

Mineral Industry Surveys

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COPPER IN JANUARY 2019

In January 2019, domestic mine production of recoverable copper was 96,300 metric tons (t) (table 2). The average daily mine production was 3,110 t, a decline of 10% from that in December 2018 and a decrease of 5% compared with that in January 2018 (fig. 1).

Total refinery production in the United States was 82,300 t in January 2019; data for electrolytic and electrowon output, as well as refined production from scrap, are in table 4. The average daily total refinery production was 2,650 t, a decrease of 13% compared with that in December 2018 and 11% less than that in January 2018 (fig. 1).

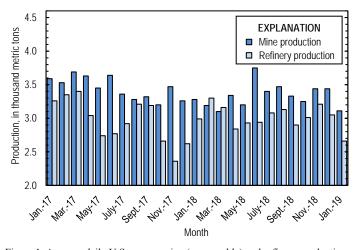


Figure 1. Average daily U.S. copper mine (recoverable) and refinery production from January 2017 through January 2019.

Smelter production in January 2019 was 34,700 t. The average daily smelter output was 1,120 t, 14% lower than that in December 2018 and a decline of 35% compared with the daily average in January 2018 (table 3).

Prices

The average January 2019 COMEX spot copper price was \$2.68 per pound, a slight decrease from \$2.72 per pound in December 2018 and 16% lower than \$3.19 per pound in January

2018 (fig. 2, table 11). The average price of New York dealers' number 2 scrap in January 2019 was \$1.81 per pound, a 4% decline from \$1.88 per pound in December and 16% less than \$2.16 per pound in January 2018 (fig. 2, table 12).

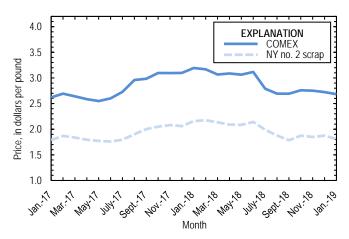


Figure 2. Monthly average COMEX copper price and New York no. 2 copper scrap price from January 2017 through January 2019. Sources: American Metal Market. Platts Metals Week.

Stocks

Refined copper stocks in the United States fell for the sixth consecutive month and totaled 229,000 t at the end of January 2019, a decrease of 6% from those in December 2018, 20% lower than those in January 2018, and 36% less than the recent peak in July 2018. COMEX stocks fell by 24%, stocks at wirerod mills decreased by 10%, and London Metal Exchange Ltd. stocks in U.S. warehouses were 12% higher compared with those at the end of December 2018 (fig. 3, table 10).

Industry News

As of January 1, the Government of China banned the importation of copper-containing scrap materials that must be disassembled prior to processing, including automobile parts, electrical appliances, motors, and wire and cable (Luk, 2018; Wu, 2019). Since March 2018, all nonferrous scrap imports into

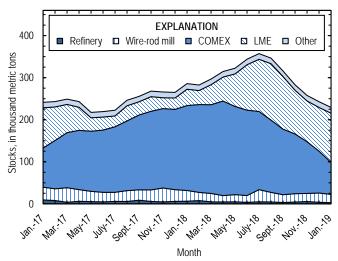


Figure 3. Monthly domestic refined copper stocks, by type, from January 2017 through January 2019. Sources: American Metal Market, London Metal Exchange Ltd., and U.S. Geological Survey.

China could have a contaminant content (mud, paper, plastic, etc.) of no more than 1%, and a 25% tariff on imports of copper scrap from the United States (Harmonized Tariff Schedule codes 7404) went into effect on August 23, 2018 (Allen, 2017; Toto, 2018). In 2018, 30% of the total U.S. copper scrap export tonnage (in gross weight) was shipped to China compared with 69% in 2017 (table 16).

In May 2018, the Government of Tamil Nadu State in India ordered the closure of Vedanta Resources Ltd.'s (United Kingdom) Tuticorin smelter owing to environmental violations and ensuing violent protests. In January 2019, the Supreme Court of India upheld a previous court ruling to reopen the smelter, the final legal requirement for the resumption of operations. No timetable for the restart had been announced as of the end of January (Adeeb, 2019). In 2018, the Tuticorin smelter had an annual capacity of 400,000 t of copper, equivalent to nearly 2% of total global smelter capacity (International Copper Study Group, 2018, p. 151, 163).

Kazakhmys Corp. LLC (Kazakhstan) restarted a smelter at the Zhezkazgan complex that had been idle for ten years. The annual design capacity of the smelter was 220,000 t of copper, equivalent to nearly 1% of total global smelter capacity (CRU

International Ltd., 2019, p. 17; International Copper Study Group, 2018, p. 154, 163).

New taxes on mining operations in Zambia went into effect at the beginning of January. The Government enacted a 5% tariff on imports of copper concentrates and increased royalty rates by 1.5% to a sliding scale of 5.5% to 7.5%, with higher duties when the copper price exceeds \$3.40 per pound (CRU International Ltd., 2019, p. 14). Citing the new mining code, Vedanta halted operations at its Nchanga Mine on January 4 (Decena, 2019).

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 $\label{table 1} {\sf TABLE~1}$ SALIENT STATISTICS OF THE COPPER INDUSTRY IN THE UNITED STATES 1

(Metric tons of copper content, unless otherwise specified)

				2018		
	Source				January-	2019
	table ²	2017 ^p	November	December	December	January
Production:						
Primary:						
Mine, recoverable	(2)	1,260,000	103,000	107,000	1,220,000	96,300
Smelter	(3)	470,000	45,300	40,600	536,000	34,700
Refinery:						
Electrolytic, domestic and foreign	(4)	482,000	50,000	45,300	538,000	37,100
Electrowon	(4)	557,000	43,000	45,800	532,000	41,400
Total	(4)	1,040,000	93,000	91,200	1,070,000	78,500
Secondary recoverable copper: ³						
Refineries	(5)	40,100	3,370	3,520	41,200	3,770
Ingot makers ⁴	(5)	57,600	4,730 r	4,730 r	56,800 r	4,730
Brass and wire-rod mills	(5)	645,000	55,300	53,500	652,000	55,700
Foundries, etc. ⁴	(5)	46,800	3,030 ^r	3,030 r	36,300 ^r	3,030
Consumption:						
Apparent	(8)	1,870,000	144,000	150,000 r	1,800,000	150,000
Refined (reported)	(7)	1,800,000	153,000	138,000 r	1,810,000	154,000
Purchased copper-base scrap (gross weight)	(9)	924,000	77,500 ^r	75,700 ^r	918,000 ^r	78,300
Stocks at end of period:						
Total refined	(10)	265,000	258,000	243,000	243,000	229,000
Blister, etc.	(10)	12,600	7,380	24,100	24,100	22,100
Price, U.S. producers cathode (cents per pound) ⁵	(11)	285.393	281.598	279.026	298.737	275.588
Imports: ⁶						
Ore and concentrates	(13)	14,000	3,120	2,340	32,200	670
Refined	(13)	813,000	51,000	44,500	778,000	57,300
Exports: ⁶						
Ore and concentrates	(14)	237,000	37,200	27,500	253,000	24,400
Refined	(14)	94,200	36,200	12,400	190,000	12,600

^pPreliminary. ^rRevised.

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

²Numbers in parentheses refer to the tables where these data are located.

³Copper recovered from copper-base scrap only.

⁴Estimated based on the monthly average of 2016 annual data.

⁵Source: Platts Metals Week.

⁶Source: U.S. Census Bureau.

 $\label{eq:table 2} \textbf{MINE PRODUCTION OF RECOVERABLE COPPER IN THE UNITED STATES}^1$

	Re	coverable co	pper	Contained copper			
Period	Arizona	Others ²	Total	Electrowon	Concentrates ³	Total	
2018: ^p							
January	68,800	32,900	102,000	46,800	56,900	104,000	
February	61,500	27,700	89,200	40,600	50,700	91,300	
March	68,200	27,900	96,000	44,400	53,700	98,000	
April	65,400	34,700	100,000	43,200	58,800	102,000	
May	69,300	29,800	99,200	46,000	55,200	101,000	
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	66,400	29,900	96,300	41,400	57,000	98,400	

^pPreliminary.

 $^{^{1}\}mathrm{Data}$ are rounded to no more than three significant digits; may not add to totals shown.

²Includes production from Michigan, Missouri, Montana, Nevada, New Mexico, and Utah.

³Includes copper content of precipitates and other metal concentrates.

$\begin{tabular}{ll} TABLE 3 \\ COPPER PRODUCED AT SMELTERS IN \\ THE UNITED STATES 1,2 \\ \end{tabular}$

(Metric tons, copper content)

	Anode
Period	production
2018: ^p	
January	53,900
February	42,200
March	41,500
April	44,800
May	39,000
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

^pPreliminary.

¹Includes blister and copper anode from primary or secondary sources.

²Data 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 $^{\!1}$

	Prin	nary materials			
	Electrolytically				Total
Period	refined ²	Electrowon	Total	Scrap	refined
2018: ^p					
January	42,800	46,800	89,600	3,220	92,800
February	48,500	40,600	89,000	3,260	92,300
March	50,400	44,400	94,800	3,220	98,000
April	38,700	43,200	82,000	3,260	85,200
May	41,600	46,000	87,600	3,330	90,900
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	41,400	78,500	3,770	82,300

Preliminary.

Data are rounded to no more than three significant digits; may not add to totals shown.

From domestic and foreign source materials.

 ${\it TABLE~5}$ COPPER RECOVERABLE IN UNALLOYED AND ALLOYED FORM FROM PURCHASED COPPER-BASE SCRAP 1

(Metric tons, copper content)

	Refine	ries ²	Ingot ma	akers ³	Brass and wi	re-rod mills	Foundrie	s, etc. ³	
Period	New scrap ^e	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	Total ⁴
2018: ^p									
January	1,680	1,540	710 ^r	4,020 r	51,100	3,300	2,200 r	830 r	65,300 r
February	1,680	1,580	710 ^r	4,020 r	50,000	2,940	2,200 r	830 r	64,000 r
March	1,680	1,540	710 ^r	4,020 r	46,800	3,350	2,200 r	830 r	61,100 ^r
April	1,680	1,580	710 ^r	4,020 r	50,800	3,270	2,200 r	830 r	65,100 r
May	1,680	1,650	710 ^r	4,020 r	53,000	3,180	2,200 r	830 r	67,300 r
June	1,680	1,720	710 ^r	4,020 r	52,400	2,960	2,200 r	830 ^r	66,500 ^r
July	1,680	1,710	710 ^r	4,020 r	51,600	3,060	2,200 r	830 ^r	65,800 ^r
August	1,680	1,540	710 ^r	4,020 r	51,600	3,220	2,200 r	830 r	65,700 ^r
September	1,680	2,130	710 ^r	4,020 r	51,900	2,850	2,200 r	830 r	66,300 r
October	1,680	2,500	710 ^r	4,020 r	52,700	3,490	2,200 r	830 r	68,100 r
November	1,680	1,690	710 ^r	4,020 r	53,900	1,470	2,200 r	830 r	66,500 r
December	1,680	1,840	710 ^r	4,020 r	50,800	2,700	2,200 ^r	830 ^r	64,800 ^r
January-December	20,100	21,000	8,520 ^r	48,300 ^r	617,000	35,800	26,400 r	9,960 ^r	787,000 ^r
2019, January	1,680	2,100	710	4,020	52,100	3,520	2,200	830	67,200

^eEstimated ^pPreliminary ^rRevised.

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

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

³Monthly data estimated based on the monthly average of 2017 annual data.

⁴Does 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.

 ${\it TABLE~6}$ PRODUCTION, SHIPMENTS, AND STOCKS OF BRASS AND WIRE-ROD SEMIFABRICATES 1

	Proc	luction	Shi	pments	Stocks, e	nd of period
Period	Brass mills	Wire-rod mills	Brass mills	Wire-rod mills	Brass mills	Wire-rod mills
2018: ^p						
January	73,600	114,000	73,500	114,000	29,500	26,700
February	72,700	107,000	73,400	107,000	28,800	26,400
March	74,300	115,000	74,000	117,000	29,200	24,200
April	73,600	103,000	73,600	111,000	29,200	16,400
May	73,600	115,000	74,000	113,000	28,800	18,400
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 ^r	28,900	21,300 r
December	73,800 ^r	97,700 ^r	73,000	92,100 ^r	29,700 ^r	27,000 ^r
January-December	884,000 r	1,330,000	884,000	1,330,000	29,700 ^r	27,000 ^r
2019, January	74,200	113,000	73,800	116,000	30,000	23,700

^pPreliminary. ^rRevised.

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

TABLE 7 CONSUMPTION OF REFINED COPPER¹

	Brass	Wire-rod	Other	
Period	mills	mills	plants ²	Total
2018: ^p				
January	34,600	114,000	5,170 ^r	154,000
February	35,100	107,000	5,170 ^r	147,000
March	34,900	115,000	5,170 ^r	155,000
April	35,100	105,000	5,170 ^r	145,000
May	34,900	115,000	5,170 ^r	155,000
June	34,900	106,000	5,170 ^r	146,000
July	34,800	104,000	5,170 ^r	144,000
August	35,100	121,000	5,170 ^r	161,000
September	35,100	122,000	5,170 ^r	163,000 r
October	34,900	112,000	5,170 ^r	152,000
November	34,700	113,000 r	5,170 ^r	153,000
December	34,600	98,000 ^r	5,170 ^r	138,000 ^r
January-December	419,000	1,330,000	62,100 r	1,810,000
2019, January	34,900	114,000	5,170	154,000

^pPreliminary. ^rRevised.

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

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

 $\label{eq:table 8} \mbox{U.S. APPARENT CONSUMPTION OF COPPER}^1$

	Refined copper	Copper in	Refined general	Refined	Stock change	Apparent
Period	production ²	old scrap ³	imports ⁴	exports ⁴	during period	consumption
2018: ^p						
January	89,600	12,300	81,100	9,550	20,300	153,000
February	89,000	11,900	77,500	7,270	-2,750	174,000
March	94,800	12,300	75,200	12,100	14,000	156,000
April	82,000	12,300	62,400	13,700	17,700	125,000
May	87,600	12,200	64,600	13,800	8,150	142,000
June	84,700	12,100	66,200	11,200	21,000	131,000
July	91,900	12,200	59,500	11,300	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 r	144,000
December	91,200 ^r	12,000	44,800	12,400	-14,900 ^r	150,000 ^r
January-December	1,070,000	146,000	747,000	190,000	-22,500 ^r	1,800,000
2019, January	78,500	13,000	57,600	12,600	-13,800	150,000

^pPreliminary. ^rRevised.

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

²Includes electrowon production and electrolytically-refined copper from primary materials. All refined copper consumed in scrap form is included in "Copper in old scrap."

³Includes 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.

⁴Source: U.S. Census Bureau.

 $\label{eq:table 9} {\sf CONSUMPTION}\ {\sf OF}\ {\sf PURCHASED}\ {\sf COPPER-BASE}\ {\sf SCRAP}^1$

	Smelt	ers			Brass	and			
	and refineries		Ingot ma	Ingot makers ²		d mills ³	Foundrie	s, etc. ²	Total scrap
Period	New scrap ^e	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	used
2018: ^p									
January	1,730	1,590	2,030 r	5,040 ^r	59,000	3,380	2,620 r	935 ^r	76,300 r
February	1,730	1,630	2,030 r	5,040 ^r	57,900	3,010	2,620 r	935 ^r	74,900 ^r
March	1,730	1,590	2,030 r	5,040 ^r	54,700	3,450	2,620 r	935 ^r	72,100 ^r
April	1,730	1,630	2,030 r	5,040 r	58,800	3,380	2,620 r	935 ^r	76,200 r
May	1,730	1,700	2,030 ^r	5,040 ^r	61,000	3,270	2,620 r	935 ^r	78,300 ^r
June	1,730	1,770	2,030 ^r	5,040 ^r	60,400	3,030	2,620 r	935 ^r	77,500 ^r
July	1,730	1,770	2,030 r	5,040 r	59,600	3,110	2,620 r	935 ^r	76,900 ^r
August	1,730	1,590	2,030 r	5,040 r	59,600	3,320	2,620 r	935 ^r	76,800 ^r
September	1,730	2,200	2,030 r	5,040 r	59,900	2,970	2,620 r	935 ^r	77,500 ^r
October	1,730	1,590	2,030 r	5,040 r	60,700	3,580	2,620 r	935 ^r	78,200 ^r
November	1,730	1,750	2,030 r	5,040 ^r	61,900	1,510	2,620 r	935 ^r	77,500 ^r
December	1,730	1,900	2,030 ^r	5,040 ^r	58,700	2,770	2,620 r	935 ^r	75,800 ^r
January-December	20,800 r	20,700	24,400 r	60,500 r	712,000	36,800	31,500 r	11,200 ^r	918,000 ^r
2019, January	1,730	2,160	2,030	5,040	60,100	3,610	2,620	935	78,300

^eEstimated. ^pPreliminary. ^rRevised.

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

²Monthly data estimated based on the monthly average of 2017 annual data.

³Consumption at brass and wire-rod mills assumed equal to receipts.

$\label{eq:table 10} \text{COPPER STOCKS AT END OF PERIOD}^1$

					Refined copper			
	Crude		Wire-rod					Total
Period	copper ²	Refineries ³	$mills^3$	Brass mills ³	Other ⁴	Comex	LME ⁵	refined
2018: ^p								
January	15,000	6,190	25,500	8,040	5,350 ^r	202,000	38,800	286,000
February	14,600	7,690	19,400	7,880	5,350 ^r	209,000	33,200	283,000
March	9,010	4,790	19,900	8,000	5,350 ^r	211,000	47,600	297,000
April	9,880	4,500	15,000	7,870	5,350 ^r	225,000	57,000	314,000 r
May	8,130	4,960	16,800	8,190	5,350 ^r	210,000	77,200	323,000
June	14,300	3,590	16,100	7,980	5,350 ^r	203,000	108,000	344,000
July	9,670	4,980	28,700	8,180	5,350 ^r	186,000	124,000	357,000
August	9,010	4,600	22,600	7,890	5,350 ^r	172,000	134,000	347,000
September	9,110	3,120	18,500	7,710	5,350 ^r	156,000	125,000	316,000
October	8,940	4,290	19,900	7,460	5,350 ^r	142,000	104,000	283,000
November	7,380	5,580	19,200 ^r	7,660	5,350 ^r	123,000	96,900	258,000
December	24,100	3,850	21,800 ^r	8,210	5,350 ^r	99,600	104,000	243,000
2019, January	22,100	2,700	19,700	8,370	5,350	76,100	117,000	229,000

^pPreliminary. ^rRevised.

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

²Copper content of blister and anode.

³Stocks of refined copper as reported; no estimates are made for nonrespondents.

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

⁵London 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)

		Comex	LME
	U.S. producers	first	cash price
Period	cathode ¹	position ²	Grade A
2018:			
January	324.640	319.390	321.137
February	322.495	316.745	317.574
March	312.083	306.683	308.227
April	314.129	308.754	310.169
May	312.402	306.402	309.409
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
2019, January	275.588	268.238	269.052

¹Sum of "Comex high grade first position" and "NY dealer premium cathode."

²Listed as "Comex high grade first position."

Source: Platts Metals Week.

TABLE 12 AVERAGE BUYING PRICES FOR COPPER SCRAP

(Cents per pound)

			Dealer	s (New York)
				Red brass
	Brass mills	Refiners	No. 2	turnings and
Period	No. 1 scrap	No. 2 scrap	scrap	borings
2018:				
January	308.14	279.00	215.79	160.81
February	304.63	275.68	217.50	161.00
March	295.18	268.32	213.50	160.00
April	299.33	274.36	209.02	158.00
May	297.50	271.68	208.59	158.55
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

Source: American Metal Market.

 ${\it TABLE~13} \\ {\it U.S.~IMPORTS~FOR~CONSUMPTION~OF~COPPER~(UNMANUFACTURED),~BY~CLASS}^1$

(Metric tons, copper content)

	Ore and concentrates ² 2019		Matte, ash, and precipitates ³ 2019		Blister and anodes 2019		Refined	
Country or								2019
locality	2018	January	2018	January	2018	January	2018	January
Belgium			283	117			10,100	
Bolivia							1,460	1,030
Canada	40		570	44	(4)		172,000	10,000
Chile							483,000	37,600
China	8		2				111	8
Congo (Brazzaville)							1,040	
Congo (Kinshasa)							3,380	
Finland					292			1
Germany					(4)		1,260	134
Japan			10		2	(4)	3,990	222
Malaysia					54			
Mexico	32,200	670	539	39			63,000	6,200
Netherlands			115		2		(4) r	
Peru							19,100	2,000
Saudi Arabia			85					
South Africa							963	
Zambia							17,900	
Other			73	(4)	5	1	561 ^r	41
Total	32,200	670	1,680	200	355	1	778,000	57,300

rRevised. -- Zero.

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

²Copper ore and concentrates only; excludes copper contained in ore and concentrates of other metals.

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

⁴Less than ½ unit.

 $\label{eq:table 14} \text{U.s. EXPORTS OF COPPER (UNMANUFACTURED), BY CLASS}^1$

(Metric tons, copper content)

	Ore and con	Ore and concentrates ²		Matte, ash, and precipitates ³		Blister and anodes		Refined	
Country or	2019		2019		2019			2019	
locality	2018	January	2018	January	2018	January	2018	January	
Belgium	20		2,170	234	226	53			
Brazil	3,040				62	12	23		
Bulgaria	2,990								
Canada	17,200	1,040	19,500	2,370	4,320	737	37,400	1,550	
China	47,500		1,650	2	210	12	47,600		
Germany	4,810		1,130	76	282	23	2		
Hong Kong					462	40	(4)		
India			44		585	47	9		
Italy	1		10		281	1	24	(4)	
Japan	13,500	4,890	230		36	2	14	(4)	
Korea, Republic of	4,690		817	56	1,680	198	2,200		
Malaysia	545	5	413		178		62	1	
Mexico	147,000	17,000	1,430	1	80	2	102,000	11,100	
Philippines	1,180				42	12	(4)		
Slovakia			526	59					
Spain	10,500	1,480	210		101	20	1		
Other	120 ^r	5	1,810 ^r	85	503 r	31	278 r	9	
Total	253,000	24,400	29,900	2,880	9,060	1,190	190,000	12,600	

^rRevised. -- Zero.

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

²Copper ore and concentrates only; excludes copper contained in ore and concentrates of other metals.

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

⁴Less than ½ unit.

 $\label{eq:table 15} \text{U.S. IMPORTS FOR CONSUMPTION OF COPPER SCRAP}^1$

	Una	alloyed	Alloyed		
Country or		2019	2019		
locality	2018	January	2018	January	
Bahamas	23		569	83	
Canada	16,800	1,540	72,000	4,230	
Chile	177		321	12	
Colombia	367	40	926	212	
Costa Rica	459	33	750	109	
Dominican Republic	80	35	901	205	
Guatemala	92		501	135	
Honduras	5		589		
Hong Kong	7		1,450	177	
Japan	278	77	52		
Mexico	10,800	1,060	38,600	3,430	
Pakistan	567				
Panama	1,020	23	640	40	
Spain			637		
Venezuela	2,540		646	8	
Other	1,290	105	4,150	323	
Total	34,600	2,920	123,000	8,960	

⁻⁻ Zero.

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

TABLE 16
U.S. EXPORTS OF COPPER SCRAP¹

	Unalloyed				Alloyed			
	-	2019				2019		
Country or		No. 1	No. 2	Other		Segregated	Unsegregated	
locality	2018	January	January	January	2018	January	January	
Belgium	19,500	638	1,080	197	11,800	39	997	
Canada	51,900			4,330	38,700		3,040	
China	195,000	1,510	1,010	1,610	80,000	805	385	
Germany	23,900	1,410	1,070	268	13,300	77	828	
Greece	7,620	901	102	199	1,170	38	40	
Hong Kong	20,200	560	1,130	727	23,000	369	901	
India	14,000	122	153	363	34,400	1,960	989	
Japan	29,100	694	1,740	445	26,700	1,040	1,870	
Korea, Republic of	45,300	1,520	898	722	25,900	1,380	1,330	
Malaysia	47,100	1,230	777	3,000	71,800	2,420	8,740	
Netherlands	8,030	76		326	2,280		117	
Pakistan	1,760	21	85	39	16,500	94	774	
Spain	796		5		10,100	304	459	
Taiwan	17,000	688	342	541	18,200	290	866	
Thailand	3,200	138	128		11,300		1,000	
Other	25,700	1,380	475	237	17,900	577	1,560	
Total	510,000	10,900	8,990	13,000	403,000	9,380	23,900	

⁻⁻ Zero.

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