

# Mineral Industry Surveys

#### For information, contact:

Kim B. Shedd, Cobalt Commodity Specialist National Minerals Information Center

Telephone: (703) 648-4974 Email: kshedd@usgs.gov Annie Hwang (Data) Telephone: (703) 648-7952 Email: ahwang@usgs.gov

Internet: https://www.usgs.gov/centers/national-minerals-

information-center/mineral-industry-surveys

# **COBALT IN JUNE 2022**

The amount of cobalt contained in U.S. imports of cobalt metals and chemicals in June 2022 was 37% less than that imported during May 2022. For the first 6 months of 2022, the amount of cobalt contained in imports was 11% 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 June 2022 was 19% less than that exported during May 2022 and during the first 6 months of 2022, the amount exported was slightly less than that exported during the same period in 2021 (table 4).

## **Prices**

During the past 2 years, cobalt prices trended upward and London Metal Exchange (LME) stocks trended downward (fig. 1, table 1). In June, the monthly average U.S. spot cobalt price decreased by 11% from that in May 2022 and was 70% higher than that in June 2021. The monthly average LME cash mean price decreased by 7% from that in May 2022 and was 63%

higher than that in June 2021. The following listed prices are for cobalt metal in June, in dollars per pound.

Type	Price range	Average price
U.S. spot <sup>1</sup>	31.50-38.75	35.12
LME cash mean <sup>2</sup>	31.64-33.28	32.58

<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).

### **Government and Industry News**

In June, the U.S. Geological Survey (USGS) announced the joint publication with the Idaho Geological Survey of a modern geological map for the Blackbird cobalt-copper-gold district in Lemhi County, ID (Idaho Geological Survey, 2022; U.S. Geological Survey, 2022). The map, which was produced in part using funds from the USGS Earth Mapping Resources Initiative,

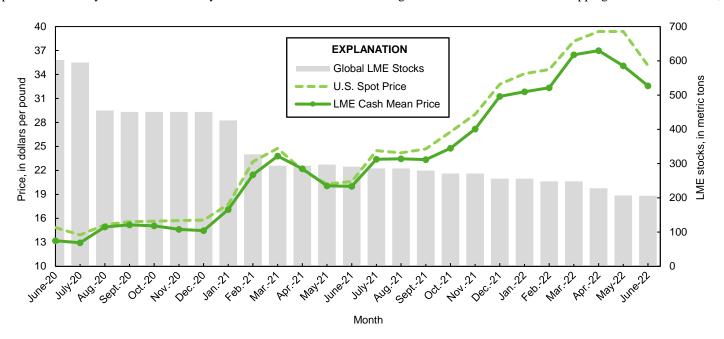


Figure 1. Global LME cobalt stocks, average U.S. spot cobalt prices, and average LME cash mean cobalt prices for June 2020 through June 2022. Sources: S&P Global Platts Metals Week and London Metal Exchange.

was intended to assist future research on the critical mineral potential for the region. The Blackbird District is part of the Idaho Cobalt Belt, home to the historic Blackbird cobalt mine, which operated intermittently from the early 1900s to the early 1980s, the Jervois Mining Ltd. (of Australia) Idaho Cobalt Operation, which was scheduled to begin commissioning in September 2022 (Jervis Global Ltd., 2022, p. 3), and numerous exploration projects.

#### **References Cited**

Idaho Geological Survey, 2022, Geologic map of the Blackbird Co-Cu-Au district, Lemhi County, Idaho: Moscow, ID, Idaho Geological Survey technical report, April 27. (Accessed December 5, 2022, at https://www.idahogeology.org/product/T-22-02.)

- Jervois Global Ltd., 2022, Interim condensed financial report for the half-year ended 30 June 2022: Melbourne, Victoria, Australia, Jervois Global Ltd., August 23, 33 p. (Accessed December 5, 2022, at https://jervoisglobal.com/wp-content/uploads/2022/08/Half-Yearly-Reportand-Accounts-to-30-June-2022.pdf.)
- U.S. Geological Survey, 2022, Everything old is new again: Reston, VA, U.S. Geological Survey Science Snippet, June 15. (Accessed December 5, 2022, at https://www.usgs.gov/news/science-snippet/everything-old-new-again.)

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 <a href="https://www.usgs.gov/centers/national-minerals-information-center/minerals-information-publication-list-services">https://www.usgs.gov/centers/national-minerals-information-center/minerals-information-publication-list-services</a>.

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:							
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			
March	302	54	194	248			
April	302	54	174	228			
May	302	39	168	207			
June	302	39	167	206			

Thondon Metal Exchange.
2Data from Defense Logistics Agency Strategic Materials.

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

	Meta	ıls <sup>2</sup>	Oxides and I	Oxides and hydroxides		Salts and compounds <sup>3</sup>		Cobalt content,
	Gross		Gross	-)	Gross	inpounds	Total cobalt content for	year to
Period and country or	weight	Value <sup>4</sup>	weight	Value <sup>4</sup>	weight	Value <sup>4</sup>	the period <sup>5</sup>	date <sup>5, 6</sup>
locality of origin	(metric tons)	(thousands)	(metric tons)	(thousands)	(metric tons)	(thousands)	(metric tons)	(metric tons)
2021:	()	(	()	(	()	(	()	()
June	740	\$31,200	236	\$7,410	392	\$4,120	1,020	5,020
July	437	20,700	202	6,600	318	3,260	672	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	269	3,710	926	8,380
November	475	25,500	267	10,100	230	3,310	736	9,120
December	440	25,500	169	6,410	410	5,070	679	9,800
January-June	3,760	150,000	1,060	32,400	1,680	19,700	5,020	,,000 XX
January-December	7,210	323,000	2,220	74,700	3,320	40,400	9,800	XX
2022:	7,210	323,000	2,220	74,700	3,320	40,400	2,800	AA
January	754	44,600	84	3,540	148	2,860	859	859
February	440	24,800	161	7,460	382	3,790	667	1,530
March	648	42,400	256	11,400	1,040	6,200	1,110	2,640
	343	24,000	193		487		624	
April May	900	68,900	211	10,100	1,290	4,040 6,910	1,410	3,260
June:	900	08,900	211	10,800	1,290	0,910	1,410	4,670
	20	1.620					20	48
Australia		1,620						
Belgium			53	3,180			38	135
Brazil					110	766	33	140
Canada	171	14,100					171	617
China	4	285	5	182	3	69	9	92
Finland	14	1,310	79	4,110	454	2,120	197	1,320
France	2	177					2	3
Germany	14	1,640					14	58
Hong Kong			<del></del>					49
Italy			2	71			2	4
Japan	167	12,300	(7)	3			167	708
Korea, Republic of								31
Madagascar								157
Malaysia								3
Mexico					102	393	28	28
Morocco	15	1,260					15	55
Netherlands								6
Norway	69	4,570					69	1,300
Russia	5	332					5	291
South Africa	19	150					19	29
Taiwan					219	1,640	54	110
Turkey								24
United Kingdom	5	461	21	1,090	104	764	48	301
Zambia								46
Other					(7)	7	(7)	3
Total	504	38,300	160	8,640	992	5,750	890	5,560
January-June	3,590	243,000	1,060	51,900	4,340	29,600	5,560	XX

XX Not applicable. -- Zero.

 $<sup>^{1}\</sup>mbox{Data}$  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 co	obalt allovs	Cobalt waste	and scrap	Wrought cobalt and cobalt articles		
	Gross	ocur unoys	Gross	and serup	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:	( ,	(* * * * * * * * * * * * * * * * * * *	( ,	(1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	(	(* * * * * * * * * * * * * * * * * * *	
June	11	\$546	149	\$1,480	22	\$3,540	
July	13	648	136	1,870	25	4,230	
August	3	120	128	1,680	51	4,530	
September	11	476	99	1,590	34	4,790	
October	20	1,110	160	2,300	27	4,470	
November	17	838	188	2,710	24	4,150	
December	30	1,460	135	1,200	32	4,710	
January-June	117	5,150	709	8,430	121	18,600	
January-December	210	9,800	1,560	19,800	315	45,500	
2022:							
January	51	2,440	163	1,840	53	5,770	
February	19	1,020	79	1,390	16	3,060	
March	6	326	189	2,980	44	4,830	
April	21	1,240	192	2,830	27	3,200	
May	24	1,400	175	2,340	42	4,720	
June:	,						
Belgium	5	371	8	348			
Canada	(3)	84	8	132	5	1,400	
China			6	19	3	774	
France			30	312	10	833	
Germany			10	4	4	581	
Ireland			41	186			
Japan			14	254	7	78	
Taiwan			6	232	1	17	
Tunisia			14	128			
United Kingdom	20	1,230	19	451	11	1,050	
Other					3	252	
Total	25	1,690	155	2,070	44	4,980	
January-June	146	8,110	953	13,400	225	26,600	

<sup>&</sup>lt;sup>r</sup>Revised. -- 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 cob	alt, powders,						Cobalt
matte, waste and scrap <sup>2</sup>		Oxides and hydroxides		Salts and compounds <sup>3</sup>		Total 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)	(uiousaiius)	(metric tons)	(mousanus)	(metric tons)	(illousalius)	(metric tons)	(metric tons)
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	339	11,500	1	32			340	3,680
October	493	15,600	2	85	(7)	10	494	4,170
November	424	10,400	2	101			426	4,600
December	333	10,000	2	96			335	4,930
January-June	2,660	68,500	33	646	2	33	2,680	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
March	597	16,600	3	94			599	1,350
April	378	13,200	1	44	(7)	5	379	1,730
May	493	17,600	7	304			498	2,220
June	400	12,200	2	79	(7)	6	402	2,630
January–June	2,620	85,700	16	654	(7)	11	2,630	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.

TABLE 5  $\mbox{U.S. EXPORTS OF WROUGHT COBALT, COBALT ORE, } \\ \mbox{AND CONCENTRATES}^1$ 

	Wrought co cobalt ar		Cobalt ore and concentrates		
Period	Gross weight (metric tons)	Value <sup>2</sup> (thousands)	Gross weight (metric tons)	Value <sup>2</sup> (thousands)	
2021:	(metric tons)	(tilousalius)	(metric tons)	(tilousalius)	
June	115	\$12,000			
July	213	17,700			
August	191	16,300			
September	121	10,900	(3)	\$8	
October	274	22,500			
November	139	13,400			
December	217	18,600	(3)	4	
January–June	667 <sup>r</sup>	70,700 <sup>r</sup>	2	14	
January-December	1,820	170,000	2	26	
2022:					
January	139	15,400			
February	103	13,300			
March	105	15,300			
April	204	19,200	(3)	4	
May	143	16,600			
June	164	16,400			
January-June	859	96,300	(3)	4	

<sup>&</sup>lt;sup>r</sup>Revised. -- Zero.

 $<sup>^{1}\</sup>mathrm{Data}$  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>&</sup>lt;sup>3</sup>Less than ½ unit.