

# Mineral Industry Surveys

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#### **COPPER IN JANUARY 2023**

Domestic mine production of recoverable copper was 100,000 metric tons (t) in January 2023 (table 2). The average daily mine production was 3,240 t, a slight decrease from that in December 2022 and 5% less than that in January 2022 (fig. 1).

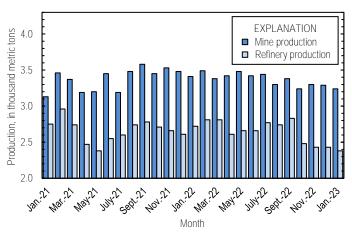


Figure 1. Average daily copper mine (recoverable) and refinery (primary and secondary) production in the United States from January 2021 through January 2023.

Smelter and electrolytic refinery production reported to the U.S. Geological Survey in January 2023 were withheld to avoid disclosing company proprietary data. Smelter and electrolytic refinery output in tables 3 and 4 are estimates based on information in annual and quarterly company reports.

In January 2023, estimated smelter production in the United States was 25,000 t (table 3). Total U.S. refinery production was 73,800 t; data for electrolytic and electrowon output, as well as refined production from scrap, are reported in table 4. The average daily refinery production was 2,380 t, a slight decrease compared with that in December 2022 and 12% lower than that in January 2022 (fig. 1).

#### **Prices**

The average Commodity Exchange Inc. (COMEX) copper price was \$4.12 per pound in January 2023, 8% higher than \$3.82 per pound in December 2022 and a decrease of 7% from \$4.43 per pound in January 2022 (fig. 2, table 11). The average U.S. dealers buying price of number 2 copper scrap was \$2.89

per pound in January 2023, an increase of 7% compared with \$2.71 per pound in December 2022 and 14% less than \$3.37 per pound in January 2022 (fig. 2, table 12).

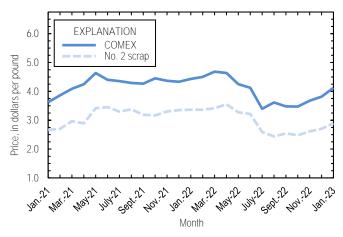


Figure 2. Monthly average Commodity Exchange Inc. (COMEX) copper price and no. 2 copper scrap U.S. dealers buying price from January 2021 through January 2023. Sources: Fastmarkets-AMM and S&P Global Platts Metals Week.

#### **Stocks**

Refined U.S. copper stocks totaled 78,700 t at the end of January 2023, a decrease of 5% from those in December 2022 and 40% lower than those in January 2022. Total domestic stocks at exchanges (COMEX and London Metal Exchange Ltd.) decreased by 10,100 t (26%) and total stocks at producers and fabricators (brass mills, refineries, wire-rod mills, and other manufacturers) increased by 6,050 t (14%) compared with those at the end of December 2022 (fig. 3, table 10).

#### **Industry News**

*Peru.*—Leading copper mines in Peru were disrupted by political demonstrations in January 2023. Glencore plc evacuated workers from the Antapaccay Mine on January 12 after protesters vandalized employee housing and burned company vehicles. As of January 17, the mine was operating at reduced capacity because of ongoing road blockades (Aquino, 2023; Carino, Jr., 2023). MMG Ltd. briefly suspended operations at the Las Bambas Mine on January 13 in response to the events at Antapaccay and announced on January 30 that it

was ramping down operations at Las Bambas owing to a supply shortage. The company planned to place the mine on care and maintenance status on February 1 if the transportation disruptions continued (Garcia, 2023; MMG Ltd., 2023).

United States.—On January 21, Southwire Co., LLC cast the first copper at a new wire-rod mill in Carrollton, GA. The facility replaced an existing plant and was expected to increase the company's annual rod production by a minimum of 10% (Southwire Co., LLC, 2022, 2023).

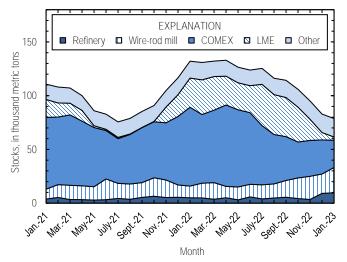


Figure 3. Domestic refined copper stocks at end of month, by type, from January 2021 through January 2023. Sources: London Metal Exchange Ltd., S&P Global Platts Metals Week, and U.S. Geological Survey.

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 ${\bf TABLE~1}$  SALIENT STATISTICS OF THE COPPER INDUSTRY IN THE UNITED STATES  $^1$ 

(Metric tons, copper content, unless otherwise specified)

				2022		
	Source				January-	2023
	table <sup>2</sup>	2021 <sup>p</sup>	November	December	December	January
Production:						
Primary (from ore):						
Mine, recoverable <sup>3</sup>	(2)	1,230,000	99,100 <sup>r</sup>	102,000 <sup>r</sup>	1,230,000	100,000
Smelter <sup>e, 4</sup>	(3)	360,000	25,000	25,000	375,000	25,000
Refinery:						
Electrolytic <sup>e</sup>	(4)	360,000	25,000	25,000	375,000	25,000
Electrowon	(4)	562,000	44,600	47,000 <sup>r</sup>	556,000 <sup>r</sup>	45,600
Total	(4)	922,000	69,600	72,000 <sup>r</sup>	931,000 <sup>r</sup>	70,600
Secondary (from copper-base scrap): <sup>5</sup>						
Refineries <sup>6</sup>	(5)	48,900	3,280	3,240	40,000	3,220
Ingot makers <sup>e, 7</sup>	(5)	51,600	3,290 <sup>r</sup>	3,290 <sup>r</sup>	39,500 <sup>r</sup>	3,290
Brass and wire-rod mills	(5)	655,000	55,100	54,400	650,000	58,000
Foundries, etc. e, 7	(5)	38,800	3,330 <sup>r</sup>	3,330 °	40,000 <sup>r</sup>	3,330
Consumption:						
Reported, refined copper	(7)	1,770,000	122,000 <sup>r</sup>	127,000 <sup>r</sup>	1,720,000 <sup>r</sup>	128,000
Apparent, primary refined copper and copper from old scrap <sup>8</sup>	(8)	1,960,000	129,000 <sup>r</sup>	132,000 <sup>r</sup>	1,820,000	126,000
Reported, purchased copper-base scrap (gross weight)	(9)	919,000	74,900 <sup>r</sup>	74,200 <sup>r</sup>	890,000 <sup>r</sup>	77,800
Stocks at end of period:						
Refined <sup>9</sup>	(10)	117,000	95,100 <sup>r</sup>	82,800 °	82,800 °	78,700
Blister and anodes	(10)	16,100	14,600	13,300	13,300	13,600
Price, U.S. producers cathode (cents per pound) <sup>10</sup>	(11)	432.264	378.483	391.895	410.775	423.233
Imports for consumption: <sup>11</sup>						
Ore and concentrates	(13)	11,000	146		11,700	
Refined	(13)	919,000	37,900	38,800	733,000	39,000
Exports: <sup>11</sup>						
Ore and concentrates	(14)	347,000	37,400	37,900	352,000	31,500
Refined	(14)	47,600	1,430	2,100	27,800	1,190

<sup>&</sup>lt;sup>e</sup>Estimated. <sup>p</sup>Preliminary. <sup>r</sup>Revised. -- Zero.

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

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

<sup>&</sup>lt;sup>3</sup>Includes the recoverable copper content of concentrates (of copper and other metals), copper produced by solvent extraction and electrowinning, and copper recovered as precipitates.

<sup>&</sup>lt;sup>4</sup>May contain small quantities of copper from scrap.

<sup>&</sup>lt;sup>5</sup>Copper recovered from copper-base scrap and converted to refined metal, alloys, and other forms. Does not include copper recovered from scrap other than copper-base.

<sup>&</sup>lt;sup>6</sup>Electrolytically refined and fire-refined copper.

<sup>&</sup>lt;sup>7</sup>Plants are surveyed by the U.S. Geological Survey on an annual basis; data after 2021 not yet available. Monthly data are estimated based on the monthly average of 2021 annual data.

<sup>&</sup>lt;sup>8</sup>Primary refined copper production plus copper recovered from old scrap (of copper-base and non-copper-base) plus refined imports for consumption minus refined exports, including adjustments for changes in refined stocks. Old scrap consists of copper items used by consumers.

<sup>&</sup>lt;sup>9</sup>Stocks of refined copper at brass mills, exchanges, refineries, wire-rod mills, and other manufacturers.

<sup>&</sup>lt;sup>10</sup>Source: S&P Global Platts Metals Week. Sum of the monthly average Commodity Exchange Inc. (COMEX) price and monthly average New York dealers cathode premium; reflects the delivered spot price of copper cathode to U.S. consumers by U.S. producers.

<sup>&</sup>lt;sup>11</sup>Source: U.S. Census Bureau. See tables 13 and 14 for listings of the relevant Harmonized Tariff Schedule (imports) and Schedule B (exports) codes.

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

	Rec	overable copp	per <sup>2</sup>		Contained copper	
Period	Arizona	Others <sup>3</sup>	Total	Electrowon	Concentrates <sup>4</sup>	Total
2022: <sup>p</sup>						
January	72,200	33,500	106,000	45,400	62,800	108,000
February	65,500	32,100	97,600	40,300	59,400	99,800
March	73,100	31,700	105,000	48,500	58,400	107,000
April	72,200	30,400	103,000	44,900	59,900	105,000
May	77,900	29,800	108,000	49,100	60,900	110,000
June	73,900	28,600	103,000	46,500	58,200	105,000
July	73,300	33,500	107,000	47,600	61,400	109,000
August	69,600	32,600	102,000	46,800	57,500	104,000
September	69,700	31,500	101,000	46,800	56,500	103,000
October	69,200 <sup>r</sup>	31,200	100,000	48,600	53,800 <sup>r</sup>	102,000
November	66,800 r	32,300	99,100 <sup>r</sup>	44,600	56,500 <sup>r</sup>	101,000
December	71,400 <sup>r</sup>	30,700	102,000 <sup>r</sup>	47,000 <sup>r</sup>	57,100 <sup>r</sup>	104,000
January-December	855,000	378,000	1,230,000	556,000 r	702,000	1,260,000
2023, January	69,400	31,000	100,000	45,600	56,800	102,000

<sup>&</sup>lt;sup>p</sup>Preliminary. <sup>r</sup>Revised.

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

<sup>&</sup>lt;sup>2</sup>Includes the recoverable copper content of concentrates (of copper and other metals), copper produced by solvent extraction and electrowinning, and copper recovered as precipitates.

 $<sup>^3</sup>$  Includes production from Michigan, Missouri, Montana, Nevada, New Mexico, and Utah.

<sup>&</sup>lt;sup>4</sup>Includes the contained copper content of concentrates (of copper and other metals) and copper recovered as precipitates.

## $\label{eq:table 3} \text{COPPER PRODUCED AT SMELTERS IN}$ THE UNITED STATES $^{1,2}$

(Metric tons, copper content)

	Anode
Period	production <sup>e, 3</sup>
2022: <sup>p</sup>	
January	35,000
February	35,000
March	35,000
April	30,000
May	30,000
June	30,000
July	35,000
August	35,000
September	35,000
October	25,000
November	25,000
December	25,000
January-December	375,000
2023, January	25,000

<sup>&</sup>lt;sup>e</sup>Estimated. <sup>p</sup>Preliminary.

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

<sup>&</sup>lt;sup>2</sup>Primary production. May contain small quantities of copper from scrap.

<sup>&</sup>lt;sup>3</sup>To avoid disclosing company proprietary data, monthly smelter production data are estimated based on information in annual and quarterly public company reports and do not reflect actual production reported to the U.S. Geological Survey.

 $\label{eq:table 4} TABLE~4$  U.S. PRODUCTION OF REFINED COPPER  $^1$ 

	From p	orimary materials			
			Total	From	Total
Period	Electrolytic <sup>e, 2</sup>	Electrowon	primary	scrap <sup>3</sup>	refined
2022: <sup>p</sup>					
January	35,000	45,400	80,400	3,990	84,400
February	35,000	40,300	75,300	3,280	78,600
March	35,000	48,500	83,500	3,490	87,000
April	30,000	44,900	74,900	3,250	78,200
May	30,000	49,100	79,100	3,220	82,300
June	30,000	46,500	76,500	3,370	79,900
July	35,000	47,600	82,600	3,250	85,800
August	35,000	46,800	81,800	3,260	85,000
September	35,000	46,800	81,800	3,220	85,000
October	25,000	48,600	73,600	3,220	76,800
November	25,000	44,600	69,600	3,280	72,900
December	25,000	47,000 <sup>r</sup>	72,000 <sup>r</sup>	3,240	75,300 <sup>r</sup>
January-December	375,000	556,000 <sup>r</sup>	931,000 <sup>r</sup>	40,000	971,000 <sup>r</sup>
2023, January	25,000	45,600	70,600	3,220	73,800

<sup>&</sup>lt;sup>e</sup>Estimated. <sup>p</sup>Preliminary. <sup>r</sup>Revised.

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

<sup>&</sup>lt;sup>2</sup>To avoid disclosing company proprietary data, monthly electrolytically refined production data are estimated based on information in annual and quarterly public company reports and do not reflect actual production reported to the U.S. Geological Survey.

<sup>&</sup>lt;sup>3</sup>Electrolytically refined and fire-refined copper.

TABLE 5 COPPER RECOVERED AS REFINED COPPER AND IN ALLOYS AND OTHER FORMS FROM PURCHASED COPPER-BASE SCRAP IN THE UNITED STATES  $^{\rm 1,2}$ 

	Refine	ries <sup>3</sup>	Ingot ma	kers <sup>e, 4</sup>	Brass and wire-rod mills		Foundries, etc. <sup>e, 4</sup>		
Period	New scrap <sup>e</sup>	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	Total <sup>5</sup>
2022: <sup>p</sup>	_								
January	1,680	2,310	350 <sup>r</sup>	2,940 <sup>r</sup>	51,800	4,470	740 <sup>r</sup>	2,590 <sup>r</sup>	66,900 <sup>r</sup>
February	1,680	1,600	350 <sup>r</sup>	2,940 <sup>r</sup>	48,100	3,530	740 <sup>r</sup>	2,590 <sup>r</sup>	61,600 <sup>r</sup>
March	1,680	1,810	350 <sup>r</sup>	2,940 <sup>r</sup>	50,900	3,950	740 <sup>r</sup>	2,590 <sup>r</sup>	64,900 <sup>r</sup>
April	1,680	1,570	350 <sup>r</sup>	2,940 <sup>r</sup>	49,900	3,750	740 <sup>r</sup>	2,590 <sup>r</sup>	63,500 <sup>r</sup>
May	1,680	1,540	350 <sup>r</sup>	2,940 <sup>r</sup>	49,800	3,640	740 <sup>r</sup>	2,590 <sup>r</sup>	63,200 <sup>r</sup>
June	1,680	1,690	350 <sup>r</sup>	2,940 <sup>r</sup>	49,800	3,710	740 <sup>r</sup>	2,590 <sup>r</sup>	63,500 <sup>r</sup>
July	1,680	1,570	350 <sup>r</sup>	2,940 <sup>r</sup>	50,700	3,110	740 <sup>r</sup>	2,590 <sup>r</sup>	63,700 <sup>r</sup>
August	1,680	1,580	350 <sup>r</sup>	2,940 <sup>r</sup>	51,400	3,330	740 <sup>r</sup>	2,590 <sup>r</sup>	64,600 <sup>r</sup>
September	1,680	1,540	350 <sup>r</sup>	2,940 <sup>r</sup>	50,800	3,340	740 <sup>r</sup>	2,590 <sup>r</sup>	64,000 <sup>r</sup>
October	1,680	1,540	350 <sup>r</sup>	2,940 <sup>r</sup>	51,100	3,230	740 <sup>r</sup>	2,590 <sup>r</sup>	64,200 <sup>r</sup>
November	1,680	1,600	350 <sup>r</sup>	2,940 <sup>r</sup>	51,800	3,270	740 <sup>r</sup>	2,590 <sup>r</sup>	65,000 <sup>r</sup>
December	1,680	1,560	350 <sup>r</sup>	2,940 <sup>r</sup>	51,800	2,600	740 <sup>r</sup>	2,590 <sup>r</sup>	64,200 <sup>r</sup>
January-December	20,100	19,900	4,200 <sup>r</sup>	35,300 <sup>r</sup>	608,000	41,900	8,880 <sup>r</sup>	31,100 <sup>r</sup>	769,000 <sup>r</sup>
2023, January	1,680	1,540	350	2,940	53,600	4,360	740	2,590	67,800

<sup>&</sup>lt;sup>e</sup>Estimated. <sup>p</sup>Preliminary. <sup>r</sup>Revised.

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

<sup>&</sup>lt;sup>2</sup>New scrap refers to material generated during the manufacturing process. Old scrap consists of copper items used by consumers.

<sup>&</sup>lt;sup>3</sup>Electrolytically refined and fire refined from scrap based on source of material at smelter or refinery level.

<sup>&</sup>lt;sup>4</sup>Plants are surveyed by the U.S. Geological Survey on an annual basis; data after 2021 not yet available. Monthly data are estimated based on the monthly average of 2021 annual data.

<sup>&</sup>lt;sup>5</sup>Does not include an estimate, based on 2021 annual data, of 2,970 tons per month from new scrap and 1,700 tons per month from old scrap of copper recovered from scrap other than copper-base.

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

	Pro	duction	Ship	oments	Stocks, end of period	
Period	Brass mills	Wire-rod mills	Brass mills	Wire-rod mills	Brass mills	Wire-rod mills
2022: <sup>p</sup>						
January	74,300	117,000	74,300	114,000	29,100	25,400
February	76,000	103,000	75,800	107,000	29,300	19,300
March	76,900	118,000	77,000	116,000	29,300	21,500
April	76,300	117,000	76,100	112,000	29,500	26,200
May	74,200	112,000	74,300	116,000	29,400	21,900
June	74,800	111,000	74,900	115,000	29,300	17,200
July	74,600	117,000	74,800	114,000	29,100	21,000
August	75,300	112,000	75,200	115,000	29,200	17,900
September	79,900	116,000	79,400	119,000	29,800	15,600
October	75,400	115,000	75,100	114,000	30,000	16,600
November	74,900	94,800	74,800	94,700	30,200	16,600
December	74,800	90,300 <sup>r</sup>	74,300	88,400 <sup>r</sup>	30,700	18,600 r
January-December	908,000	1,330,000 <sup>r</sup>	906,000	1,330,000 <sup>r</sup>	30,700	18,600 r
2023, January	76,400	91,000	75,400	94,000	31,700	15,600

<sup>&</sup>lt;sup>p</sup>Preliminary. <sup>r</sup>Revised.

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

### $\label{eq:table 7} \text{U.s. Consumption of Refined Copper}^1$

	Brass	Wire-rod	Other	
Period	mills	mills	plants <sup>e, 2</sup>	Total
2022: <sup>p</sup>				
January	34,900	111,000	3,590 °	149,000 <sup>r</sup>
February	34,800	101,000	3,590 <sup>r</sup>	140,000 <sup>r</sup>
March	36,600	114,000	3,590 <sup>r</sup>	154,000 <sup>r</sup>
April	34,600	113,000	3,590 <sup>r</sup>	152,000 <sup>r</sup>
May	34,900	109,000	3,590 <sup>r</sup>	147,000 <sup>r</sup>
June	34,800	107,000	3,590 <sup>r</sup>	146,000 <sup>r</sup>
July	34,900	112,000	3,590 <sup>r</sup>	151,000 <sup>r</sup>
August	35,000	106,000	3,590 <sup>r</sup>	145,000 <sup>r</sup>
September	34,900	101,000	3,590 <sup>r</sup>	140,000 <sup>r</sup>
October	35,000	105,000	3,590 <sup>r</sup>	144,000 <sup>r</sup>
November	35,000	83,700	3,590 <sup>r</sup>	122,000 <sup>r</sup>
December	35,200	88,700 <sup>r</sup>	3,590 <sup>r</sup>	127,000 <sup>r</sup>
January-December	420,000	1,250,000 <sup>r</sup>	43,000 <sup>r</sup>	1,720,000 <sup>r</sup>
2023, January	34,700	89,600	3,590	128,000

<sup>&</sup>lt;sup>e</sup>Estimated. <sup>p</sup>Preliminary. <sup>r</sup>Revised.

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

<sup>&</sup>lt;sup>2</sup>Chemical plants, foundries, ingot makers, and miscellaneous manufacturers. These plants are surveyed by the U.S. Geological Survey on an annual basis; data after 2021 not yet available. Monthly data are estimated based on the monthly average of 2021 annual data.

 $\label{eq:table 8} \text{U.s. Apparent consumption of copper}^1$ 

	Primary refined	Copper in	Refined imports	Refined	Refined stock change	Apparent
Period	copper production	old scrap <sup>2</sup>	for consumption <sup>3</sup>	exports <sup>3</sup>	during period	consumption <sup>4</sup>
2022: <sup>p</sup>						
January	80,400	14,000 <sup>r</sup>	140,000	2,530	15,500	217,000 <sup>r</sup>
February	75,300	12,400 <sup>r</sup>	34,300	3,110	-1,320	120,000 <sup>r</sup>
March	83,500	13,000 <sup>r</sup>	48,700	2,590	1,350	141,000 <sup>r</sup>
April	74,900	12,500 <sup>r</sup>	64,800	2,820	794	149,000 <sup>r</sup>
May	79,100	12,400 <sup>r</sup>	74,300	2,890	-6,470	169,000 <sup>r</sup>
June	76,500	12,600 <sup>r</sup>	75,900	1,720	-2,560	166,000 <sup>r</sup>
July	82,600	11,900 <sup>r</sup>	80,900	1,900	1,560	172,000 <sup>r</sup>
August	81,800	12,100 <sup>r</sup>	36,400	3,060	-9,190	136,000 <sup>r</sup>
September	81,800	12,100 <sup>r</sup>	50,700	2,470	-1,970	144,000 <sup>r</sup>
October	73,600	12,000 <sup>r</sup>	49,700	1,190	-8,330	142,000 <sup>r</sup>
November	69,600	12,100 <sup>r</sup>	37,900	1,430	-10,800	129,000 <sup>r</sup>
December	72,000 <sup>r</sup>	11,400 <sup>r</sup>	38,800	2,100	-12,300 <sup>r</sup>	132,000 <sup>r</sup>
January-December	931,000 <sup>r</sup>	149,000 <sup>r</sup>	733,000	27,800	-33,800 <sup>r</sup>	1,820,000
2023, January	70,600	13,100	39,000	1,190	-4,040	126,000

<sup>&</sup>lt;sup>p</sup>Preliminary. <sup>r</sup>Revised.

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

<sup>&</sup>lt;sup>2</sup>Copper recovered from old scrap (of copper-base and non-copper-base) and converted to refined metal, alloys, and other forms. Includes reported monthly production and estimates for annual reporters based on the monthly average of 2021 annual data. Old scrap consists of copper items used by consumers.

<sup>&</sup>lt;sup>3</sup>Source: U.S. Census Bureau. Includes Harmonized Tariff Schedule (imports) and Schedule B (exports) codes 7403.11.0000, 7403.12.0000, 7403.13.0000, and 7403.19.0000.

<sup>&</sup>lt;sup>4</sup>Primary refined copper production plus copper in old scrap plus refined imports for consumption minus refined exports minus refined stock change during period.

 $\label{eq:table 9} \text{U.s. consumption of purchased copper-base scrap}^{1,\,2}$ 

·	Smelt	ters			Brass	and		·	
	and refi	neries	Ingot ma	kers <sup>e, 3</sup>	wire-roo	l mills <sup>4</sup>	Foundries	, etc. <sup>e, 3</sup>	
Period	New scrap <sup>e</sup>	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	Total
2022: <sup>p</sup>	_								
January	1,730	2,380	933 <sup>r</sup>	3,450 <sup>r</sup>	59,800	4,610	871 <sup>r</sup>	3,040 <sup>r</sup>	76,900 r
February	1,730	1,650	933 <sup>r</sup>	3,450 <sup>r</sup>	56,200	3,720	871 <sup>r</sup>	3,040 <sup>r</sup>	71,600 r
March	1,730	1,870	933 <sup>r</sup>	3,450 <sup>r</sup>	59,200	4,250	871 <sup>r</sup>	3,040 <sup>r</sup>	75,300 <sup>r</sup>
April	1,730	1,620	933 г	3,450 <sup>r</sup>	58,100	3,980	871 <sup>r</sup>	3,040 <sup>r</sup>	73,700 <sup>r</sup>
May	1,730	1,590	933 <sup>r</sup>	3,450 <sup>r</sup>	57,800	3,810	871 <sup>r</sup>	3,040 <sup>r</sup>	73,200 <sup>r</sup>
June	1,730	1,740	933 <sup>r</sup>	3,450 <sup>r</sup>	57,900	3,880	871 <sup>r</sup>	3,040 <sup>r</sup>	73,500 <sup>r</sup>
July	1,730	1,620	933 г	3,450 <sup>r</sup>	58,800	3,220	871 <sup>r</sup>	3,040 <sup>r</sup>	73,600 <sup>r</sup>
August	1,730	1,630	933 г	3,450 <sup>r</sup>	59,500	3,490	871 <sup>r</sup>	3,040 <sup>r</sup>	74,700 r
September	1,730	1,590	933 <sup>r</sup>	3,450 <sup>r</sup>	58,900	3,510	871 <sup>r</sup>	3,040 <sup>r</sup>	74,000 <sup>r</sup>
October	1,730	1,590	933 <sup>r</sup>	3,450 <sup>r</sup>	59,100	3,340	871 <sup>r</sup>	3,040 <sup>r</sup>	74,100 <sup>r</sup>
November	1,730	1,650	933 г	3,450 <sup>r</sup>	59,800	3,420	871 <sup>r</sup>	3,040 <sup>r</sup>	74,900 <sup>r</sup>
December	1,730	1,610	933 г	3,450 <sup>r</sup>	59,900 <sup>r</sup>	2,710	871 <sup>r</sup>	3,040 <sup>r</sup>	74,200 r
January-December	20,700	20,500	11,200 <sup>r</sup>	41,400 <sup>r</sup>	705,000	43,900	10,500 <sup>r</sup>	36,500 <sup>r</sup>	890,000 <sup>r</sup>
2023, January	1,730	1,590	933	3,450	61,700	4,500	871	3,040	77,800

<sup>&</sup>lt;sup>e</sup>Estimated. <sup>p</sup>Preliminary. <sup>r</sup>Revised.

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

<sup>&</sup>lt;sup>2</sup>New scrap refers to material generated during the manufacturing process. Old scrap consists of copper items used by consumers.

<sup>&</sup>lt;sup>3</sup>Plants are surveyed by the U.S. Geological Survey on an annual basis; data after 2021 not yet available. Monthly data are estimated based on the monthly average of 2021 annual data.

<sup>&</sup>lt;sup>4</sup>Consumption at brass and wire-rod mills assumed equal to receipts.

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

(Metric tons, copper content)

					Refined copper			
	Blister and		Wire-rod					Total
Period	anodes	Refineries	mills	Brass mills	Other <sup>e, 2</sup>	COMEX <sup>3</sup>	$LME^4$	refined
2022: <sup>p</sup>								
January	11,800	5,000	10,900	9,530	6,200 <sup>r</sup>	73,300	27,200	132,000
February	13,300	4,870	13,700	9,860	6,200 <sup>r</sup>	63,900	32,300	131,000
March	12,200	3,690	15,400	8,160	6,200 r	67,400	31,300	132,000
April	16,100	4,990	10,600	8,620	6,200 r	75,800	26,800	133,000
May	11,500	3,090	12,000	8,330	6,200 <sup>r</sup>	71,800	25,100	126,000
June	13,100	5,800	11,700	8,330	6,200 <sup>r</sup>	66,700	25,100	124,000
July	12,900	3,980	13,100	8,640	6,200 <sup>r</sup>	55,100	38,400	125,000
August	14,200	4,790	13,100	9,010	6,200 r	46,000	37,100	116,000
September	14,900	5,570	15,500	9,840	6,200 <sup>r</sup>	40,800	36,400	114,000
October	18,500	4,300	19,200	10,400	6,200 <sup>r</sup>	33,400	32,400	106,000
November	14,600	3,470	21,500	10,800	6,200 r	33,400	19,700	95,100
December	13,300	9,100	18,000 r	11,000	6,200 r	31,700	6,850	82,800
2023, January	13,600	9,640	23,500	10,900	6,200	25,400	3,050	78,700

<sup>&</sup>lt;sup>e</sup>Estimated. <sup>p</sup>Preliminary. <sup>r</sup>Revised.

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

<sup>&</sup>lt;sup>2</sup>Chemical plants, foundries, ingot makers, and miscellaneous manufacturers. These plants are surveyed by the U.S. Geological Survey on an annual basis; data after 2021 not yet available. Monthly data are estimated based on yearend 2021 stocks.

<sup>&</sup>lt;sup>3</sup>Commodity Exchange Inc.

<sup>&</sup>lt;sup>4</sup>London Metal Exchange Ltd., U.S. warehouses.

TABLE 11
AVERAGE PRICES FOR REFINED COPPER IN THE UNITED STATES
AND ON THE LONDON METAL EXCHANGE

(Cents per pound)

	COMEX		
	first	U.S. producers	LME
Period	position <sup>1</sup>	cathode <sup>2</sup>	grade A cash <sup>3</sup>
2022:			
January	443.113	451.613	443.364
February	450.211	458.711	450.870
March	468.228	477.228	464.329
April	463.763	473.388	461.863
May	424.929	434.929	424.657
June	412.540	422.540	409.684
July	339.610	350.610	341.513
August	361.500	372.500	361.070
September	348.021	359.021	350.800
October	347.386	358.386	345.649
November	367.683	378.483	364.184
December	381.645	391.895	379.511
January-December	400.719	410.775	399.791
2023, January	412.233	423.233	408.200

<sup>&</sup>lt;sup>1</sup>Listed as "COMEX high grade first position." COMEX refers to the Commodity Exchange Inc.

Source: S&P Global Platts Metals Week.

<sup>&</sup>lt;sup>2</sup>Sum of "COMEX high grade first position" and "NY dealer premium cathode." Reflects the delivered spot price of copper cathode to U.S. consumers by U.S. producers.

<sup>&</sup>lt;sup>3</sup>LME refers to the London Metal Exchange Ltd.

TABLE 12 AVERAGE BUYING PRICES FOR COPPER SCRAP IN THE UNITED STATES

#### (Cents per pound)

			De	ealers
				Red brass
	Brass mills	Refiners	No. 2	turnings and
Period	no. 1 scrap	no. 2 scrap	scrap	borings
2022:	_			
January	433.10	393.50	336.50	235.00
February	440.32	399.84	336.50	225.00
March	459.30	423.17	341.50	217.00
April	454.35	418.85	355.00	211.50
May	414.90	379.40	327.50	196.50
June	401.81	366.31	321.50	185.00
July	329.10	295.60	259.00	172.50
August	350.65	322.65	244.00	153.00
September	335.52	307.81	254.50	148.00
October	333.62	308.71	247.50	148.00
November	356.15	332.15	261.50	150.50
December	371.67	348.57	270.50	155.50
January-December	390.04	358.05	296.29	183.13
2023, January	401.30	379.30	289.00	159.00

Source: Fastmarkets-AMM.

 ${\it TABLE~13} \\ {\it U.s.~imports~for~consumption~of~unmanufactured~copper}^1$ 

(Metric tons, copper content)

	Ore and concentrates <sup>2</sup> 2023		Matte, ash, and precipitates <sup>3</sup> 2023		Blister and	d anodes4	Refined <sup>5</sup>	
Country or						2023		2023
locality	2022	January	2022	January	2022	January	2022	January
Austria							54	
Belgium			384				2	
Canada	11,700		581	20	(6)	(6)	118,000	12,900
Chile							473,000	22,400
China					(6)		897	69
Congo (Kinshasa)							8,910	
Finland					281		39	
France					15		53	6
Germany	(6)		94		(6)	(6)	3,410	282
Hungary	9							
India	11					(6)	57	
Japan	(6)				(6)		1,350	100
Korea, Republic of					1	(6)	10	6
Mexico			25	2	(6)		75,500	1,100
Peru							50,100	2,200
Qatar			43					
Slovakia			14					
Spain			51		(6)			
United Kingdom	(6)		(6)		5	(6)	138	
Zambia							1,230	
Other	(6)		1		4	(6)	11	4
Total	11,700		1,190	22	306	(6)	733,000	39,000

<sup>--</sup> Zero.

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

<sup>&</sup>lt;sup>2</sup>Harmonized Tariff Schedule of the United States (HTS) code 2603.00.0010. Includes copper ore and concentrates only; excludes copper contained in ore and concentrates of other metals.

<sup>&</sup>lt;sup>3</sup>HTS codes 2620.30.0010 and 7401.00.0000. Includes copper matte, ash, and precipitates only; excludes the copper content of mattes and ashes of other metals.

<sup>&</sup>lt;sup>4</sup>HTS code 7402.00.0000.

<sup>&</sup>lt;sup>5</sup>HTS codes 7403.11.0000, 7403.12.0000, 7403.13.0000, and 7403.19.0000.

<sup>&</sup>lt;sup>6</sup>Less than ½ unit.

 $\label{eq:table 14} \text{U.s. EXPORTS OF UNMANUFACTURED COPPER}^1$ 

(Metric tons, copper content)

	Ore and concentrates <sup>2</sup> 2023		Matte, ash, and	l precipitates <sup>3</sup>	Blister and	d anodes <sup>4</sup>	Refined <sup>5</sup>	
Country or			2023		2023		2023	
locality	2022	January	2022	January	2022	January	2022	January
Belgium	70		5,950	285	211	7		
Bulgaria	1,540							
Canada	39,800	3,730	13,300	457	6,740	2,570	14,200	803
China	56,900	3,530	378	39	60		2,350	29
Costa Rica			345				(6)	
Germany	1,500		235	20	244		1	20
India		9	16		1,560		34	18
Israel					115		98	7
Italy					155		10	
Japan	11,000		361	19	20		23	
Korea, Republic of			189		1,570	69	133	7
Madagascar	1,220							
Malaysia	186	10	147		168	19	51	48
Mexico	232,000	24,200	30	802	260	85	7,680	74
Netherlands			59		4		1,070	
Philippines	7,770		(6)		67	3	35	
Poland			270	38				
Singapore			414	20	40	1	22	(6)
Slovakia			1,210	21				
Spain			1,510	320	42		376	99
Taiwan			86		137		25	
Thailand	1		158		94			
Turkey			233	20	20		20	
United Kingdom			4		40	2	1,630	
Other	718	9	194	47	378	3	57	83
Total	352,000	31,500	25,100	2,090	11,900	2,760	27,800	1,190

<sup>--</sup> Zero.

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

<sup>&</sup>lt;sup>2</sup>Schedule B of the United States code 2603.00.0010. Includes copper ore and concentrates only; excludes copper contained in ore and concentrates of other metals.

<sup>&</sup>lt;sup>3</sup>Schedule B codes 2620.30.0000, 7401.00.0010, and 7401.00.0050. Includes copper matte, ash, and precipitates only; excludes the copper content of mattes and ashes of other metals.

<sup>&</sup>lt;sup>4</sup>Schedule B code 7402.00.0000.

<sup>&</sup>lt;sup>5</sup>Schedule B codes 7403.11.0000, 7403.12.0000, 7403.13.0000, and 7403.19.0000.

<sup>&</sup>lt;sup>6</sup>Less than ½ unit.

TABLE 15 U.S. IMPORTS FOR CONSUMPTION OF COPPER  $\mathsf{SCRAP}^1$ 

Country or locality  Antigua and Barbuda  Bahamas, The  Barbados  Bermuda  Bolivia  Brazil  Canada  Cayman Islands  Colombia	2022 12 39 14 17,600	2023 January    	2022 188 612 326 90 94 69	2023 January 11 61
Antigua and Barbuda Bahamas, The Barbados Bermuda Bolivia Brazil Canada Cayman Islands	  12 39 14 17,600	   	188 612 326 90 94	11 61
Bahamas, The Barbados Bermuda Bolivia Brazil Canada Cayman Islands	12 39 14 17,600	   	612 326 90 94	61
Barbados Bermuda Bolivia Brazil Canada Cayman Islands	39 14 17,600		326 90 94	
Bermuda Bolivia Brazil Canada Cayman Islands	39 14 17,600		90 94	6
Bolivia Brazil Canada Cayman Islands	39 14 17,600		94	
Brazil Canada Cayman Islands	14 17,600			
Canada Cayman Islands	17,600		60	
Cayman Islands		1 (70	09	
		1,670	41,800	2,890
Colombia			243	3
Cololliola	196	20	106	
Costa Rica	712	32	1,350	68
Dominican Republic	1,350	211	2,090	115
Ecuador	24		57	
El Salvador			1,090	57
Germany	260	31	50	
Grenada			72	
Guatemala			309	
Haiti			104	
Honduras	24		787	80
Jamaica	7		461	20
Mexico	12,200	1,130	42,900	3,350
Nicaragua			194	
Panama	1,190	96	405	28
Peru			225	
Saudi Arabia			134	
Sint Maarten	1		54	24
Saint Lucia	25		269	18
Saint Vincent and the Grenadines			91	
Suriname	360	50	69	15
Uruguay	80		32	
Vietnam	62		50	
Other	75	2	401	11
Total	34,200	3,240	94,700	6,760

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

<sup>&</sup>lt;sup>2</sup>Harmonized Tariff Schedule of the United States (HTS) codes 7404.00.3020 and 7404.00.6020.

 $<sup>^3\</sup>mathrm{HTS}\ codes\ 7404.00.3045,\ 7404.00.3055,\ 7404.00.3065,\ 7404.00.3090,\ 7404.00.6045,\ 7404.00.6055,$ 7404.00.6065, and 7404.00.6090.

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

		Unalle	oyed <sup>2</sup>	Alloyed <sup>3</sup>			
		2023				2023	
Country or		No. 1	No. 2	Other		Segregated	Unsegregated
locality	2022	January	January	January	2022	January	January
Austria	1,300	19	39		1,210	114	124
Belgium	33,100	858	582	701	8,990	19	678
Canada	60,900			6,350	45,800		2,390
China	261,000	6,270	4,990	10,900	32,100	1,320	1,340
Germany	15,300	1,130	37	205	15,700	36	982
Greece	8,910	121		79	2,170	21	221
Hong Kong	16,700	40	522	401	3,900	20	398
India	19,800	608	42	460	66,200	1,750	2,980
Japan	25,400	501	1,010	102	6,910	97	778
Korea, Republic of	42,000	1,050	583	929	11,300	471	463
Malaysia	25,000	1,100	338	855	41,700	537	2,390
Mexico	3,120	208	1	34	8,380	18	249
Netherlands	7,620	66	41	289	1,540		
Pakistan	1,490	40			26,300	80	1,300
Philippines	1,780	100		26	817		53
Poland	15,700	320		1,640	1,030	20	19
Singapore	1,210	539			264		
Slovakia	1,540	55			2,500		
Spain	3,900	164		136	7,380	99	314
Sweden	581				1,940		57
Taiwan	13,100	59	415	430	4,470		539
Thailand	23,900	405	19	1,690	39,500	355	2,860
Turkey	1,040	300			2,320		
United Arab Emirates	766	51			5,810		762
Vietnam	159				929		
Other	2,200	73		119	2,710		192
Total	588,000	14,100	8,620	25,300	342,000	4,970	19,100

<sup>--</sup> Zero.

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

<sup>&</sup>lt;sup>2</sup>Schedule B of the United States codes 7404.00.0010 and 7404.00.0015 (no. 1), 7404.00.0025 (no. 2), and 7404.00.0030 (other).

<sup>&</sup>lt;sup>3</sup>Schedule B codes for segregated alloyed copper scrap are 7404.00.0041, 7404.00.0046, 7404.00.0051, 7404.00.0056,

<sup>7404.00.0061</sup>, 7404.00.0066, and 7404.00.0075. Schedule B codes for unsegregated alloyed copper scrap are 7404.00.0085 and 7404.00.0095.