

# Mineral Industry Surveys

**For information, contact:**

Daniel M. Flanagan, Copper Commodity Specialist  
 National Minerals Information Center  
 U.S. Geological Survey  
 989 National Center  
 Reston, VA 20192  
 Telephone: (703) 648-7726, Fax: (703) 648-7757  
 Email: dflanagan@usgs.gov

Sheema Merchant (Data)  
 Telephone: (703) 659-9944  
 Fax: (703) 648-7975  
 Email: smerchant@usgs.gov

**Internet:** <https://www.usgs.gov/centers/nmic>

## COPPER IN JUNE 2019

In June 2019, mine production of recoverable copper in the United States was 104,000 metric tons (t). The average daily mine production was 3,460 t, an increase of 4% from that in May and 8% lower than that in June 2018 (fig. 1). Year-to-date mine output through June 2019 was 606,000 t, a slight increase relative to the same period in 2018 (table 2). Mine production of copper at the three ASARCO LLC (Tucson, AZ) mines in Arizona was significantly higher in the first half of 2019 compared with that in the first half of 2018, when a landslide affected operations at the Mission Mine (Grupo México, S.A.B de C.V., 2019, p. 1). Copper output at Rio Tinto plc’s (United Kingdom) Bingham Canyon Mine in Utah and Capstone Mining Corp.’s (Canada) Pinto Valley Mine in Arizona rose by 8% and 13%, respectively, owing to higher ore grades and improved mining productivity (Capstone Mining Corp., 2019; Rio Tinto, 2019a, p. 5; 2019b, p. 6). These increases were partially offset by decreased production as a result of lower ore grades at KGHM Polska Miedź’s (Poland) Robinson Mine in Nevada, where output declined by 24% in the first half of 2019 from that in the first half of 2018, and at Lundin Mining Corp.’s (Canada) Eagle Mine in Michigan (KGHM Polska Miedź, 2019, p. 18; Lundin Mining Corp., 2019).

Smelter production in June 2019 was 51,800 t. The average daily smelter output was 1,730 t, slightly less than that in May and an increase of 13% compared with the daily average in June 2018. Year-to-date output through June 2019 was 228,000 t, 15% lower than that through June 2018 (table 3).

Total domestic refinery production was 90,000 t in June 2019; data for electrolytic and electrowon output, as well as refined production from scrap, are in table 4. The average daily refinery production was 3,000 t, an increase of 8% from that in May and slightly greater than that in June 2018 (fig. 1). Year-to-date refinery production through June 2019 was 487,000 t, a decline of 11% relative to the same period in 2018 (table 4). Smelter and refinery output in the first half of 2019 were affected by a scheduled maintenance shutdown at the Rio Tinto smelter in Utah and unplanned maintenance at the Freeport-McMoRan Inc. (Phoenix, AZ) smelter in Arizona (Freeport-McMoRan Inc., 2019, p. 3; RioTinto plc, 2019a, p. 5).

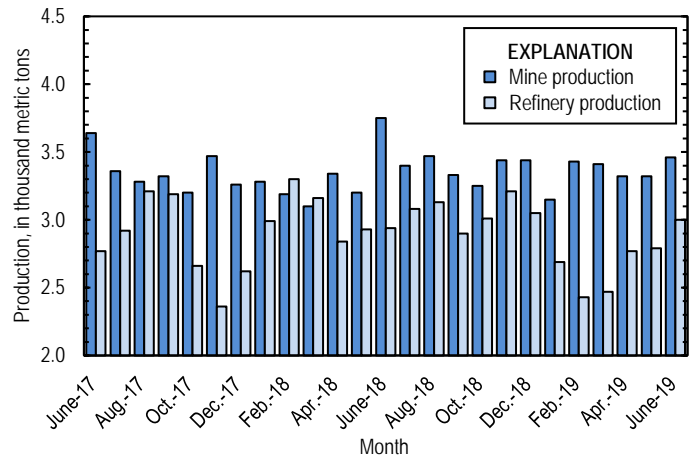


Figure 1. Average daily U.S. copper mine (recoverable) and refinery production from June 2017 through June 2019.

### Prices

The average June 2019 COMEX spot copper price was \$2.68 per pound, a slight decrease from \$2.74 per pound in May and 14% lower than \$3.12 per pound in June 2018 (fig. 2, table 11). The average price of New York dealers’ number 2 scrap in June 2019 was \$1.88 per pound, 6% less than \$2.01 per pound in May and a decline of 12% from \$2.14 per pound in June 2018 (fig. 2, table 12).

### Stocks

Refined copper stocks in the United States fell for the eleventh consecutive month and totaled 109,000 t at the end of June 2019, a decrease of 7% from those in May, 68% lower than those in June 2018, and 70% less than the most recent peak in July 2018. London Metal Exchange Ltd. stocks in U.S. warehouses fell by 23%, stocks at wire-rod mills declined slightly, and COMEX stocks were 7% higher compared with those at the end of May (fig. 3, table 10).

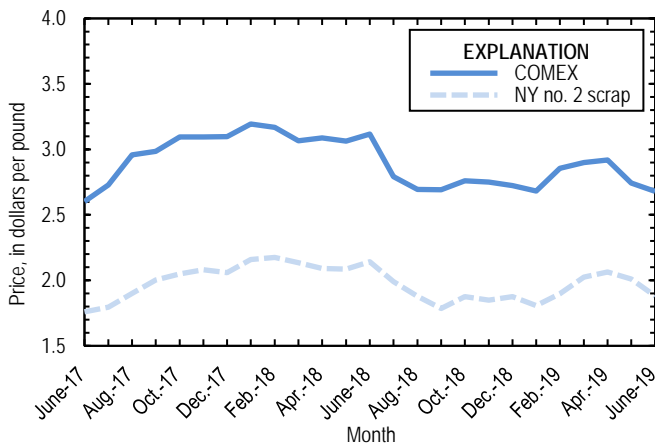


Figure 2. Monthly average COMEX copper price and New York no. 2 copper scrap price from June 2017 through June 2019. Sources: American Metal Market, Platts Metals Week.

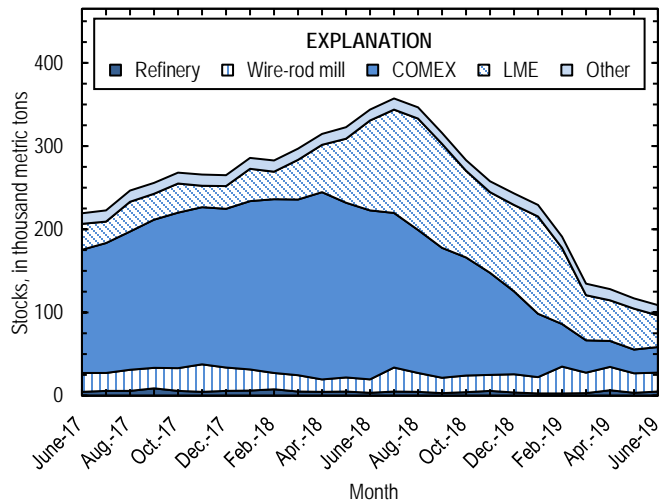


Figure 3. Monthly domestic refined copper stocks, by type, from June 2017 through June 2019. Sources: American Metal Market, London Metal Exchange Ltd., and U.S. Geological Survey.

## Industry News

**Chile.**—Unionized workers accounting for more than 80% of the workforce at the Chuquicamata Mine, owned by Corporación Nacional del Cobre de Chile, voted on May 29 to go on strike. Following a final attempt to reach an agreement with the company, several labor unions stopped work from June 14 until June 27. The nearly two-week strike resulted in lost production of about 500 t of copper per day (de la Paz, 2019; Mir, 2019). In 2018, Chuquicamata was one of the leading global copper mines and produced 321,000 t of copper, or nearly 2% of global output (Corporación Nacional del Cobre de Chile, 2019, p. 5).

**Zambia.**—Vedanta Resources Ltd. (United Kingdom) pursued arbitration to challenge liquidation proceedings brought against it by the Government of Zambia. The Government was seeking investors to buy the assets of Konkola Copper Mines plc, Vedanta’s subsidiary in Zambia, and claimed that the company violated its operating license. The dispute was reportedly affecting production, but the extent of the impact was unknown (Benjamin, 2019; CRU International Ltd., 2019, p. 11). Konkola Copper Mines accounts for 25% of current copper mine production capacity in Zambia and nearly 2% of global capacity (International Copper Study Group, 2019, p. 146–150).

## References Cited

Benjamin, Chantelle, 2019, Vedanta Resources will challenge any attempt to sell its Zambian copper mine: S&P Global Market Intelligence, June 20. (Accessed June 21, 2019, via <https://www.snl.com/>.)

Capstone Mining Corp, 2019, Capstone Mining Q2 2019 results—Continued operating momentum: Vancouver, British Columbia, Canada, Capstone Mining Corp. news release, July 30, 6 p. (Accessed July 31, 2019, at [https://s2.q4cdn.com/231101920/files/doc\\_financials/2019/Q2/CS-NR-2019-Q2-Results.pdf](https://s2.q4cdn.com/231101920/files/doc_financials/2019/Q2/CS-NR-2019-Q2-Results.pdf).)

Corporación Nacional del Cobre de Chile, 2019, 2018 results: Santiago, Chile, Corporación Nacional del Cobre de Chile presentation, March 29, 20 p. (Accessed September 25, 2019, at [http://prontus.codelco.cl/prontus\\_codelco/site/artic/20190329/asocfile/20190329111207/codelco\\_results2018.pdf](http://prontus.codelco.cl/prontus_codelco/site/artic/20190329/asocfile/20190329111207/codelco_results2018.pdf).)

CRU International Ltd., 2019, CRU copper monitor: London, United Kingdom, CRU International Ltd., June 28, 22 p. (Accessed July 5, 2019, via <http://www.crugroup.com/>.)

de la Paz, F.D.M, 2019, Unions at Codelco’s Chuquicamata mine vote to strike: S&P Global Market Intelligence, May 30. (Accessed June 31, 2019, via <https://www.snl.com/>.)

Freeport-McMoRan Inc., 2019, Freeport-McMoRan reports first-quarter 2019 results: Phoenix, AZ, Freeport-McMoRan Inc. news release, April 25, 26 p. (Accessed September 12, 2019, at [https://s22.q4cdn.com/529358580/files/doc\\_news/2019/FCX\\_190425.pdf](https://s22.q4cdn.com/529358580/files/doc_news/2019/FCX_190425.pdf).)

Grupo México, S.A.B. de C.V., 2019, Results for 2Q19: Mexico City, Mexico, Grupo México, S.A.B. de C.V., press release, July 23, 17 p. (Accessed July 26, 2019, at [https://www.gmexico.com/images/documentos/en/PR\\_GMEX\\_2Q19.pdf](https://www.gmexico.com/images/documentos/en/PR_GMEX_2Q19.pdf).)

International Copper Study Group, 2019, ICSG directory of copper mines and plants up to 2023: Lisbon, Portugal, International Copper Study Group, July, 219 p. (Accessed August 10, 2019, via <http://www.icsg.org/>.)

KGHM Polska Miedź, 2019, The Management Board’s report on the activities of the group in the first half of 2019: Lubin, Poland, KGHM Polska Miedź, August, 39 p. (Accessed September 6, 2019, at [https://kgmh.com/sites/kgmh/2014/files/document-attachments/mbs\\_report\\_on\\_activities\\_of\\_the\\_kghm\\_group\\_psr\\_2019.pdf](https://kgmh.com/sites/kgmh/2014/files/document-attachments/mbs_report_on_activities_of_the_kghm_group_psr_2019.pdf).)

Lundin Mining Corp., 2019, Lundin Mining second quarter results: Toronto, Ontario, Canada, Lundin Mining Corp. news release, July 24, 8 p. (Accessed July 26, 2019, at <https://www.lundinmining.com/news/lundin-mining-first-quarter-results-122957/>.)

Mir, Fawad, 2019, Codelco resumes full operations at Chuquicamata copper mine: S&P Global Market Intelligence, July 1. (Accessed July 5, 2019, via <https://www.snl.com/>.)

Rio Tinto plc, 2019a, Rio Tinto releases first quarter production results: London, United Kingdom, Rio Tinto plc media release, April 16, 25 p. (Accessed April 19, 2019, at <https://mc-56397411-4872-452d-b48e-428890-cdn-endpoint.azureedge.net/-/media/Content/Documents/Invest/Financial-news-and-performance/Production/RT-First-Quarter-Operations-Review-2019-pdf.pdf?rev=7c1a6a92ca474881afd64157f34f1a38>.)

Rio Tinto plc, 2019b, Rio Tinto releases second quarter production results: London, United Kingdom, Rio Tinto plc media release, July 16, 27 p. (Accessed July 17, 2019, at <https://mc-56397411-4872-452d-b48e-428890-cdn-endpoint.azureedge.net/-/media/Content/Documents/Invest/Financial-news-and-performance/Production/RT-Second-Quarter-Operations-Review-2019-pdf.pdf?rev=5e5b75433858402b8f41c65190cc9785>.)

*List services and web feed subscribers are the first to receive notification of USGS minerals information publications and data releases. For information on how to subscribe, go to <https://www.usgs.gov/centers/nmic/minerals-information-publication-list-services>.*

TABLE 1  
SALIENT STATISTICS OF THE COPPER INDUSTRY IN THE UNITED STATES<sup>1</sup>

(Metric tons of copper content, unless otherwise specified)

	Source table <sup>2</sup>	2019				
		2018 <sup>p</sup>	April	May	June	January– June
<b>Production:</b>						
<b>Primary:</b>						
Mine, recoverable	(2)	1,220,000	99,500 <sup>r</sup>	103,000	104,000	606,000
Smelter	(3)	536,000	32,900	54,100	51,800	228,000
<b>Refinery:</b>						
Electrolytic, domestic and foreign	(4)	538,000	38,100	38,300	40,600	207,000
Electrowon	(4)	532,000	41,300	44,700	45,900	259,000
Total	(4)	1,070,000	79,400	83,000	86,500	466,000
<b>Secondary recoverable copper:<sup>3</sup></b>						
Refineries	(5)	41,200	3,600	3,470	3,480	21,600
Ingot makers <sup>4</sup>	(5)	56,800	4,730	4,730	4,730	28,400
Brass and wire-rod mills	(5)	652,000	54,700	54,900	54,900	331,000
Foundries, etc. <sup>4</sup>	(5)	36,300	3,030	3,030	3,030	18,200
<b>Consumption:</b>						
Apparent	(8)	1,800,000	150,000	148,000	148,000	908,000
Refined (reported)	(7)	1,810,000	159,000	154,000	150,000	929,000
Purchased copper-base scrap (gross weight)	(9)	918,000	77,200	77,500	77,500	466,000
<b>Stocks at end of period:</b>						
Total refined	(10)	243,000	128,000	117,000	109,000	109,000
Blister, etc.	(10)	9,230	8,860	9,210	13,600	13,600
Price, U.S. producers cathode (cents per pound) <sup>5</sup>	(11)	298.737	299.820	282.232	274.968	287.285
<b>Imports:<sup>6</sup></b>						
Ore and concentrates	(13)	32,200	3,110	3,850	7,360	16,800
Refined	(13)	778,000	65,400	52,400	55,200	308,000
<b>Exports:<sup>6</sup></b>						
Ore and concentrates	(14)	253,000	23,200	35,000	27,900	169,000
Refined	(14)	190,000	13,500	11,000	13,800	74,300

<sup>p</sup>Preliminary. <sup>r</sup>Revised.

<sup>1</sup>Data are rounded to no more than three significant digits, except prices; may not add to totals shown.

<sup>2</sup>Numbers in parentheses refer to the tables where these data are located.

<sup>3</sup>Copper recovered from copper-base scrap only.

<sup>4</sup>Estimated based on the monthly average of 2017 annual data.

<sup>5</sup>Source: Platts Metals Week.

<sup>6</sup>Source: U.S. Census Bureau.

TABLE 2  
MINE PRODUCTION OF RECOVERABLE COPPER IN THE UNITED STATES<sup>1</sup>

(Metric tons)

Period	Recoverable copper			Contained copper		
	Arizona	Others <sup>2</sup>	Total	Electrowon	Concentrates <sup>3</sup>	Total
2018: <sup>p</sup>						
January–June	404,000	195,000	599,000	266,000	345,000	611,000
June	70,600	41,900	113,000	44,900	70,100	115,000
July	66,800	38,500	105,000	46,000	61,400	107,000
August	69,100	38,600	108,000	45,500	64,600	110,000
September	63,000	36,800	99,800	43,000	59,100	102,000
October	64,000	36,900	101,000	43,100	59,800	103,000
November	65,200	38,000	103,000	43,000	62,400	105,000
December	69,300	37,300	107,000	45,800	63,000	109,000
January–December	801,000	421,000	1,220,000	532,000	716,000	1,250,000
2019:						
January	67,800	29,900	97,700	42,400	57,400	99,800
February	62,600	33,500	96,100	39,800	58,400	98,200
March	70,300	35,500	106,000	44,600	63,300	108,000
April	67,900 <sup>r</sup>	31,600	99,500 <sup>r</sup>	41,300	60,400 <sup>r</sup>	102,000 <sup>r</sup>
May	69,300 <sup>r</sup>	33,700	103,000	44,700	60,400 <sup>r</sup>	105,000
June	71,400	32,400	104,000	45,900	60,000	106,000
January–June	409,000	197,000	606,000	259,000	360,000	619,000

<sup>p</sup>Preliminary. <sup>r</sup>Revised.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Includes production from Michigan, Missouri, Montana, Nevada, New Mexico, and Utah.

<sup>3</sup>Includes copper content of precipitates and other metal concentrates.

TABLE 3  
COPPER PRODUCED AT SMELTERS IN  
THE UNITED STATES<sup>1,2</sup>

(Metric tons, copper content)

Period	Anode production
2018: <sup>p</sup>	
January–June	267,000
June	45,700
July	47,500
August	46,100
September	40,800
October	48,200
November	45,300
December	40,600
January–December	536,000
2019:	
January	34,700
February	17,700
March	37,000
April	32,900
May	54,100
June	51,800
January–June	228,000

<sup>p</sup>Preliminary.

<sup>1</sup>Includes blister and copper anode from primary or secondary sources.

<sup>2</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

TABLE 4  
PRODUCTION OF REFINED COPPER, BY SOURCE AND METHOD OF RECOVERY<sup>1</sup>

(Metric tons)

Period	Primary materials			Scrap	Total refined
	Electrolytically refined <sup>2</sup>	Electrowon	Total		
2018: <sup>P</sup>					
January–June	262,000	266,000	528,000	19,700	547,000
June	39,800	44,900	84,700	3,400	88,000
July	45,900	46,000	91,900	3,390	95,300
August	48,400	45,500	93,900	3,220	97,100
September	40,200	43,000	83,200	3,810	87,000
October	46,100	43,100	89,200	4,180	93,400
November	50,000	43,000	93,000	3,370	96,400
December	45,300	45,800	91,200	3,520	94,700
January–December	538,000	532,000	1,070,000	41,200	1,110,000
2019:					
January	37,100	42,400	79,500	3,770	83,200
February	25,000	39,800	64,800	3,330	68,100
March	27,800	44,600	72,500	3,950	76,400
April	38,100	41,300	79,400	3,600	83,000
May	38,300	44,700	83,000	3,470	86,500
June	40,600	45,900	86,500	3,480	90,000
January–June	207,000	259,000	466,000	21,600	487,000

<sup>P</sup>Preliminary.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>From domestic and foreign source materials.

TABLE 5  
COPPER RECOVERABLE IN UNALLOYED AND ALLOYED FORM FROM PURCHASED COPPER-BASE SCRAP<sup>1</sup>

(Metric tons, copper content)

Period	Refineries <sup>2</sup>		Ingot makers <sup>3</sup>		Brass and wire-rod mills		Foundries, etc. <sup>3</sup>		Total <sup>4</sup>
	New scrap <sup>e</sup>	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	
2018: <sup>p</sup>									
January–June	10,100	9,600	4,260	24,100	304,000	19,000	13,200	4,980	389,000
June	1,680	1,720	710	4,020	52,400	2,960	2,200	830	66,500
July	1,680	1,710	710	4,020	51,600	3,060	2,200	830	65,800
August	1,680	1,540	710	4,020	51,600	3,220	2,200	830	65,700
September	1,680	2,130	710	4,020	51,900	2,850	2,200	830	66,300
October	1,680	2,500	710	4,020	52,700	3,490	2,200	830	68,100
November	1,680	1,690	710	4,020	53,900	1,470	2,200	830	66,500
December	1,680	1,840	710	4,020	50,800	2,700	2,200	830	64,800
January–December	20,100	21,000	8,520	48,300	617,000	35,800	26,400	9,960	787,000
2019:									
January	1,680	2,100	710	4,020	52,100	3,520	2,200	830	67,200
February	1,680	1,660	710	4,020	51,900	3,170	2,200	830	66,200
March	1,680	2,270	710	4,020	52,200	3,310	2,200	830	67,200
April	1,680	1,930	710	4,020	51,400	3,340	2,200	830	66,100
May	1,680	1,790	710	4,020	51,600	3,330	2,200	830	66,100
June	1,680	1,800	710	4,020	51,400	3,550	2,200	830	66,100
January–June	10,100	11,500	4,260	24,100	311,000	20,200	13,200	4,980	399,000

<sup>e</sup>Estimated <sup>p</sup>Preliminary.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Electrolytically refined and fire refined from scrap based on source of material at smelter or refinery level.

<sup>3</sup>Monthly data estimated based on the monthly average of 2017 annual data.

<sup>4</sup>Does not include an estimate, based on reported 2017 annual data, of 3,190 tons per month from new scrap and 2,560 tons per month from old scrap of copper recovered from scrap other than copper-base.

TABLE 6  
 PRODUCTION, SHIPMENTS, AND STOCKS OF BRASS AND WIRE-ROD SEMIFABRICATES<sup>1</sup>

(Metric tons, gross weight)

Period	Production		Shipments		Stocks, end of period	
	Brass mills	Wire-rod mills	Brass mills	Wire-rod mills	Brass mills	Wire-rod mills
2018: <sup>p</sup>						
January–June	442,000	673,000	442,000	677,000	28,900	22,200
June	73,900	118,000	73,800	114,000	28,900	22,200
July	73,400	99,300	73,700	102,000	28,700	19,600
August	73,800	124,000	74,200	120,000	28,300	23,900
September	73,500	110,000	73,300	111,000	28,400	23,000
October	74,300	114,000	73,900	120,000	28,800	16,900
November	73,500	113,000	73,400	108,000	28,900	21,300
December	73,800	97,700	73,000	92,100	29,700	27,000
January–December	884,000	1,330,000	884,000	1,330,000	29,700	27,000
2019:						
January	74,200	113,000	73,800	116,000	30,000	23,700
February	73,500	103,000	73,600	110,000	29,900	17,100
March	74,200	117,000	73,800	112,000	30,400	22,400
April	73,700	104,000	73,900	111,000	30,200 <sup>r</sup>	23,800
May	73,800	116,000	74,100	112,000	29,800	28,400
June	73,600	109,000	73,500	116,000	30,000	22,100
January–June	443,000	662,000	443,000	676,000	30,000	22,100

<sup>p</sup>Preliminary. <sup>r</sup>Revised.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.



TABLE 7  
CONSUMPTION OF REFINED COPPER<sup>1</sup>

(Metric tons)

Period	Brass mills	Wire-rod mills	Other plants <sup>2</sup>	Total
2018: <sup>p</sup>				
January–June	210,000	661,000	31,000	901,000
June	34,900	106,000	5,170	146,000
July	34,800	104,000	5,170	144,000
August	35,100	121,000	5,170	161,000
September	35,100	122,000	5,170	163,000
October	34,900	112,000	5,170	152,000
November	34,700	113,000	5,170	153,000
December	34,600	98,000	5,170	138,000
January–December	419,000	1,330,000	62,100	1,810,000
2019:				
January	34,900	116,000	5,170	156,000
February	34,800	106,000	5,170	146,000
March	34,900	123,000	5,170	163,000
April	34,900	119,000	5,170	159,000
May	35,400	114,000	5,170	154,000
June	34,200	110,000	5,170	150,000
January–June	209,000	689,000	31,000	929,000

<sup>p</sup>Preliminary.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Monthly consumption data by ingot makers, chemical plants, foundries, and miscellaneous manufacturers are estimated based on the monthly average of 2017 annual data.

TABLE 8  
U.S. APPARENT CONSUMPTION OF COPPER<sup>1</sup>

(Metric tons)

Period	Refined copper production <sup>2</sup>	Copper in old scrap <sup>3</sup>	Refined general imports <sup>4</sup>	Refined exports <sup>4</sup>	Stock change during period	Apparent consumption
2018: <sup>p</sup>						
January–June	528,000	73,100	427,000	67,700	78,300	882,000
June	84,700	12,100	66,200	11,300	21,000	131,000
July	91,900	12,200	59,500	11,200	13,500	139,000
August	93,900	12,200	48,300	15,700	-10,200	149,000
September	83,200	12,400	62,300	15,600	-30,900	173,000
October	89,200	13,400	54,400	31,000	-32,900	159,000
November	93,000	10,600	51,000	36,200	-25,400	144,000
December	91,200	12,000	44,800	12,400	-14,900	150,000
January–December	1,070,000	146,000	747,000	190,000	-22,500	1,800,000
2019:						
January	79,500	13,000	57,600	12,600	-13,800	151,000
February	64,800	12,200	37,000	13,100	-37,900	139,000
March	72,500	13,000	39,900	10,200	-56,500	172,000
April	79,400	12,700	65,000	13,500	-6,390	150,000
May	83,000	12,500	52,000	11,000	-11,300	148,000
June	86,500	12,800	54,800	13,800	-8,080	148,000
January–June	466,000	76,200	306,000	74,300	-134,000	908,000

<sup>p</sup>Preliminary.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Includes electrolytic production and electrolytically-refined copper from primary materials. All refined copper consumed in scrap form is included in "Copper in old scrap."

<sup>3</sup>Includes reported monthly production of copper from old scrap of copper-base, an estimate for annual reporters, and a monthly average of copper from non-copper-base materials based on 2017 annual data.

<sup>4</sup>Source: U.S. Census Bureau.

TABLE 9  
CONSUMPTION OF PURCHASED COPPER-BASE SCRAP<sup>1</sup>

(Metric tons, gross weight)

Period	Smelters and refineries		Ingot makers <sup>2</sup>		Brass and wire-rod mills <sup>3</sup>		Foundries, etc. <sup>2</sup>		Total scrap used
	New scrap <sup>c</sup>	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	
2018: <sup>p</sup>									
January–June	10,400	9,900	12,200	30,200	352,000	19,500	15,700	5,610	455,000
June	1,730	1,770	2,030	5,040	60,400	3,030	2,620	935	77,500
July	1,730	1,770	2,030	5,040	59,600	3,110	2,620	935	76,900
August	1,730	1,590	2,030	5,040	59,600	3,320	2,620	935	76,800
September	1,730	2,200	2,030	5,040	59,900	2,970	2,620	935	77,500
October	1,730	1,590	2,030	5,040	60,700	3,580	2,620	935	78,200
November	1,730	1,750	2,030	5,040	61,900	1,510	2,620	935	77,500
December	1,730	1,900	2,030	5,040	58,700	2,770	2,620	935	75,800
January–December	20,800	20,700	24,400	60,500	712,000	36,800	31,500	11,200	918,000
2019:									
January	1,730	2,160	2,030	5,040	60,100	3,610	2,620	935	78,300
February	1,730	1,710	2,030	5,040	59,900	3,260	2,620	935	77,200
March	1,730	2,340	2,030	5,040	60,200	3,410	2,620	935	78,300
April	1,730	1,990	2,030	5,040	59,400	3,450	2,620	935	77,200
May	1,730	1,850	2,030	5,040	59,700	3,540	2,620	935	77,500
June	1,730	1,850	2,030	5,040	59,400	3,910	2,620	935	77,500
January–June	10,400	11,900	12,200	30,200	359,000	21,200	15,700	5,610	466,000

<sup>c</sup>Estimated. <sup>p</sup>Preliminary.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Monthly data estimated based on the monthly average of 2017 annual data.

<sup>3</sup>Consumption at brass and wire-rod mills assumed equal to receipts.

TABLE 10  
COPPER STOCKS AT END OF PERIOD<sup>1</sup>

(Metric tons)

Period	Crude copper <sup>2</sup>	Refined copper					Total refined	
		Refineries <sup>3</sup>	Wire-rod mills <sup>3</sup>	Brass mills <sup>3</sup>	Other <sup>4</sup>	Comex		
2018: <sup>P</sup>								
June	14,300	3,590	16,100	7,980	5,350	203,000	108,000	344,000
July	9,670	4,980	28,700	8,180	5,350	186,000	124,000	357,000
August	9,010	4,600	22,600	7,890	5,350	172,000	134,000	347,000
September	9,110	3,120	18,500	7,710	5,350	156,000	125,000	316,000
October	8,940	4,290	19,900	7,460	5,350	142,000	104,000	283,000
November	7,380	5,580	19,200	7,660	5,350	123,000	96,900	258,000
December	9,230	3,850	21,800	8,210	5,350	99,600	104,000	243,000
2019:								
January	9,550	2,700	19,700	8,370	5,350	76,100	117,000	229,000
February	10,200	2,750	32,300	8,270	5,350	51,200	91,300	191,000
March	15,000	2,970	24,800	8,400	5,350	38,700	54,400	135,000
April	8,860	6,630	28,100	8,370	5,350	31,100	48,600	128,000
May	9,210	3,550	23,200	7,250	5,350 <sup>r</sup>	28,700	49,000	117,000
June	13,600	5,000	22,800	7,120	5,350	30,700	38,000	109,000

<sup>P</sup>Preliminary.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Copper content of blister and anode.

<sup>3</sup>Stocks of refined copper as reported; no estimates are made for nonrespondents.

<sup>4</sup>Monthly estimates based on 2017 annual data, comprising stocks at ingot makers, chemical plants, foundries, and miscellaneous manufacturers.

<sup>5</sup>London Metal Exchange Ltd., U.S. warehouses.

TABLE 11  
 AVERAGE PRICE OF COPPER IN THE UNITED STATES  
 AND ON THE LONDON METAL EXCHANGE

(Cents per pound)

Period	U.S. producers cathode <sup>1</sup>	Comex first position <sup>2</sup>	LME cash price Grade A
<b>2018:</b>			
June	318.152	311.714	315.436
July	285.626	279.126	283.387
August	276.087	269.387	273.936
September	276.107	269.232	273.044
October	282.498	275.935	281.918
November	281.598	275.098	280.882
December	279.026	272.338	276.397
Year	298.737	292.567	295.960
<b>2019:</b>			
January	275.588	268.238	269.052
February	293.129	285.566	284.754
March	297.974	289.974	292.581
April	299.820	292.007	292.317
May	282.232	274.282	273.412
June	274.968	267.843	266.166
January-June	287.285	279.652	279.714

<sup>1</sup>Sum of "Comex high grade first position" and "NY dealer premium cathode."

<sup>2</sup>Listed as "Comex high grade first position."

Source: Platts Metals Week.

TABLE 12  
AVERAGE BUYING PRICES FOR COPPER SCRAP

(Cents per pound)

Period	Brass mills No. 1 scrap	Refiners No. 2 scrap	Dealers (New York)	
			No. 2 scrap	Red brass turnings and borings
2018:				
June	301.67	274.14	214.17	160.57
July	269.95	239.48	198.93	151.29
August	261.00	229.07	187.80	145.43
September	261.16	228.50	178.45	141.47
October	267.65	239.80	187.50	141.00
November	267.50	240.10	185.00	130.00
December	264.52	238.72	187.50	141.00
Year	283.19	254.90	200.31	150.76
2019:				
January	260.33	235.19	180.79	139.00
February	278.66	252.39	189.82	140.42
March	282.69	253.31	202.50	145.00
April	284.26	252.17	206.50	147.00
May	265.41	231.95	201.05	143.18
June	257.40	225.70	188.00	138.00
January-June	271.46	241.79	194.78	142.10

Source: American Metal Market.

TABLE 13  
U.S. IMPORTS FOR CONSUMPTION OF COPPER (UNMANUFACTURED), BY CLASS<sup>1</sup>

(Metric tons, copper content)

Country or locality	Ore and concentrates <sup>2</sup>			Matte, ash, and precipitates <sup>3</sup>			Blister and anodes			Refined		
	2019			2019			2019			2019		
	2018	June	January-- June	2018	June	January-- June	2018	June	January-- June	2018	June	January-- June
Belgium	--	--	--	283	--	228	--	--	--	10,100	--	2,300
Bolivia	--	--	--	--	--	--	--	--	--	1,460	--	1,390
Canada	40	--	(4)	613	40	187	(4)	--	--	172,000	13,500	61,300
Chile	--	--	--	--	--	--	--	--	--	483,000	35,700	199,000
China	8	--	--	2	--	--	--	--	(4)	111	24	184
Congo (Brazzaville)	--	--	--	--	--	--	--	--	--	1,040	--	--
Congo (Kinshasa)	--	--	--	--	--	--	--	--	--	3,380	--	--
Finland	--	--	--	--	--	--	292	35	132	--	--	38
Germany	--	--	--	--	--	--	(4)	--	--	1,260	94	942
Japan	--	--	--	10	50	50	2	(4)	(4)	3,990	219	1,470
Malaysia	--	--	--	--	--	--	54	--	--	--	--	--
Mexico	32,100	7,360	16,800	539	(4)	59	--	--	(4)	63,100	5,630	38,500
Netherlands	--	--	--	115	--	--	2	--	3	(4)	--	--
Peru	--	--	--	--	--	--	--	--	--	19,100	--	3,000
Saudi Arabia	--	--	--	85	--	98	--	--	--	--	--	--
Zambia	--	--	--	--	--	--	--	--	--	18,900	--	616
Other	--	--	2	175	--	536	5	(4)	3	562	--	54
Total	32,200	7,360	16,800	1,820	90	1,160	355	35	139	778,000	55,200	308,000

-- Zero.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Copper ore and concentrates only; excludes copper contained in ore and concentrates of other metals.

<sup>3</sup>Copper matte, ash, and precipitates only; excludes the copper content of mattes and ashes of other metals.

<sup>4</sup>Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 14  
U.S. EXPORTS OF COPPER (UNMANUFACTURED), BY CLASS<sup>1</sup>

(Metric tons, copper content)

Country or locality	Ore and concentrates <sup>2</sup>			Matte, ash, and precipitates <sup>3</sup>			Blister and anodes			Refined		
	2019			2019			2019			2019		
	2018	June	January-- June	2018	June	January-- June	2018	June	January-- June	2018	June	January-- June
Belgium	20	3	85	2,150	310	1,230	226	18	175	--	--	29
Brazil	3,040	--	--	--	--	--	62	21	39	23	--	1
Bulgaria	2,990	--	11,200	--	--	--	--	--	--	--	--	--
Canada	17,200	913	6,500	19,500	1,490	9,090	4,320	244	2,890	37,300	4,690	17,900
China	47,500	7	7	1,650	--	89	210	24	109	47,600	(4)	3
Germany	4,810	--	--	1,130	39	324	282	40	185	2	--	1
Hong Kong	--	--	--	--	--	19	462	20	219	(4)	--	(4)
India	--	--	--	44	--	--	585	39	145	9	36	36
Italy	1	--	--	10	--	--	281	22	88	24	2	25
Japan	13,500	--	10,100	230	--	8	36	--	3	14	1	3
Korea, Republic of	4,690	--	6,910	817	--	74	1,680	173	922	2,200	15	77
Malaysia	545	--	5	413	--	--	178	20	99	62	--	4
Mexico	147,000	21,600	122,000	1,430	--	1,210	80	3	22	102,000	9,020	56,100
Philippines	1,180	--	2,310	--	--	--	42	--	33	(4)	2	2
Slovakia	--	--	--	526	78	429	--	--	--	--	--	--
Spain	10,500	5,380	10,100	210	--	--	101	--	20	1	--	--
Other	120	14	480	1,850	5	373	503	73	481	278	60	108
Total	253,000	27,900	169,000	30,000	1,930	12,800	9,060	697	5,430	190,000	13,800	74,300

-- Zero.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Copper ore and concentrates only; excludes copper contained in ore and concentrates of other metals.

<sup>3</sup>Copper matte, ash, and precipitates only; excludes the copper content of mattes and ashes of other metals.

<sup>4</sup>Less than ½ unit.

Source: U.S. Census Bureau.



TABLE 15  
U.S. IMPORTS FOR CONSUMPTION OF COPPER SCRAP<sup>1</sup>

(Metric tons, gross weight)

Country or locality	Unalloyed			Alloyed		
	2018	2019		2018	2019	
		June	January– June		June	January– June
Bahamas	23	--	--	569	48	442
Canada	16,800	1,010	8,610	72,000	2,870	30,300
Chile	177	--	--	321	19	1,240
Colombia	367	--	100	926	89	638
Costa Rica	459	55	263	750	100	481
Dominican Republic	80	101	322	901	152	1,150
Guatemala	92	--	8	501	73	391
Honduras	5	13	32	589	43	243
Hong Kong	7	--	--	1,450	--	229
Japan	278	131	945	52	--	--
Mexico	10,800	1,050	6,610	38,600	3,760	21,000
Pakistan	567	--	--	--	--	--
Panama	1,020	81	335	640	35	221
Spain	--	--	--	637	--	--
Venezuela	2,540	--	28	646	60	200
Other	1,270	83	451	4,150	439	2,710
Total	34,500	2,520	17,700	123,000	7,690	59,200

-- Zero.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

Source: U.S. Census Bureau.

TABLE 16  
U.S. EXPORTS OF COPPER SCRAP<sup>1</sup>

(Metric tons, gross weight)

Country or locality	Unalloyed							Alloyed					
	2018	2019						2018	2019				
		No. 1		No. 2		Other			Segregated		Unsegregated		
		June	January– June	June	January– June	June	January– June		June	January– June	June	January– June	
Belgium	19,500	670	3,570	1,150	5,890	340	1,330	11,800	60	577	919	6,300	
Canada	51,900	--	--	--	--	4,150	24,800	40,200	--	--	2,790	25,400	
China	193,000	2,310	15,600	1,760	16,700	3,770	15,500	78,600	83	4,730	612	4,450	
Germany	24,000	1,580	9,590	640	3,870	269	1,190	13,300	176	984	1,150	6,290	
Greece	7,630	498	4,070	--	388	78	711	1,150	--	155	79	239	
Hong Kong	20,700	860	3,910	494	3,730	871	4,830	23,600	623	6,060	2,920	11,300	
India	14,000	150	1,350	296	1,700	597	4,050	34,300	2,320	14,300	1,490	6,300	
Japan	29,300	532	3,170	980	7,390	288	1,890	26,700	214	3,490	1,090	8,450	
Korea, Republic of	45,800	1,340	9,260	277	2,350	593	6,140	25,900	1,100	6,440	793	6,190	
Malaysia	47,800	628	7,190	1,320	8,550	1,750	19,200	71,800	1,940	18,400	8,670	58,500	
Netherlands	8,030	61	483	139	336	274	1,900	2,280	--	181	--	543	
Pakistan	1,450	19	292	106	507	18	57	16,500	20	359	948	7,570	
Spain	760	81	196	89	161	316	334	10,100	179	1,840	403	3,740	
Taiwan	17,100	518	4,950	180	827	426	2,800	18,300	727	3,390	684	6,990	
Thailand	3,000	33	348	40	585	280	676	11,100	41	93	1,220	7,360	
Other	25,700	919	7,620	925	3,850	891	2,540	17,900	219	2,240	1,420	9,750	
Total	509,000	10,200	71,600	8,390	56,800	14,900	88,000	403,000	7,690	63,300	25,200	169,000	

-- Zero.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

Source: U.S. Census Bureau.