

TIN

(Data in metric tons of tin content unless otherwise noted)

Domestic Production and Use: Tin has not been mined or smelted in the United States since 1993 and 1989, respectively. Twenty-five firms accounted for about 90% of the primary tin consumed domestically in 2015. The major uses for tin in the United States were cans and containers, 22%; chemicals, 20%; solder, 18%; alloys, 14%; and other, 26%. Based on the average Platts Metals Week New York Dealer price for tin, the estimated value of imported refined tin was \$800 million, and the estimated value of old scrap recovered domestically was \$240 million.

Salient Statistics—United States:	2011	2012	2013	2014	2015^e
Production, secondary:					
Old scrap ^e	11,000	11,200	10,600	10,600	10,600
New scrap	2,530	2,440	2,150	2,060	2,000
Imports for consumption, refined tin	34,200	36,900	34,900	35,600	37,300
Exports, refined tin and tin alloys	5,450	5,560	5,870	5,700	5,800
Shipments from Government stockpile	—	—	—	—	—
Consumption, reported:					
Primary	25,200	24,500	25,700	24,200	23,300
Secondary	3,280	3,240	4,730	3,250	2,800
Consumption, apparent ¹	39,900	41,900	40,000	40,000	42,200
Price, average, cents per pound: ²					
New York dealer	1,216	990	1,041	1,023	720
Metals Week composite	1,575	1,283	1,352	NA	NA
London Metal Exchange, cash	1,184	957	1,012	994	700
Kuala Lumpur	1,188	958	1,012	993	NA
Stocks, consumer and dealer, yearend	6,280	6,910	6,520	7,010	6,900
Net import reliance ³ as a percentage of apparent consumption	72	73	74	74	75

Recycling: About 12,600 tons of tin from old and new scrap was recycled in 2015 accounting for about 30% of apparent consumption. Of this, about 10,600 tons was recovered from old scrap at 2 detinning plants and about 75 secondary nonferrous metal-processing plants.

Import Sources (2011–14): Peru, 35%; Indonesia, 18%; Bolivia, 15%; Malaysia, 13%; and other, 19%.

Tariff: Item	Number	Normal Trade Relations 12–31–15
Unwrought tin:		
Tin, not alloyed	8001.10.0000	Free.
Tin alloys, containing, by weight:		
5% or less lead	8001.20.0010	Free.
More than 5% but not more than 25% lead	8001.20.0050	Free.
More than 25% lead	8001.20.0090	Free.
Tin waste and scrap	8002.00.0000	Free.

Depletion Allowance: 22% (Domestic), 14% (Foreign).

Government Stockpile:**Stockpile Status—9–30–15⁴**

Material	Inventory	Disposal Plan FY 2015	Disposals FY 2015
Tin	4,041	—	—

Events, Trends, and Issues: Apparent consumption of tin in the United States increased by 6% in 2015 compared with consumption in 2014. Peru remained the primary supplier of tin to the United States, and recycling rates of tin remained unchanged from those in 2014. Tin prices decreased significantly during 2015. The New York dealer price averaged 912 cents per pound in January and continued to decrease through September, when it stabilized at 731 cents per pound. The London Metal Exchange (LME) price averaged 880 cents per pound in January, and continued to decrease until August, when it stabilized at about 700 cents per pound.

TIN

The price declines are attributed to increased tin production in Burma, where investments in tin mines by companies from China have resulted in a near doubling of production since 2013, and to reduced demand in China for imported tin metal. In China, the world's leading consumer of tin, imports of tin ores from Burma supplanted imports of tin metal from Indonesia. In Indonesia, tin producers responded to the lower tin prices by restricting sales of tin when the price of tin fell below a specific price threshold, with the result that one-half of tin producers in Indonesia stopped refined tin production in April. This attempt to raise tin prices had little effect owing to Burma's increased mine output, high tin stock levels in China, and a strong U.S. dollar.

Artisanal and small-scale tin mining has been identified as a potential source of funding for armed groups engaged in civil unrest in the Congo (Kinshasa) and surrounding countries. The United States, through the enactment of Section 1502 of the Dodd-Frank Act in 2010, made it a statutory obligation for all companies registered with the U.S. Securities and Exchange Commission (SEC) to perform due diligence to determine whether the products they manufacture, or the components of the products they manufacture, contain tantalum, tin, tungsten, and (or) gold (3TG) minerals and, if so, to determine whether these minerals were sourced from the Congo and (or) its bordering countries. Under rules issued by the SEC, publicly traded companies were required to report the sources of 3TG materials used by May 2014. The Federal courts issued a decision that the SEC must have the final resource extraction rule ready for congressional decision by June 27, 2016.

World Mine Production and Reserves: Reserves figures for Peru were revised based on data from the Ministerio de Energia y Minas del Peru.

	Mine production		Reserves⁵
	<u>2014</u>	<u>2015^e</u>	
United States	—	—	—
Australia	7,210	7,000	370,000
Bolivia	19,900	20,000	400,000
Brazil	14,700	17,000	700,000
Burma	25,000	30,000	NA
China	96,000	100,000	1,500,000
Congo (Kinshasa)	6,400	6,400	NA
Indonesia	76,000	50,000	800,000
Laos	800	900	NA
Malaysia	3,780	3,800	250,000
Nigeria	2,800	2,800	NA
Peru	23,100	22,500	130,000
Russia	240	100	350,000
Rwanda	4,200	3,700	NA
Thailand	200	200	170,000
Vietnam	5,400	5,400	NA
Other countries	100	100	180,000
World total (rounded)	286,000	294,000	4,800,000

World Resources: Identified resources of tin in the United States, primarily in Alaska, were insignificant compared with those of the rest of the world. World resources, principally in western Africa, southeastern Asia, Australia, Bolivia, Brazil, China, Indonesia, and Russia, are extensive and, if developed, could sustain recent annual production rates well into the future.

Substitutes: Aluminum, glass, paper, plastic, or tin-free steel substitute for tin in cans and containers. Other materials that substitute for tin are epoxy resins for solder; aluminum alloys, copper-base alloys, and plastics for bronze; plastics for bearing metals that contain tin; and compounds of lead and sodium for some tin chemicals.

^eEstimated. NA Not available. — Zero.

¹Defined as old scrap + imports – exports + adjustments for Government and industry stock changes.

²Source: Platts Metals Week

³Defined as imports – exports + adjustments for Government and industry stock changes.

⁴See [Appendix B](#) for definitions.

⁵See [Appendix C](#) for resource/reserve definitions and information concerning data sources.