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(Data in thousand metric tons of copper content unless otherwise noted)

Domestic Production and Use: In 2014, U.S. mine production of copper increased by 10% to about 1.37 million tons, and was valued at about $9.7 billion. Arizona, Utah, New Mexico, Nevada, and Montana—in descending order of production—accounted for more than 99% of domestic mine production; copper also was recovered in Idaho and Missouri. Twenty-seven mines recovered copper, 17 of which accounted for about 99% of production. Three primary smelters, 3 electrolytic and 4 fire refineries, and 14 electrowinning facilities operated during 2014. Refined copper and scrap were consumed at about 30 brass mills, 15 rod mills, and 500 foundries and miscellaneous consumers. Copper and copper alloys products were used in building construction, 43%; electric and electronic products, 19%; transportation equipment, 19%; consumer and general products, 12%; and industrial machinery and equipment, 7%.[1]

Salient Statistics—United States:	2010	2011	2012	2013	2014[e]
Production:					
Mine	1,110	1,110	1,170	1,250	1,370
Refinery:					
Primary	1,060	992	962	993	1,070
Secondary	38	37	39	47	50
Copper from all old scrap	143	153	164	180	180
Imports for consumption:					
Ores and concentrates	1	15	6	3	([2])
Refined	605	670	630	734	600
General imports, refined	583	649	628	730	590
Exports:					
Ores and concentrates	137	252	301	348	390
Refined	78	40	159	113	100
Consumption:					
Reported, refined	1,760	1,760	1,760	1,820	1,830
Apparent, unmanufactured[3]	1,760	1,730	1,770	1,770	1,810
Price, average, cents per pound:					
Domestic producer, cathode	348.3	405.9	367.3	339.9	322
London Metal Exchange, high-grade	341.7	399.8	360.6	332.3	315
Stocks, yearend, refined, held by U.S. producers, consumers, and metal exchanges	384	409	236	258	190
Employment, mine and mill, thousands	9.5	10.6	11.5	12.1	11.9
Net import reliance[4] as a percentage of apparent consumption	32	34	36	34	31

Recycling: Old scrap, converted to refined metal and alloys, provided 180,000 tons of copper, equivalent to 10% of apparent consumption. Purchased new scrap, derived from fabricating operations, yielded 640,000 tons of contained copper. Of the total copper recovered from scrap (including aluminum- and nickel-based scrap), brass mills recovered 75%; miscellaneous manufacturers, foundries, and chemical plants, 10%; ingot makers,10%; and copper smelters and refiners, 5%. Copper in all scrap contributed about 32% of the U.S. copper supply.

Import Sources (2010–13): Unmanufactured: Chile, 51%; Canada, 26%; Mexico, 13%; Peru, 6%; and other, 4%. Refined copper accounted for 87% of unmanufactured copper imports.

Tariff: Item	Number	Normal Trade Relations[5] 12–31–14
Copper ores and concentrates	2603.00.0000	1.7¢/kg on lead content.
Unrefined copper anode	7402.00.0000	Free.
Refined and alloys; unwrought	7403.00.0000	1.0% ad val.
Copper wire (rod)	7408.11.6000	3.0% ad val.

Depletion Allowance: 15% (Domestic), 14% (Foreign).

Government Stockpile: None.

Events, Trends, and Issues: The COMEX spot copper price began 2014 at $3.36 per pound of copper. Although fluctuating through several cycles, copper prices on average trended downward during the year in large part owing to reduced demand growth from slower economic growth in China and expectations that the U.S. Federal Reserve would continue cutting its bond purchases during 2014. At the end of August, domestic stocks of refined copper were

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22% lower than those at yearend 2013. The International Copper Study Group (ICSG)[6] projected that in 2014, global refined copper consumption would exceed production by about 310,000 tons. Global production of refined copper was projected to increase by 2.6% and consumption was projected to increase by 5.2%.

U.S. mine production increased by about 14% in 2014, mainly owing to significant increases in production in Arizona, New Mexico, and Utah. Copper production at the Bingham Canyon Mine in Utah increased following recovery from a pit-wall failure in 2013, and in May, a 100,000-metric-ton-per-year expansion of copper in concentrate was completed at the Morenci Mine in Arizona. Total U.S. refined production increased by about 8% owing to across-the-board production increases at electrolytic refineries. In 2015, domestic mine and refined production of copper were expected to increase moderately, and according to ICSG projections, global refined-copper output was expected to exceed demand owing to lower demand growth in China and a 4.3% growth in global refined production.

World Mine Production and Reserves: Reserves for the United States were revised owing to general reserves depletion and revised estimates for companies that did not report reserves. Reserves for Australia, Canada, Chile, Peru, and Poland were revised based on new information from the Governments of those countries. Reserves for Indonesia and Kazakhstan were revised based on reported company data.

	Mine production		Reserves[7]
	2013	2014[e]	
United States	1,250	1,370	35,000
Australia	990	1,000	[8]93,000
Canada	632	680	11,000
Chile	5,780	5,800	209,000
China	1,600	1,620	30,000
Congo (Kinshasa)	970	1,100	20,000
Indonesia	504	400	25,000
Kazakhstan	446	430	6,000
Mexico	480	520	38,000
Peru	1,380	1,400	68,000
Poland	429	425	28,000
Russia	833	850	30,000
Zambia	760	730	20,000
Other countries	2,200	2,400	90,000
World total (rounded)	18,300	18,700	700,000

World Resources: A 1998 USGS assessment estimated 550 million tons of copper contained in identified and undiscovered resources in the United States.[9] A 2014 USGS global assessment of copper deposits indicated that known resources contain about 2.1 billion tons of copper (porphyry deposits accounted for 1.8 billion tons of those resources), and undiscovered resources contain an estimated 3.5 billion tons.[10] (For a listing of USGS regional copper resource assessments, go to http://minerals.usgs.gov/global.)

Substitutes: Aluminum substitutes for copper in power cable, electrical equipment, automobile radiators, and cooling and refrigeration tube; titanium and steel are used in heat exchangers; optical fiber substitutes for copper in telecommunications applications; and plastics substitute for copper in water pipe, drain pipe, and plumbing fixtures.

[e]Estimated.
[1]Some electrical components are included in each end use. Distribution for 2013 by the Copper Development Association, Inc., 2014.
[2]Less than ½ unit.
[3]Defined as primary refined production + copper from old scrap converted to refined metal and alloys + refined imports – refined exports ± changes in refined stocks. General imports were used to calculate apparent consumption.
[4]Defined as imports – exports + adjustments for Government and industry stock changes for refined copper.
[5]No tariff for Canada, Chile, Mexico, and Peru for items shown. Tariffs for other countries may be eliminated under special trade agreements.
[6]International Copper Study Group, 2014, Forecast 2014–2015: Lisbon, Portugal, International Copper Study Group press release, October 14, 1 p.
[7]See Appendix C for resource/reserve definitions and information concerning data sources.
[8] For Australia, Joint Ore Reserves Committee (JORC)-compliant reserves were about 25 million tons.
[9]U.S. Geological Survey National Mineral Resource Assessment Team, 2000, 1998 assessment of undiscovered deposits of gold, silver, copper, lead, and zinc in the United States: U.S. Geological Survey Circular 1178, 21 p.
[10]Johnson, K.M., and others, 2014, Estimate of undiscovered copper resources of the world, 2013: U.S. Geological Survey Fact Sheet 2014–3004, 3 p., http://dx.doi.org/10.3133/fs20143004.