 | 3,060 |
| Malaysia | 1,740 | -- | 48 | 169 |
| Peru | 20,900 | 1,540 | 1,270 | 19,000 |
| Singapore | 706 | -- | -- | 400 |
| Thailand | 1,670 | -- | -- | 15 |
| United Kingdom | 225 | -- | -- | -- |
| Other | 152 | 69 | 9 | 308 |
| Total | 36,300 | 2,150 | 2,380 | 30,500 |
| Other (gross weight): | | | | |
| Alloys | 1,720 | 65 | 96 | 1,160 |
| Bars and rods | 4,190 | 309 | 284 | 2,770 |
| Foil, tubes, pipes | 97 | 4 | (2) | 53 |
| Plates, sheets, strip | 1,150 | -- | 660 | 2,540 |
| Waste and scrap | 23,300 | 5,860 | 4,050 | 76,700 |
| Miscellaneous | 2,940 | 576 | 490 | 4,040 |
| Total | 33,400 | 6,820 | 5,580 | 87,200 |
| Exports (metal) | 9,800 | 497 | 269 | 2,960 |

-- Zero.

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

[2]Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 5

CONSUMPTION OF TIN IN THE UNITED STATES, BY FINISHED PRODUCT[1]

(Metric tons of contained tin)

| | | 2009 | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | October | | | November | | | January- |
| Product | 2008[p] | Primary | Secondary | Total | Primary | Secondary | Total | November |
| Alloys (miscellaneous)[2] | 1,800 | 129 | W | 129 | 130 | W | 130 | 1,610 |
| Babbitt | 459 | 18 | W | 18 | 18 | W | 18 | 389 |
| Bar tin and anodes | 218 | 17 | -- | 17 | 16 | -- | 16 | 181 |
| Bronze and brass | 2,250 | 88 | 113 | 201 | 88 | 93 | 181 | 1,930 |
| Chemicals | 2,940 | 281 | W | 281 | 281 | W | 281 | 2,820 |
| Collapsible tubes and foil | W | W | W | W | W | W | W | W |
| Solder | 5,750 | 197 | 277 | 474 | 198 | 277 | 475 | 5,210 |
| Tinning | 322 | 27 | -- | 27 | 24 | -- | 24 | 284 |
| Tinplate[3] | 6,690 | 509 | -- | 509 | 482 | -- | 482 | 5,570 |
| Tin powder | 227 | 18 | W | 18 | 19 | W | 19 | 209 |
| White metal[4] | W | W | W | W | W | W | W | W |
| Other | 389 | 28 | 47 | 75 | 29 | 47 | 76 | 353 |
| Total reported | 21,100 | 1,310 | 436 | 1,750 | 1,280 | 416 | 1,700 | 18,600 |
| Estimated undistributed consumption[5] | 10,800 | 600 | 300 | 900 | 600 | 300 | 900 | 9,900 |
| Grand total | 31,900 | 1,910 | 736 | 2,650 | 1,880 | 716 | 2,600 | 28,500 |

[p]Preliminary. W Withheld to avoid disclosing company proprietary data; included with "Other." -- Zero.

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

[2]Includes terne metal.

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

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

[5]Estimated consumption of plants reporting on an annual basis.