

# Mineral Industry Surveys

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# **COBALT IN FEBRUARY 2022**

The amount of cobalt contained in U.S. imports of cobalt metals and chemicals in February 2022 was 22% less than that imported during January 2022. For the first 2 months of 2022, the amount of cobalt contained in imports was 41% more than that imported during the same period in 2021 (table 2). The amount of cobalt contained in U.S. exports of unwrought cobalt and chemicals in February 2022 was 36% less than that exported during January 2022 and during the first 2 months of 2022, the amount exported was 16% less than that exported during the same period in 2021 (table 4).

### **Prices**

During the past 2 years, cobalt prices have trended upward and London Metal Exchange (LME) stocks have trended downward (fig. 1, table 1). In February, the monthly average U.S. spot cobalt price increased slightly from that in January 2022 and was 50% higher than that in February 2021. The monthly average LME cash mean price increased slightly from

that in January 2022 and was 51% higher than that in February 2021. The following listed prices are for cobalt metal in February, in dollars per pound.

Type	Price range	Average price
U.S. spot <sup>1</sup>	33.75–35.50	34.63
LME cash mean <sup>2</sup>	31.96-33.33	32.34

<sup>1</sup>Source: S&P Global Platts Metals Week, minimum 99.8% cobalt cathode. <sup>2</sup>London Metal Exchange, mean of the cash buyer and cash seller price, minimum 99.3% cobalt briquettes, cathode, ingot, or rounds (converted from dollars per metric ton and rounded to the nearest cent).

## **Industry News**

U.S. cobalt producer Missouri Cobalt, LLC announced that it had changed the name of its parent company to United States Strategic Metals, LLC to demonstrate the company's intention to become a domestic supplier of strategic metals for clean energy. Missouri Cobalt also announced that it entered a

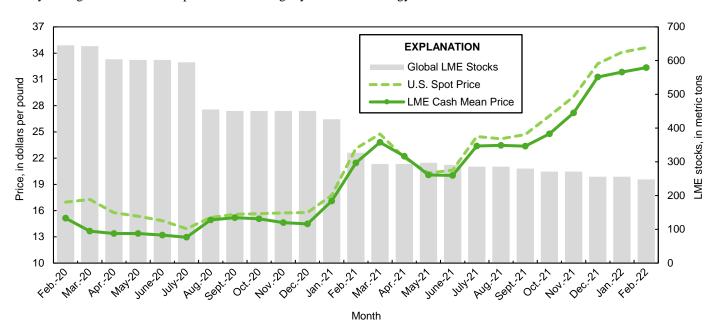


Figure 1. Global LME cobalt stocks, average U.S. spot cobalt prices, and average LME cash mean cobalt prices for February 2020 through February 2022. Sources: S&P Global Platts Metals Week and London Metal Exchange.

strategic global marketing relationship with Glencore plc, a leading global commodity producer and marketer headquartered in Baar, Switzerland. The relationship included a long-term offtake agreement for 100% of Missouri Cobalt's products, including cobalt and nickel sulfates, lithium products, and copper cathode from its hydrometallurgical plant, which was under construction. Missouri Cobalt and Glencore also planned to explore other commercial arrangements, such as a recycling and raw materials sourcing agreement for the hydrometallurgical plant (Missouri Cobalt, LLC, 2022).

Since 2019, Missouri Cobalt has processed tailings generated by previous mining of lead and other metals at the Madison Mine near Fredericktown, MO, and produced a bulk concentrate containing cobalt, copper, and nickel (U.S. Environmental Protection Agency, 2019; Missouri Cobalt, LLC, 2021). In 2021, the company announced that it was in the final stage of constructing a hydrometallurgical plant to produce battery-grade cobalt and nickel, which the company expected to begin production in the third quarter of 2022 (Missouri Cobalt, LLC, 2021, 2022).

### **References Cited**

- Missouri Cobalt, LLC, 2021, Missouri Cobalt nears completion of key facility, advancing its leadership goal in domestic battery-grade cobalt and nickel: St. Louis, MO, PRNewswire, June 30. (Accessed May 16, 2022, at https://www.prnewswire.com/news-releases/missouri-cobalt-nears-completion-of-key-facility-advancing-its-leadership-goal-in-domestic-battery-grade-cobalt-and-nickel-301323342.html.)
- Missouri Cobalt, LLC, 2022, Missouri Cobalt Holdings changes name to United States Strategic Metals; announces strategic global marketing relationship with Glencore: St. Louis, MO, PRNewswire, February 9. (Accessed May 16, 2022, at https://www.prnewswire.com/news-releases/missouri-cobalt-holdings-changes-name-to-united-states-strategic-metals-announces-strategic-global-marketing-relationship-with-glencore-301478414.html.)
- U.S. Environmental Protection Agency, 2019, "Cobalt mine" in Fredericktown, Missouri, is focus of EPA administrator and Rep. Jason Smith recognition event: Fredericktown, MO, U.S. Environmental Protection Agency news release, July 31. (Accessed May 16, 2022, at https://www.epa.gov/newsreleases/cobalt-mine-fredericktown-missourifocus-epa-administrator-and-rep-jason-smith.)

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TABLE 1 REPORTED STOCKS OF COBALT METAL, END OF PERIOD

(Metric tons, contained cobalt)

		LME <sup>1</sup>				
	U.S.	U.S.	Non-U.S.			
Period	Government <sup>2</sup>	warehouse	warehouse	Total		
2021:						
February	302	73	254	327		
March	302	50	244	294		
April	302	50	244	294		
May	302	50	247	297		
June	302	50	241	291		
July	302	50	236	286		
August	302	50	236	286		
September	302	50	230	280		
October	302	50	221	271		
November	302	50	221	271		
December	302	50	206	256		
2022:						
January	302	50	206	256		
February	302	54	194	248		

<sup>&</sup>lt;sup>1</sup>London Metal Exchange.
<sup>2</sup>Data from Defense Logistics Agency Strategic Materials.

 ${\it TABLE~2}$  U.S. IMPORTS FOR CONSUMPTION OF COBALT, BY COUNTRY OR LOCALITY  $^1$ 

	36.	. 2	Oxides and l	videovidos	G 1: 1	. 3	T-4-11-14	Cobalt
	Gross Meta	ıls		iyaroxiaes	Salts and co	mpounds	Total cobalt	content,
Period and country or locality of origin	weight (metric tons)	Value <sup>4</sup> (thousands)	Gross weight (metric tons)	Value <sup>4</sup> (thousands)	Gross weight (metric tons)	Value <sup>4</sup> (thousands)	content for the period <sup>5</sup> (metric tons)	year to date <sup>5, 6</sup> (metric tons)
2021:								
February	223	\$7,880	175	\$4,170	179	\$2,170	409	1,080
March	1,000	39,900	176	5,300	269	2,740	1,210	2,290
April	784	32,300	159	5,540	298	3,860	985	3,280
May	508	21,800	172	6,370	335	4,430	722	4,000
June	740	31,200	236	7,410	392	4,130	1,020	5,020
July	437	20,700	202	6,600	330	3,320	675	5,690
August	801	37,800	187	6,620	216	2,300	1,000	6,690
September	577	28,500	174	6,590	199	3,070	766	7,460
October	722	35,200	168	6,040	309	4,160	937	8,400
November	475	25,500	267	10,100	190	2,820	725	9,120
December	440	25,500	169	6,410	410	5,080	679	9,800
January–February	729	24,800	313	7,770	383	4,540	1,080	XX
January-December	7,210	323,000	2,220	74,700	3,330	40,500	9,800	XX
2022:								
January	754	44,600	84	3,540	148	2,860	859	859
February:				•		•		
Australia								8
Belgium	(7)	7	43	2,430	3	61	32	32
Brazil					101	565	29	35
Canada	57	4,120			1	14	58	90
China	11	234	3	89			13	18
Finland	2	76	100	4,150	187	2,490	134	223
Germany	5	368					5	10
Japan	46	2,540					46	218
Madagascar	42	3,100					42	42
Norway	159	8,470					159	634
Russia	99	4,750					99	129
Taiwan					16	251	4	18
Turkey	12	368					12	12
United Kingdom	7	766	15	790	74	408	36	55
Other			(7)	3	(7)	2	(7)	3
Total	440	24,800	161	7,460	382	3,790	667	1,530
January-February	1,190	69,400	245	11,000	530	6,660	1,530	XX

XX Not applicable. -- 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>Unwrought cobalt, excluding alloys; includes cobalt cathode and cobalt metal powder; may include intermediate products of cobalt metallurgy.

<sup>&</sup>lt;sup>3</sup>Includes cobalt acetates, cobalt carbonates, cobalt chlorides, and cobalt sulfates.

<sup>&</sup>lt;sup>4</sup>Customs value.

<sup>&</sup>lt;sup>5</sup>Estimated from gross weights.

<sup>&</sup>lt;sup>6</sup>May include revisions to previously published data.

<sup>&</sup>lt;sup>7</sup>Less than ½ unit.

 ${\it TABLE~3}$  U.S. IMPORTS FOR CONSUMPTION OF ADDITIONAL COBALT MATERIALS, BY COUNTRY OR LOCALITY  $^1$ 

	Unwrought c	obalt allovs	Cobalt waste	e and scrap	Wrought cobalt and cobalt articles		
	Gross		Gross		Gross		
Period and country or	weight	Value <sup>2</sup>	weight	Value <sup>2</sup>	weight	Value <sup>2</sup>	
locality of origin	(metric tons)	(thousands)	(metric tons)	(thousands)	(metric tons)	(thousands)	
2021:	( ,	(* * * * * * * * * * * * * * * * * * *	( 22 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	(1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	( ,	(* * * * * * * * * * * * * * * * * * *	
February	30	\$1,230	96	\$1,170	17	\$2,990	
March	15	749	127	1,210	16	3,370	
April	4	232	108	1,400	37	3,040	
May	3	166	145	1,840	9	3,270	
June	11	546	149	1,480	22	3,530	
July	13	649	136	1,870	25	4,220	
August	3	123	128	1,680	51	4,570	
September	11	476	99	1,590	34	5,000	
October	20	1,110	160	2,300	27	4,480	
November	17	838	188	2,710	24	4,150	
December	30	1,460	135	1,200	32	4,710	
January–February	83	3,450	180	2,500	37	5,520	
January-December	210	9,800	1,560	19,800	315	45,800	
2022:							
January	51	2,440	163	1,840	53	5,770	
February:							
Belgium	1	58	10	407			
Canada			15	212	3	706	
France			11	5	2	760	
Germany	(3)	67			2	259	
Ireland			15	11	(3)	35	
Japan	(3)	21	4	107	(3)	86	
United Kingdom	17	870	24	652	6	783	
Other					3	430	
Total	19	1,020	79	1,390	16	3,060	
January-February	70	3,450	242	3,240	69	8,830	

<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>Customs value.

<sup>&</sup>lt;sup>3</sup>Less than ½ unit.

 $\label{eq:table 4} \textbf{U.S. EXPORTS OF COBALT MATERIALS}^1$ 

	Unwrought cobalt, powders, matte, waste and scrap <sup>2</sup>		Oxides and hydroxides		Salts and compounds <sup>3</sup>		Total cobalt	Cobalt content,
Period	Gross weight (metric tons)	Value <sup>4</sup> (thousands)	Gross weight (metric tons)	Value <sup>4</sup> (thousands)	Gross weight (metric tons)	Value <sup>4</sup> (thousands)	content for the period <sup>5</sup> (metric tons)	year to date <sup>5, 6</sup> (metric tons)
2021:	(metric tons)	(tilousalius)	(metric tons)	(tilousulus)	(metric tons)	(tilousanus)	(metric tons)	(metric tons)
February	470	\$11,300	21	\$222	(7)	\$4	485	889
March	481	9,650	5	192	(7)	6	484	1,370
April	569	14,000	1	28	(7)	4	570	1,940
May	439	14,300	3	68			441	2,380
June	295	8,020	3	106	1	18	298	2,680
July	367	13,100	1	25	1	32	368	3,050
August	285	9,810	2	79	6	58	288	3,340
September	344	11,600	1	32			345	3,680
October	488	15,500	2	85	(7)	10	489	4,170
November	426	10,500	2	101			428	4,600
December	331	9,920	2	96			333	4,930
January–February	873	22,500	21	251	(7)	4	889	XX
January-December	4,900	139,000	43	1,060	9	133	4,930	XX
2022:								
January	454	14,400	2	83			456	456
February	293	11,600	1	50			293	749
January–February	747	26,000	3	132			749	XX

XX Not applicable. -- 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>May include other intermediate products of cobalt metallurgy and unwrought cobalt alloys.

<sup>&</sup>lt;sup>3</sup>Cobalt acetates and cobalt chlorides.

<sup>&</sup>lt;sup>4</sup>Free alongside ship (f.a.s.) value.

<sup>&</sup>lt;sup>5</sup>Estimated from gross weights.

<sup>&</sup>lt;sup>6</sup>May include revisions to previously published data.

<sup>&</sup>lt;sup>7</sup>Less than ½ unit.

 $\label{eq:table 5} \mbox{U.S. EXPORTS OF WROUGHT COBALT, COBALT ORE,} \\ \mbox{AND CONCENTRATES}^1$ 

	Wrought co	obalt and	Cobalt ore and concentrates		
	cobalt a	rticles			
	Gross	_	Gross		
	weight	Value <sup>2</sup>	weight	Value <sup>2</sup>	
Period	(metric tons)	(thousands)	(metric tons)	(thousands)	
2021:					
February	113	\$14,400			
March	151	13,500			
April	116	12,100	2	\$14	
May	105	11,000			
June	114	12,000			
July	213	17,700			
August	192	16,200			
September	116	10,700	(3)	8	
October	274	22,500			
November	140	13,500			
December	217	18,600	(3)	4	
January-February	200	24,500			
January-December	1,840	172,000	2	26	
2022:					
January	139	15,400			
February	103	13,300			
January–February	242	28,800			
7					

<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>Free alongside ship (f.a.s.) value.

<sup>3</sup>Less than ½ unit.