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 used about 90% of the primary tin consumed domestically in 2012. The major uses were as follows: cans and containers, 23%; construction, 18%; transportation, 17%; electrical, 12%; and other, 30%. On the basis of the average New York composite price, the estimated values of some critical items in 2012 were as follows: primary metal consumed, $1.02 billion; imports for consumption, refined tin, $1.38 billion; and secondary production (old scrap), $381 million.

Salient Statistics—United States:	2008	2009	2010	2011	2012[e]
Production, secondary:					
Old scrap[e]	11,700	11,100	11,100	11,000	10,500
New scrap	2,640	2,310	2,680	2,530	2,600
Imports for consumption, refined tin	36,300	33,000	35,300	34,200	38,000
Exports, refined tin	9,800	3,170	5,630	5,450	6,000
Shipments from Government stockpile excesses	60	—	—	—	—
Consumption, reported:					
Primary	23,100	24,800	25,300	25,200	28,000
Secondary	6,250	7,750	4,820	1,830	6,000
Consumption, apparent	38,800	42,400	41,400	39,900	42,300
Price, average, cents per pound:					
New York market	865	642	954	1,216	1,270
New York composite	1,129	837	1,240	1,575	1,645
London	837	615	925	1,184	1,230
Kuala Lumpur	838	609	922	1,188	1,236
Stocks, consumer and dealer, yearend	8,560	7,070	6,410	5,780	6,000
Net import reliance[1] as a percentage of apparent consumption	70	74	74	73	75

Recycling: About 13,100 tons of tin from old and new scrap was recycled in 2012. Of this, about 10,500 tons was recovered from old scrap at 2 detinning plants and 74 secondary nonferrous metal-processing plants.

Import Sources (2008–11): Peru, 47%; Bolivia, 17%; Indonesia, 11%; China, 3%; and other, 22%.

Tariff: Most major imports of tin, including unwrought metal, waste and scrap, and unwrought tin alloys, enter the United States duty free.

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

Government Stockpile: The Defense Logistics Agency, DLA Strategic Materials made no tin sales in fiscal year 2012. Tin was last sold in fiscal year 2008. When tin was available it was offered via the basic ordering agreement and the negotiated offering. The tin inventory was stored in the Hammond, IN, depot.

Stockpile Status—9–30–12[2]

Material	Uncommitted inventory	Authorized for disposal	Disposal plan FY 2012	Disposals FY 2012
Pig tin	4,020	—	—	—

Prepared by **James F. Carlin, Jr. [(703) 648–4985, jcarlin@usgs.gov]**

TIN

Events, Trends, and Issues: Apparent consumption of tin in the United States increased slightly in 2012 compared with that of 2011. The monthly average composite price of tin remained in a fairly narrow range throughout the year. Price stability in 2012 was attributed to lower production in some key producing countries and moderately higher world tin consumption.

China, the world's leading tin producer, experienced large tin imports and declining exports. Tin production in China declined because of drought conditions, pollution controls by local governments, and declining prices in the first part of the year. By midyear, more than 100 small tin mines and processors were closed in Kafang and Gejiu City, Yunnan Province, in an attempt to reduce pollution in the Hong River in Yunnan and the Mekong River in Vietnam.

World consumption of secondary tin materials experienced marked growth. Industry analysts attributed this pattern to occasional difficulty in obtaining primary tin.

World Mine Production and Reserves: Reserve figures were revised for Brazil based on new information from official Government sources in that country.

	Mine production		Reserves[3]
	2011	2012[e]	
United States	—	—	—
Australia	6,500	6,000	240,000
Bolivia	20,300	20,000	400,000
Brazil	11,000	11,500	710,000
China	120,000	100,000	1,500,000
Congo (Kinshasa)	2,900	5,700	NA
Indonesia	42,000	41,000	800,000
Malaysia	3,350	3,300	250,000
Peru	28,900	29,000	310,000
Russia	160	160	350,000
Rwanda	1,400	3,600	NA
Thailand	200	300	170,000
Vietnam	5,400	5,400	NA
Other countries	2,000	2,000	180,000
World total (rounded)	244,000	230,000	4,900,000

World Resources: U.S. resources of tin, 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 sufficient to 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.

[e]Estimated. NA Not available. — Zero.
[1]Defined as imports - exports + adjustments for Government and industry stock changes.
[2]See Appendix B for definitions.
[3]See Appendix C for resource/reserve definitions and information concerning data sources.