

# 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](mailto:jcarlin@usgs.gov)

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

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

## TIN IN OCTOBER 2010

Domestic consumption of primary tin in October 2010 was estimated to be 2,080 metric tons (t), the same as that in September 2010 and 9% higher than that in October 2009. Imports of refined tin were 3,120 t in October 2010, an increase of 45% from that in October 2009. Imports for the first 10 months of 2010 totaled 28,800 t, a slight increase from those in the comparable period of 2009. Peru, Bolivia, Malaysia, and Indonesia, in decreasing order, were the leading sources of tin imports in the first 10 months of 2010.

The Platts Metals Week average composite price of tin in October 2010 was \$15.82 per pound, compared with \$9.15 per pound in October 2009. Industry analysts attribute the marked tin price increase in recent months to an expanding gap between world demand and world production.

The Association of European Producers of Steel for Packaging (Brussels, Belgium) announced steel packaging recycling rates for 2008. In 2008, the recycling rate of steel packaging was slightly higher than that in 2007. With 71% of steel packaging recycled in Europe, this amounts to about 2.6 million metric tons (Mt) of food and beverage cans and other steel containers being recycled in 2008. According to the latest available data, this places recycling rates for steel above those of other packaging materials such as glass (64%), beverage cartons (33%), and plastic (29%) in Europe. The five countries that had the greatest steel packaging recycling rates in 2008 in Europe were Germany (94%), Belgium (93%), the Netherlands (87%), Hungary (83%), and Austria (80%) (Association of European Producers of Steel for Packaging, 2010).

Consolidated Tin Mines Ltd. (North Cairns, Queensland, Australia) announced that it had been granted a mineral development license for the Windermere project by the Queensland government after a 2-year wait, enabling it to add that resource to its adjacent Mt. Garnet project near Cairns. Windermere has a reported resource of 2.1 Mt grading 0.55% tin, increasing Mt. Garnet's total resource to 7.3 Mt grading 0.60% tin. Consolidated had acquired Windermere from Metals X Ltd.'s subsidiary Bluestone Nominees Pty. Ltd. in February 2008. A scoping study in July 2010 indicated that without the addition of the Windermere resource, a centralized Mt. Garnet plant would have the potential to process 700,000 metric tons

per year (t/yr) of tin ore to produce 22,900 t of tin metal in concentrate (Platts Metals Week, 2010).

Empressa Metalúrgica Vinto (EMV) (Oruro, Bolivia) announced that work would be underway in September 2010 to install an Ausmelt tin smelter at its Vinto site, with completion due by August 2011 and startup expected by September 2011. The Vinto tin smelter produced 5,700 t of refined tin in the first half of 2010. Vinto chose the Ausmelt tin smelter to improve the efficiency of its smelting operation (ITRI Ltd., 2010c).

Kasbah Resources Ltd.'s (South Perth, Western Australia, Australia) tin project in Morocco was on track toward the completion of a prefeasibility study on bulk underground mining of the deposit in the second quarter of 2011. The mine was expected to produce 6,000 t/yr of tin-in-concentrate during a phase one mine life of 6 years, based on the mining of 800,000 t/yr of ore grading 1% tin. A drilling program continued to firm up the resource toward a target of 10 Mt. As of August 2010, the inferred and indicated resource was 7 Mt with a grade of 0.8% tin. Kasbah Resources may use open pit mining for some shallow deposits (ITRI Ltd., 2010a).

PT Timah Tbk (Bangka, Indonesia) announced tin production figures indicating that, increasingly, offshore tin mining was contributing more to its production. Timah's January to June offshore tin-in-concentrate production rose by 28% from that in the comparable period of 2009 and amounted to 52% of the company's total mine production of 17,600 t (ITRI Ltd., 2010b).

## Update

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

## References Cited

- Association of European Producers of Steel for Packaging, 2010, Steel for Packaging: Europe's recycling leader: Brussels, Belgium, Association of European Producers of Steel for Packaging, v. 2, 15 p.
- ITRI Ltd., 2010a, Achmmach project update: Frogmore, United Kingdom, ITRI Ltd. news release, September 1. (Accessed March 2, 2011, at [http://www.itri.co.uk/pooled/articles/BF\\_NEWSART/view.asp?Q=BF\\_NEWSART\\_320615](http://www.itri.co.uk/pooled/articles/BF_NEWSART/view.asp?Q=BF_NEWSART_320615).)
- ITRI Ltd., 2010b, Timah's offshore drive continues: Frogmore, United Kingdom, ITRI Ltd. news release, August 31. (Accessed March 2, 2011, at

[http://www.itri.co.uk/pooled/articles/BF\\_NEWSART/  
view.asp?Q=BF\\_NEWSART\\_320608.](http://www.itri.co.uk/pooled/articles/BF_NEWSART/view.asp?Q=BF_NEWSART_320608))

ITRI Ltd., 2010c, Vinto Ausmelt construction begins: Frogmore, United Kingdom, ITRI Ltd. news release, September 21. (Accessed March 2, 2011,

at [http://www.itri.co.uk/pooled/articles/BF\\_NEWSART/  
view.asp?Q=BF\\_NEWSART\\_320851.](http://www.itri.co.uk/pooled/articles/BF_NEWSART/view.asp?Q=BF_NEWSART_320851))

Platts Metals Week, 2010, Consolidated gets tin site OK: Platts Metals Week, v. 81, no. 37, September 13, p. 8–9.

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

(Metric tons, unless otherwise noted)

|  | 2009 <sup>p</sup> | 2010             |          |                      |
|--|-------------------|------------------|----------|----------------------|
|  |                   | September        | October  | January -<br>October |
| Production, secondary <sup>e, 2</sup>          | 11,500            | 922 <sup>r</sup> | 922      | 9,220                |
| Consumption:                                   |                   |                  |          |                      |
| Primary  | 21,100            | 2,080            | 2,080    | 14,500               |
| Secondary                                      | 10,800            | 644              | 650      | 3,480                |
| Imports for consumption, metal                 | 33,000            | 3,650            | 3,120    | 28,800               |
| Exports, metal                                 | 3,170             | 499              | 598      | 4,610                |
| Stocks at end of period                        | XX                | 7,060            | 7,090    | XX                   |
| Prices (average cents per pound): <sup>3</sup> |                   |                  |          |                      |
| Metals Week composite <sup>4</sup>             | 837.08            | 1,383.55         | 1,582.37 | XX                   |
| Metals Week New York dealer                    | 641.62            | 1,061.61         | 1,222.69 | XX                   |
| London, standard grade, cash                   | 615.15            | 1,028.98         | 1,194.09 | XX                   |
| Kuala Lumpur                                   | 609.34            | 1,024.56         | 1,189.24 | 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 |
| 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 |

<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<br>(waste, strips,<br>cobble, etc.)<br>(gross weight) | Tinplate (all forms) |                |  | Shipments <sup>2</sup> |
|-----------|--|----------------------|----------------|--|------------------------|
|           |  | Gross<br>weight      | Tin<br>content | Tin per<br>metric ton<br>of plate<br>(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                |

<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          | September    | October      | January -<br>October <sup>2</sup> |
| <b>Imports:</b>               |               |              |              |                                   |
| <b>Metal (unwrought tin):</b> |               |              |              |                                   |
| Bolivia                       | 6,300         | 547          | 439          | 4,940                             |
| Brazil                        | 1,050         | --           | --           | 75                                |
| Chile                         | 121           | 59           | 59           | 562                               |
| China                         | 1,210         | 69           | 40           | 637                               |
| Indonesia                     | 3,220         | 325          | 355          | 3,230                             |
| Malaysia                      | 169           | 935          | 566          | 3,330                             |
| Peru                          | 20,300        | 1,490        | 1,020        | 14,000                            |
| Singapore                     | 451           | 90           | 141          | 896                               |
| Thailand                      | 15            | 40           | 445          | 750                               |
| Vietnam                       | --            | 102          | 41           | 225                               |
| Other                         | 222           | 1            | 6            | 99                                |
| <b>Total</b>                  | <b>33,000</b> | <b>3,650</b> | <b>3,120</b> | <b>28,800</b>                     |
| <b>Other (gross weight):</b>  |               |              |              |                                   |
| Alloys                        | 1,230         | 121          | 129          | 1,010                             |
| Bars and rods                 | 3,020         | 248          | 322          | 2,780                             |
| Foil, tubes, pipes            | 55            | 17           | 9            | 77                                |
| Plates, sheets, strip         | 3,370         | 3            | 5            | 121                               |
| Waste and scrap               | 80,600        | 4,900        | 4,300        | 49,300                            |
| Miscellaneous                 | 3,830         | 436          | 280          | 2,990                             |
| <b>Total</b>                  | <b>92,100</b> | <b>5,730</b> | <b>5,040</b> | <b>56,300</b>                     |
| <b>Exports (metal)</b>        | <b>3,170</b>  | <b>499</b>   | <b>598</b>   | <b>4,610</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  | 2010              |           |           |       |         |           |       |                                   |
|--|-------------------|-----------|-----------|-------|---------|-----------|-------|-----------------------------------|
|  | 2009 <sup>p</sup> | September |           |       | October |           |       | January -<br>October <sup>2</sup> |
|  |                   | Primary   | Secondary | Total | Primary | Secondary | Total |                                   |
| Alloys (miscellaneous) <sup>3</sup>              | 1,910             | 236       | W         | 236   | 237     | W         | 237   | 2,600                             |
| Babbitt  | 427               | 15        | W         | 15    | 15      | W         | 15    | 184                               |
| Bar tin and anodes                               | 270               | 20        | --        | 20    | 20      | --        | 20    | 199                               |
| Bronze and brass                                 | 2,110             | 124       | 83        | 206   | 113     | 89        | 202   | 1,810                             |
| Chemicals  | 3,080             | 328       | W         | 328   | 350     | W         | 350   | 3,300                             |
| Collapsible tubes and foil                       | W                 | W         | W         | W     | W       | W         | W     | W                                 |
| Solder   | 6,210             | 196       | 237       | 432   | 196     | 237       | 433   | 4,340                             |
| Tinning  | 318               | 30        | --        | 30    | 27      | --        | 27    | 279                               |
| Tinplate <sup>4</sup>                            | 6,200             | 491       | --        | 491   | 478     | --        | 478   | 4,720                             |
| Tin powder                                       | 193               | 15        | W         | 15    | 15      | W         | 15    | 160                               |
| White metal <sup>5</sup>                         | W                 | W         | W         | W     | W       | W         | W     | W                                 |
| Other  | 379               | 28        | 25        | 53    | 27      | 25        | 52    | 358                               |
| Total reported                                   | 21,100            | 1,480     | 344       | 1,830 | 1,480   | 350       | 1,830 | 18,000                            |
| Estimated undistributed consumption <sup>6</sup> | 10,800            | 600       | 300       | 900   | 600     | 300       | 900   | 9,000                             |
| Grand total                                      | 31,900            | 2,080     | 644       | 2,730 | 2,080   | 650       | 2,730 | 27,000                            |

<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.