

Mineral Industry Surveys

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COPPER IN FEBRUARY 2011

Average daily mine production of copper in February 2011 rose slightly from that in January and was essentially equal to that in February 2010, according to data compiled by the U.S. Geological Survey. Average daily smelter production in February 2011 was 11% lower than that in January, with all three smelters reporting lower output. Downstream, average daily electrolytic refined copper production in February was down by about 6% from that in January. The average daily production of total refined copper in February declined slightly from that in January and was at the lowest level in more than 40 years. Average daily consumption of refined copper, however, rose by about 8% and was about 4% higher than that in February 2010.

Update

According to preliminary data released by the International Copper Study Group, world apparent consumption of copper increased by 2.4% in the first quarter of 2011 compared with that in the first quarter of 2010. Apparent consumption in China, the leading global copper consumer, accounting for about 38% of global consumption in 2010, declined by about 6%.

Consumption in the European Union, Japan, and the United States, which combined accounted for about 30% of global consumption in 2010, rose by about 4% each. In Russia, which accounted for about 2% of global consumption in 2010, apparent consumption of refined copper increased by 90%. Increased Russian consumption may be attributed to reinstatement of a refined copper export tax that encouraged conversion of cathode to wirerod before exporting. Mine and refined production of copper was about 2.5% and 1.5% higher, respectively, during the first quarter of 2011 than that in the same period of 2010. Global apparent consumption of copper during the first quarter of 2010 exceeded refined production by about 33,000 metric tons (t) (16,000 t seasonally adjusted) (International Copper Study Group, 2011).

Reference Cited

International Copper Study Group, 2011, Copper—Preliminary data for March 2011: Lisbon, Portugal, International Copper Study Group press release, June 21, 1 p.

TABLE 1
SALIENT STATISTICS OF THE COPPER INDUSTRY IN THE UNITED STATES¹

(Metric tons, unless otherwise specified)

	Source table ²	2010 ^p	2011		
			January	February	January- February
Production:					
Primary:					
Mine, recoverable	(2)	1,110,000	90,200	82,500	173,000
Refinery:					
Electrolytic, domestic and foreign	(4)	627,000	49,500	42,200	91,600
Electrowon	(4)	428,000	33,700	31,400	65,100
Total	(4)	1,060,000	83,200	73,500	157,000
Secondary recoverable copper:					
Refineries	(5)	37,700	3,830	2,970	6,800
Ingot makers ³	(5)	73,900	6,160	6,160	12,300
Brass and wire-rod mills	(5)	565,000	50,400 ^r	46,600	97,100
Foundries, etc. ³	(5)	46,100	3,840	3,840	7,680
Smelter, total	(3)	601,000	52,100	42,000	94,100
Consumption:					
Apparent	(8)	1,740,000	149,000	125,000	274,000
Refined (reported)	(7)	1,760,000	152,000	148,000	301,000
Purchased copper-base scrap	(9)	915,000	80,900 ^r	76,000	157,000
Stocks at end of period:					
Total refined	(10)	384,000	382,000	382,000	382,000
Blister, etc.	(10)	21,100	25,200	24,800	24,800
Prices, U.S. producer cathode (cents per pound) ⁴	(11)	348.337	440.254	454.992	447.623
Imports:⁵					
Ore and concentrate ⁶	(13)	1,390	--	NA	-- ⁷
Refined	(13)	605,000	57,400	NA	57,400 ⁷
Exports:⁵					
Ore and concentrate ⁶	(14)	137,000	17,000	NA	17,000 ⁷
Refined	(14)	78,300	1,640	NA	1,640 ⁷

^pPreliminary. ^rRevised. NA Not available. -- Zero.

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

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

³Monthly data estimated based on 2009 monthly average.

⁴Source: Platts Metals Week.

⁵Source: U.S. Census Bureau.

⁶Copper content.

⁷Includes data for January only; February 2011 data were not available at time of publication.

TABLE 2
MINE PRODUCTION OF RECOVERABLE COPPER IN THE UNITED STATES¹

(Metric tons)

Period	Recoverable copper			Contained copper		
	Arizona	Others ²	Total	Electrowon	Concentrates ³	Total
2010: ^P						
February	53,100	29,600	82,700	36,400	47,600	84,000
March	56,600	36,500	93,200	36,900	57,700	94,600
April	56,600	33,300	89,900	33,900	57,400	91,300
May	61,500	30,400	91,900	36,500	56,900	93,400
June	58,600	27,500	86,000	34,600	52,700	87,400
July	59,100	35,300	94,400	36,000	60,200	96,200
August	56,200	38,200	94,400	34,500	61,400	95,900
September	57,700	32,100	89,800	33,600	58,000	91,600
October	60,000	39,000	99,100	35,000	66,000	101,000
November	57,600	35,600	93,100	34,600	60,600	95,200
December	63,600	31,500	95,100	35,400	61,900	97,300
January-December	703,000	406,000	1,110,000	428,000	701,000	1,130,000
2011:						
January	57,300	32,900	90,200	33,700	58,400	92,100
February	53,000	29,600	82,500	31,400	53,100	84,500
January-February	110,000	62,400	173,000	65,100	112,000	177,000

^PPreliminary.

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

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

³Includes copper content of precipitates and other metal concentrates.

TABLE 3
COPPER PRODUCED AT SMELTERS IN
THE UNITED STATES, BY SOURCE^{1,2}

(Metric tons, copper content)

Period	Anode production
2010: ^P	
February	43,500
March	52,000
April	46,100
May	36,400
June	57,100
July	59,000
August	60,600
September	50,900
October	47,400
November	46,500
December	50,600
January-December	601,000
2011:	
January	52,100
February	42,000
January-February	94,100

^PPreliminary.

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

²Data are rounded to no more than three significant digits; may not add to total shown.

TABLE 4
PRODUCTION OF REFINED COPPER, BY SOURCE AND METHOD OF RECOVERY¹

(Metric tons)

Period	Primary materials			Scrap	Total refined
	Electrolytically refined ²		Total		
	Electrowon				
2010:^P					
February	51,800	36,400	88,200	3,170	91,300
March	55,200	36,900	92,100	2,830	95,000
April	52,100	33,900	85,900	3,290	89,200
May	45,600	36,500	82,100	2,960	85,100
June	51,000	34,600	85,700	3,280	88,900
July	56,400	36,000	92,400	3,180	95,600
August	56,500	34,500	91,000	3,450	94,400
September	57,200	33,600	90,800	3,330	94,200
October	51,800	35,000	86,900	3,240	90,100
November	46,300	34,600	80,900	3,200	84,100
December	50,900	35,400	86,300	2,850	89,200
January-December	627,000	428,000	1,060,000	37,700	1,090,000
2011:					
January	49,500	33,700	83,200	3,830	87,100
February	42,200	31,400	73,500	2,970	76,500
January-February	91,600	65,100	157,000	6,800	164,000

^PPreliminary.

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

²From domestic and foreign source materials.

TABLE 5
COPPER RECOVERABLE IN UNALLOYED AND ALLOYED FORM FROM PURCHASED COPPER-BASE SCRAP¹

(Metric tons, copper content)

Period	Refineries ²		Ingot makers ³		Brass and wire-rod mills		Foundries, etc. ³		Total ⁴
	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	
2010:^P									
February	1,360	1,810	958	5,200	45,900	1,420	2,580	1,260	60,500
March	1,320	1,510	958	5,200	48,500	1,420	2,580	1,260	62,800
April	1,730	1,550	958	5,200	45,300	1,420	2,580	1,260	60,000
May	1,470	1,490	958	5,200	44,900	1,420	2,580	1,260	59,300
June	1,720	1,560	958	5,200	51,400	1,420	2,580	1,260	66,100
July	1,650	1,530	958	5,200	43,700	1,460	2,580	1,260	58,300
August	1,840	1,620	958	5,200	46,600	1,460	2,580	1,260	61,500
September	1,770	1,560	958	5,200	45,900	1,460	2,580	1,260	60,700
October	1,700	1,540	958	5,200	45,400	1,420	2,580	1,260	60,000
November	1,660	1,540	958	5,200	43,100	1,420	2,580	1,260	57,700
December	1,390	1,470	958	5,200	39,100	1,420	2,580	1,260	53,400
January-December	19,100	18,600	11,500	62,400	548,000	17,200	30,900	15,200	722,000
2011:									
January	2,040	1,790	958	5,200	48,900 ^r	1,500	2,580	1,260	64,300 ^r
February	1,460	1,500	958	5,200	45,200	1,480	2,580	1,260	59,600
January-February	3,500	3,300	1,920	10,400	94,100	2,980	5,150	2,530	124,000

^PPreliminary. ^rRevised.

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

²Electrolytically refined and fire-refined scrap based on source of material at smelter level.

³Monthly data and 2010 cumulative data estimated based on 2009 annual data.

⁴Does not include an estimate, based on reported 2009 data, of 2,450 tons per month from new scrap and 1,410 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 SEMIFABRICATES¹

(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
2010: ^P						
February	82,100	101,000	83,500	98,800	31,200	25,900
March	81,900	112,000	82,900	113,000	30,100	24,800
April	79,500	106,000	79,700	105,000	29,900	26,100
May	77,900	103,000	76,800	104,000	31,000	25,100
June	80,800	104,000	81,400	111,000	30,500	18,400
July	75,900	112,000	77,600	108,000	28,800	22,200
August	81,100	111,000	81,400	110,000	28,600	22,600
September	81,200	110,000	80,300	109,000	29,500	23,400
October	80,600	106,000	80,800	107,000	29,300	22,000
November	78,300	93,500	77,600	100,000	30,000	15,100
December	75,100	90,100	74,900	80,900	30,100	24,300
January-December	956,000	1,250,000	958,000	1,240,000	30,100	24,300
2011:						
January	80,700	109,000	81,000	110,000	29,800	23,800
February	77,900	107,000	78,800	103,000	28,800	28,300
January-February	159,000	216,000	160,000	212,000	28,800	28,300

^PPreliminary.

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

TABLE 7
 CONSUMPTION OF REFINED COPPER¹

(Metric tons)

Period and item	Brass mills	Wire-rod mills	Other plants ²	Total
2010: ^P				
February	39,600	98,900	4,500	143,000
March:	39,000	110,000	4,500	154,000
April	40,700	108,000	4,500	153,000
May	38,400	105,000	4,500	148,000
June	36,600	107,000	4,500	148,000
July	39,000	113,000	4,500	156,000
August	37,300	109,000	4,500	151,000
September	37,700	109,000	4,500	151,000
October	38,300	104,000	4,500	147,000
November	38,400	94,400	4,500	137,000
December	35,800	90,000	4,500	130,000
January-December	459,000	1,250,000	54,000	1,760,000
2011:				
January	37,500	110,000	4,500	152,000
February:				
Cathodes	24,800	108,000	1,090	134,000
Wire bars	--	--	(3)	(3)
Ingots and ingot bars	1,240	--	1,400	2,640
Cakes and slabs	(3)	--	(3)	(3)
Billets and other	9,840	--	2,010	11,900
Total	35,900	108,000	4,500	148,000
January-February	73,400	218,000	9,000	301,000

^PPreliminary. -- Zero.

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

²Consumption by ingot makers, chemical plants, foundries, and miscellaneous manufacturers is estimated based on 2009 annual data.

³Withheld to avoid disclosing company proprietary data; included with "Billets and other."

TABLE 8
U.S. APPARENT CONSUMPTION OF COPPER¹

(Metric tons)

Period	Refined copper production	Copper in old scrap ²	Refined general imports ³	Refined exports ³	Stock change during period	Apparent consumption
2010: ^P						
February	88,200	11,100	60,400	13,900	20,100	126,000
March	92,100	10,800	44,700	13,600	(19,600)	154,000
April	85,900	10,800	42,900	10,400	(12,200)	141,000
May	82,100	10,800	40,200	4,670	(20,600)	149,000
June	85,700	10,800	55,200	4,520	(3,790)	151,000
July	92,400	10,900	63,400	4,200	(8,520)	171,000
August	91,000	11,000	35,300	5,250	(15,200)	147,000
September	90,800	10,900	31,300	6,980	(26,100)	152,000
October	86,900	10,800	40,500	1,540	(17,000)	154,000
November	80,900	10,800	34,400	1,220	(8,180)	133,000
December	86,300	10,800	63,300	5,690	28,000	127,000
January-December	1,060,000	130,000	583,000	78,300	(50,500)	1,740,000
2011:						
January	83,200	11,200	54,200	1,640 ^r	(1,700)	149,000
February	73,500	10,900	46,100	5,010	432	125,000
January-February	157,000	22,000	100,000	6,650	(1,270)	274,000

^PPreliminary. ^rRevised.

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

²Includes 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 2009 data.

³Source: U.S. Census Bureau.

TABLE 9
CONSUMPTION OF PURCHASED COPPER-BASE SCRAP¹

(Metric tons, gross weight)

Period	Smelters and refineries		Ingot makers ²		Brass and wire-rod mills ³		Foundries, etc. ²		Total scrap used
	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	
2010: ^P									
February	1,760	1,510	2,880	6,460	56,800	1,430	4,020	1,520	76,400
March	1,420	1,500	2,880	6,460	60,800	1,430	4,020	1,520	80,000
April	1,790	1,600	2,880	6,460	56,200	1,430	4,020	1,520	75,900
May	1,520	1,530	2,880	6,460	56,100	1,430	4,020	1,520	75,500
June	1,780	1,600	2,880	6,460	64,400	1,430	4,020	1,520	84,100
July	1,700	1,580	2,880	6,460	54,600	1,500	4,020	1,520	74,300
August	1,930	1,630	2,880	6,460	57,500	1,500	4,020	1,520	77,400
September	1,830	1,610	2,880	6,460	57,100	1,500	4,020	1,520	76,900
October	1,750	1,590	2,880	6,460	56,200	1,430	4,020	1,520	75,900
November	1,710	1,580	2,880	6,460	53,700	1,430	4,020	1,520	73,300
December	1,430	1,510	2,880	6,460	48,400	1,430	4,020	1,520	67,700
January-December	20,100	18,800	34,500	77,600	681,000	17,500	48,200	18,300	915,000
2011:									
January	2,270	1,680	2,880	6,460	60,500 ^r	1,570	4,020	1,520	80,900 ^r
February	1,530	1,530	2,880	6,460	56,500	1,540	4,020	1,520	76,000
January-February	3,800	3,210	5,750	12,900	117,000	3,100	8,040	3,040	157,000

^PPreliminary. ^rRevised.

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

²Monthly data estimated from 2009 annual data.

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

TABLE 10
COPPER STOCKS AT END OF PERIOD¹

(Metric tons)

Period	Crude copper ²	Refined copper					Total refined	
		Refineries ³	Wire-rod mills ³	Brass mills ³	Other ⁴	Comex		LME ⁵
2010: ^p								
February	25,200	20,600	26,200	6,720	4,290	93,700	335,000	487,000
March	25,500	14,100	19,400	6,540	4,290	91,700	331,000	467,000
April	24,400	13,200	10,400	7,170	4,290	91,700	328,000	455,000
May	23,800	5,460	9,150	7,130	4,290	92,500	316,000	434,000
June	18,100	6,490	12,600	8,470	4,290	92,500	306,000	431,000
July	23,700	5,670	15,800	7,070	4,290	91,400	298,000	422,000
August	22,400	5,970	10,100	8,720	4,290	86,500	291,000	407,000
September	19,900	5,780	7,910	8,140	4,290	77,000	278,000	381,000
October	17,600	4,110	9,600	6,080	4,290	68,100	272,000	364,000
November	23,400	4,350	11,900	6,040	4,290	65,100	264,000	356,000
December	21,100	10,300	19,700	6,400	4,290	58,600	284,000	384,000
2011:								
January	25,200	11,700	17,600	7,470	4,290	64,100	277,000	382,000
February	24,800	9,220	12,800	8,420	4,290	75,200	273,000	382,000

^pPreliminary.

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 reported and 2009 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)

Period	U.S. producers delivered price cathode ¹	Comex first position ²	LME cash price Grade A
2010:			
February	317.744	311.918	310.605
March	345.367	339.541	338.487
April	357.745	351.919	351.279
May	316.404	310.578	310.130
June	299.533	293.707	294.774
July	312.252	306.426	305.477
August	337.808	331.982	330.353
September	357.624	351.798	349.671
October	383.138	377.312	376.111
November	390.033	384.207	384.153
December	422.799	416.973	414.885
January-December	348.337	342.511	341.744
2011:			
January	440.254	434.428	433.403
February	454.992	449.166	447.567
January-February	447.623	441.797	440.485

¹Listed as "U.S. producer cathode."

²Listed as "Comex high grade first position."

Source: Platts Metals Week.

TABLE 12
NEW YORK AVERAGE BUYING PRICES FOR COPPER SCRAP

(Cents per pound)

Month	Brass mills No. 1 scrap	Refiners No. 2 scrap	Dealers (New York)	
			No. 2 Scrap	Red brass turnings and borings
2010:				
February	303.89	282.32	225.92	160.00
March	331.83	310.04	263.37	173.91
April	343.18	322.32	280.68	180.00
May	304.00	273.90	249.50	163.00
June	291.00	264.33	222.50	155.00
July	299.57	275.33	219.64	153.57
August	321.05	299.18	260.68	165.00
September	342.62	317.67	265.36	165.00
October	366.33	332.33	278.93	172.62
November	370.45	327.60	282.50	175.00
December	304.89	272.26	229.61	150.00
January-December	325.19	297.67	252.40	164.12
2011:				
January	417.40	364.60	291.25	176.25
February	432.47	375.63	317.50	195.00
January-February	424.94	370.12	304.38	185.63

Source: American Metal Market.

TABLE 13
U.S. IMPORTS FOR CONSUMPTION OF COPPER (UNMANUFACTURED), BY CLASS¹

(Metric tons, copper content)

Country or territory	Ore and concentrate		Matte, ash, and precipitates		Blister and anodes		Refined	
	2011		2011		2011		2011	
	2010	January	2010	January	2010	January	2010	January
Belgium	9	--	47	--	--	--	(2)	1
Brazil	--	--	--	--	--	--	1,980	--
Canada	1,270	--	310	4	21,700	--	168,000	15,100
Chile	--	--	--	--	--	--	308,000	28,000
Finland	--	--	--	--	348	17	1	--
Germany	--	--	--	--	(2)	--	3,180	213
Japan	--	--	3	--	15	1	4,990	290
Kuwait	--	--	138	--	--	--	--	--
Mexico	17	--	--	--	3,990	--	19,200	5,870
Netherlands	87	--	136	--	3	--	--	--
Peru	--	--	--	--	--	--	97,100	7,680
Taiwan	(2)	--	(2)	--	--	--	1	(2)
Other	14	--	206	24	160	1	2,400	243
Total	1,390	--	840	28	26,300	19	605,000	57,400

-- Zero.

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

²Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 14
U.S. EXPORTS OF COPPER (UNMANUFACTURED), BY CLASS¹

(Metric tons, copper content)

Country or territory	Ore and concentrate		Matte, ash and precipitates		Blister and anodes		Refined	
	2011		2011		2011		2011	
	2010	January	2010	January	2010	January	2010	January
Canada	12,800	880	41,400	2,210	6,010	204	8,030	100
China	82,300	5,240	455	54	294	20	34,300	82
Germany	18	9	846	--	2,160	130	30	--
Hong Kong	--	--	--	--	1,740	99	4,690	--
Italy	--	--	39	--	60	21	12,300	454
Japan	9,610	4,200	100	--	1,920	51	39	2
Korea, Republic of	3,100	--	--	--	659	43	113	1
Mexico	24,700	6,690	--	--	670	3	16,100	930
Singapore	(2)	--	--	--	107	20	2	--
Spain	--	--	122	--	140	20	20	--
Sweden	--	--	--	--	9	--	--	--
Switzerland	3,730	--	--	--	22	--	5	--
Taiwan	1	--	--	--	454	21	800	--
Other	304	2	969	58	2,620	200	1,900	75
Total	137,000	17,000	44,000	2,330	16,900	832	78,300	1,640

-- Zero.

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

²Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 15
U.S. COPPER SCRAP IMPORTS¹

(Metric tons, gross weight)

Country or territory	Unalloyed		Alloyed	
	2011		2011	
	2010	January	2010	January
Canada	9,010	1,490	32,500	2,350
Chile	--	--	80	--
Costa Rica	867	82	2,100	156
Germany	28	2	24	6
Guatemala	651	53	1,070	194
Honduras	20	--	701	74
Jamaica	237	8	361	7
Japan	14	--	9	--
Mexico	5,850	493	29,900	2,350
Nicaragua	1,270	67	1,330	76
Other	3,440	383	6,340	874
Total	21,400	2,570	74,500	6,090

-- Zero.

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

Source: U.S. Census Bureau.

TABLE 16
U.S. COPPER SCRAP EXPORTS¹

(Metric tons, gross weight)

Country or territory	Unalloyed				Alloyed		
	2010	2011			2010	2011	
		No. 1 January	No. 2 January	Other January		Segregated January	Unsegregated January
Belgium	11,000	489	807	117	19,900	178	1,310
Canada	15,500	--	--	1,390	29,900	186	2,280
China	247,000	2,570	13,200	7,030	512,000	17,200	19,800
Germany	4,190	264	81	7	9,570	117	1,230
Hong Kong	10,300	82	282	39	44,500	880	939
India	965	--	--	94	17,900	535	334
Japan	7,180	116	37	193	9,900	448	118
Korea, Republic of	13,300	281	741	483	17,600	1,340	40
Mexico	4,090	107	290	41	7,090	15	979
Spain	2,890	257	565	77	8,630	203	860
Taiwan	2,940	50	203	--	2,790	43	60
Thailand	924	--	--	--	413	--	--
Other	12,900	2,410	509	39	19,700	570	2,020
Total	334,000	6,630	16,700	9,510	699,000	21,700	30,000

-- Zero.

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

Source: U.S. Census Bureau.