

Mineral Industry Surveys

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PLATINUM-GROUP METALS IN JULY 2023

Imports for consumption of platinum-group metals (PGMs), including waste and scrap, were 16,100 kilograms (kg) in July 2023, a decrease of 15% compared with imports in June 2023, and a decrease of 7% compared with imports in July 2022 (table 1). The leading import sources for PGMs into the United States in July 2023 were, in descending order of quantity, South Africa, Germany, and Russia (tables 3, 4).

In July 2023, exports of rhodium were more than double exports in June 2023 and exports of palladium increased by 51% compared with those in June 2023. Exports of PGM scrap and platinum decreased in July 2023 by 70% and by 61%, respectively, compared with those in June 2023. The leading destinations for PGM exports were, in descending order of quantity, Switzerland, Germany, and Japan (tables 1, 5).

The Engelhard average July 2023 prices were unchanged for iridium and ruthenium compared with the average prices in June 2023. The average prices for rhodium decreased by 30%, by 6% for palladium, and slightly for platinum compared with prices in June. Compared with average prices in July 2022, the July 2023 average price for platinum increased by 9% for platinum, and decreased by 71% for rhodium, by 36% for palladium, by 23% for ruthenium, and by 6% for iridium (fig. 1; tables 1, 2).

Industry News

The Government of India released a list of 30 critical minerals established by the Ministry of Mines. The Geological Survey of India had been increasing exploration of these critical minerals since 2020. A joint venture, Khanij Bidesh India Ltd., was established by Hindustan Copper Ltd., Mineral Exploration Company Ltd., and the National Aluminum Company Ltd., to identify and acquire critical mineral assets overseas where domestic supply would not meet the country's requirements. PGMs were on the list of minerals deemed critical (Government of India, 2023).

PJSC MMC Norilsk Nickel (Nornickel) (Russia) reported that Norilsk Nickel USA, Inc., its cobalt, nickel, and PGM distribution company in the Americas, had been acquired by

TMP Metals Group, Inc. According to Nornickel, TMP Metals Group is a subsidiary of TMP Holdings, Inc., which is based in California, and distributes, refines, and tokenizes nickel and PGMs (PJSC MMC Norilsk Nickel, 2023).

BASF SE announced the completion of its spinoff business BASF Environmental Catalyst and Metal Solutions (ECMS), first announced in December 2021. ECMS will concentrate on producing emissions catalysts and mobile emission catalysts for gasoline, diesel, and off-road vehicles; motorcycles; small engines; and other applications. ECMS will also refine PGMs from spent automotive catalysts to be reused in the manufacturing of new automotive and chemical catalysts, thus improving growth in recycling, sustainability, and the hydrogen economy. Although ECMS will be a standalone entity, its performance will be reported as part of BASF's Catalysts division in the Surface Technologies segment (BASF SE, 2023).

References Cited

- BASF SE, 2023, BASF completes carve-out of mobile emissions catalysts and precious metals services businesses: Ludwigshafen, Germany, BASF SE news release, July 28. (Accessed September 8, 2023, at <https://catalysts.basf.com/news/basf-completes-carve-out>.)
- Government of India, 2023, Thirty critical minerals list released: New Delhi, India, Press Information Bureau, July 24. (Accessed September 8, 2023, at <https://pib.gov.in/PressReleasePage.aspx?PRID=1942027>.)
- PJSC MMC Norilsk Nickel, 2023, Nornickel sells U.S.-based metals distributor in an all-cash transaction: Moscow, Russia, PJSC MMC Norilsk Nickel press release, July 6. (Accessed September 8, 2023, at <https://nornickel.com/news-and-media/press-releases-and-news/nornickel-sells-u-s-based-metals-distributor-in-an-all-cash-transaction/>.)

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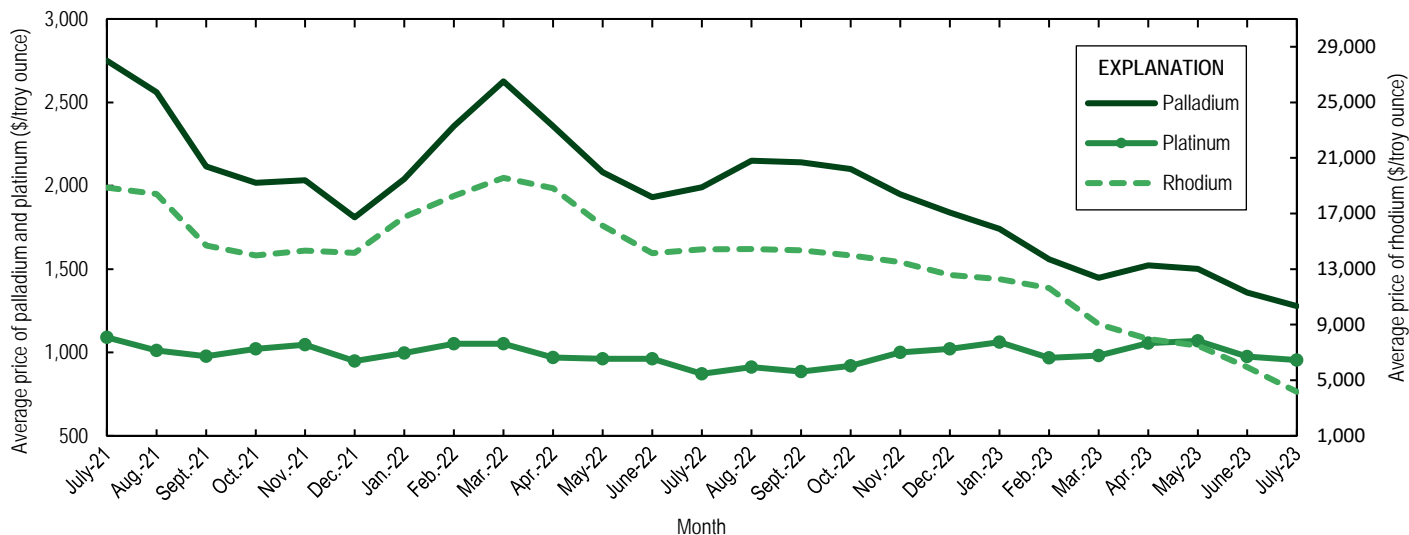


Figure 1. Engelhard unfabricated average monthly prices for palladium, platinum, and rhodium in dollars per troy ounce from July 2021 through July 2023. Source: S&P Global Platts Metals Week.

TABLE 1
U.S. SALIENT PLATINUM-GROUP METALS STATISTICS¹

(Kilograms metal content, unless otherwise specified)

	2022	2023			
	January– December	May	June	July	January– July
Mine production: ²					
Palladium	10,100	843 ^r	843 ^r	843	5,760
Platinum	3,000	243 ^r	243 ^r	243	1,710
Total	13,100	1,090 ^r	1,090 ^r	1,090	7,480
Imports for consumption: ³					
Palladium	65,200	4,150	6,550	4,960	36,000
Platinum	64,200	4,660	7,670	7,540	40,000
Iridium	1,610	328	112	111	1,150
Osmium	1	--	--	--	--
Rhodium	13,200	906	725	818	6,150
Ruthenium	13,300	1,050	722	706	6,440
Waste and scrap ⁴	41,500	2,530	3,130	2,000	18,400
Total	199,000	13,600	18,900	16,100	108,000
Exports: ³					
Palladium	42,200	1,930	3,200	4,840	18,600
Platinum	23,100	655	2,120	835	7,620
Iridium, osmium, ruthenium	906	71	17	92	349
Rhodium	677	8	9	23	117
Waste and scrap ⁴	35,200	1,320	1,940	580	7,330
Total	102,000	3,980	7,290	6,370	34,000
Price, average (dollars per troy ounce): ⁵					
Palladium	2,133.81	1,501.18	1,359.57	1,278.30	1,484.97
Platinum	966.54	1,069.77	975.29	953.80	1,009.44
Iridium	4,581.93	4,600.00	4,600.00	4,600.00	4,602.08
Rhodium	15,585.00	7,484.09	5,940.48	4,172.50	8,327.43
Ruthenium	577.02	465.00	465.00	465.00	467.78

^rRevised. -- Zero.

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

²Annual data are based on publicly available annual reports. Monthly and year-to-date data are estimated based on publicly reported quarterly data.

³Source: U.S. Census Bureau.

⁴Includes waste and scrap for all platinum-group elements. Previously included within platinum.

⁵Source: S&P Global Platts Metals Week.

TABLE 2
PLATINUM-GROUP METALS PRICES¹

(Dollars per troy ounce)

	Palladium	Platinum	Iridium	Rhodium	Ruthenium
2022:					
Low:					
Price	1,690.00	834.00	3,750.00	12,250.00	475.00
Date	Dec. 20	Jul. 14	Nov. ² –Dec. ²	Dec. ²	Dec. 21
High:					
Price	3,050.00	1,155.00	5,000.00	20,250.00	625.00
Date	Mar. 8	Mar. 8	Mar.–Jul. ²	Feb. ²	Mar.–Jul. ²
Price, average	2,133.81	966.54	4,581.93	15,585.00	577.02
2023:					
May:					
Low:					
Price	1,400.00	1,010.00	4,600.00	7,000.00	465.00
Date	May 31	May 31	May ²	May ²	May ²
High:					
Price	1,633.00	1,130.00	4,600.00	8,650.00	465.00
Date	May 10 and 11	May 10	May ²	May 1	May ²
Price, average	1,501.18	1,069.77	4,600.00	7,484.09	465.00
June:					
Low:					
Price	1,241.00	904.00	4,600.00	4,400.00	465.00
Date	Jun. 29	Jun. 29	Jun. ²	Jun. 30	Jun. ²
High:					
Price	1,430.00	1,040.00	4,600.00	7,000.00	465.00
Date	Jun. 2	Jun. 7	Jun. ²	Jun. 1	Jun. ²
Price, average	1,359.57	975.29	4,600.00	5,940.48	465.00
July:					
Low:					
Price	1,215.00	910.00	4,600.00	4,000.00	465.00
Date	Jul. 10	Jul. 6	Jul. ²	Jul. ²	Jul. ²
High:					
Price	1,330.00	990.00	4,600.00	4,400.00	465.00
Date	Jul. 18	Jul. 19	Jul. ²	Jul. 12 and 13	Jul. ²
Price, average	1,278.30	953.80	4,600.00	4,172.50	465.00
January–July:					
Low:					
Price	1,215.00	904.00	4,600.00	4,000.00	465.00
Date	Jul. 10	Jun. 29	Jan.–Jul. ²	Jul. ²	Jan.–Jul. ²
High:					
Price	1,820.00	1,135.00	4,700.00	12,400.00	485.00
Date	Jan. 10	Apr. 21	Jan. 3–5	Jan. ²	Jan. ² and Feb. 2
Price, average	1,484.97	1,009.44	4,602.08	8,327.43	467.78

¹Quotes from Engelhard.

²Occurred multiple days in month(s) listed.

Source: S&P Global Platts Metals Week.

TABLE 3
U.S. IMPORTS FOR CONSUMPTION OF PLATINUM METAL, BY COUNTRY OR LOCALITY¹

(Kilograms metal content, unless otherwise specified)

Country or locality	Platinum grain and nuggets		Platinum sponge		Other unwrought platinum		Platinum, other		Platinum coins	
	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)
2022, January–December	1,320	\$42,000	47,800	\$1,500,000	2,350	\$146,000	12,100	\$529,000	642	\$21,000
2023:										
May	29	1,020	4,070	139,000	126	4,470	391	15,800	40	1,430
June	25	820	6,210	199,000	643	27,500	722	29,500	77	2,350
July:										
Australia	--	--	--	--	(2)	2	(2)	9	1	109
Belgium	--	--	1,360	43,200	--	--	--	--	--	--
Canada	14	435	--	--	--	--	14	461	79	2,540
Colombia	27	847	--	--	1	16	--	--	--	--
Costa Rica	--	--	--	--	--	--	115	5,320	--	--
France	--	--	--	--	--	--	31	922	--	--
Germany	--	--	632	19,400	91	3,090	280	10,100	1	33
Hong Kong	(2)	3	--	--	(2)	5	--	--	--	--
Ireland	--	--	--	--	--	--	3	122	--	--
Italy	--	--	328	9,890	14	616	1	26	--	--
Japan	--	--	29	849	(2)	8	15	493	--	--
Korea, Republic of	--	--	156	4,730	--	--	--	--	--	--
Singapore	--	--	--	--	7	406	22	479	--	--
South Africa	--	--	4,100	127,000	--	--	2	42	--	--
Switzerland	--	--	23	735	--	--	51	1,430	--	--
Taiwan	--	--	--	--	--	--	19	300	--	--
United Kingdom	--	--	80	2,400	--	--	38	1,240	(2)	11
Total	41	1,280	6,710	208,000	112	4,140	591	20,900	81	2,690
January–July	444	14,500	31,300	1,010,000	1,370	58,300	6,370	245,000	481	16,100

-- 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 4
U.S. IMPORTS FOR CONSUMPTION OF PLATINUM-GROUP METALS, BY COUNTRY OR LOCALITY¹

(Kilograms metal content, unless otherwise specified)

Country or locality	Palladium ²		Iridium ²		Osmium ²		Rhodium ²		Ruthenium ²		Waste and scrap ³	
	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)
2022, January–December	65,200	\$4,370,000	1,610	\$194,000	1	\$3	13,200	\$6,780,000	13,300	\$226,000	41,500	\$1,350,000
2023:												
May	4,150	202,000	328	29,900	--	--	906	283,000	1,050	15,200	2,530	79,300
June	6,550	317,000	112	13,300	--	--	725	191,000	722	10,000	3,130	87,100
July: ⁴												
Belgium	143	6,370	--	--	--	--	104	24,400	--	--	89	2,900
Bolivia	--	--	--	--	--	--	--	--	--	--	9	301
Brazil	--	--	--	--	--	--	--	--	--	--	23	1,480
Canada	342	15,600	--	--	--	--	--	--	--	--	287	9,860
Colombia	--	--	--	--	--	--	--	--	--	--	59	1,400
France	(5)	4	--	--	--	--	--	--	--	--	24	944
Germany	256	10,800	47	7,880	--	--	253	62,200	295	4,240	300	10,500
Haiti	--	--	--	--	--	--	--	--	--	--	12	395
India	--	--	--	--	--	--	--	--	--	--	15	612
Italy	93	3,780	3	488	--	--	22	6,000	--	--	133	4,330
Japan	293	11,300	7	1,050	--	--	2	830	--	--	--	--
Korea, Republic of	249	10,200	--	--	--	--	31	7,790	--	--	--	--
Malaysia	--	--	--	--	--	--	--	--	--	--	24	696
Mexico	1	39	--	--	--	--	--	--	--	--	201	4,270
Netherlands	--	--	--	--	--	--	--	--	--	--	99	3,230
Philippines	--	--	--	--	--	--	--	--	--	--	189	6,080
Russia	2,100	88,800	--	--	--	--	--	--	--	--	--	--
South Africa	1,460	69,000	36	5,140	--	--	361	102,000	410	5,550	--	--
Switzerland	23	964	--	--	--	--	--	--	--	--	--	--
United Kingdom	(5)	12	18	2,670	--	--	46	10,600	1	17	496	25,900
Other	(5)	38	--	--	--	--	(5)	26	--	--	36	1,730
Total	4,960	217,000	111	17,200	--	--	818	214,000	706	9,810	2,000	74,700
January–July	36,000	1,800,000	1,150	138,000	--	--	6,150	2,090,000	6,440	88,600	18,400	603,000

-- Zero.

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

²Unwrought and other forms.

³Includes waste and scrap for all platinum-group elements.

⁴The 20 countries and (or) localities with the greatest total platinum-group metal imports are listed. All others are included in the "Other" category.

⁵Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 5
U.S. EXPORTS OF PLATINUM-GROUP METALS, BY COUNTRY OR LOCALITY¹

(Kilograms metal content, unless otherwise specified)

Country or locality	Palladium ²		Platinum ²		Iridium, osmium and ruthenium ^{2,3}		Rhodium ²		Waste and scrap ⁴	
	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)
2022, January–December	42,200	\$2,770,000	23,100	\$885,000	906	\$36,500	677	\$355,000	35,200	\$2,990,000
2023:										
May	1,930	97,800	655	41,000	71	9,330	8	3,110	1,320	78,400
June	3,200	122,000	2,120	97,100	17	1,980	9	3,900	1,940	105,000
July: ⁵										
Australia	2	111	17	619	3	270	--	--	--	--
Brazil	163	7,120	(6)	87	--	--	--	--	--	--
Canada	570	27,500	9	331	--	--	15	5,750	83	2,810
China	51	2,860	63	1,740	(6)	16	--	--	--	--
Costa Rica	10	701	38	2,490	--	--	--	--	--	--
Germany	1,330	58,400	50	4,950	--	--	2	696	242	23,900
Hong Kong	6	392	3	246	2	266	6	2,540	64	2,740
India	4	204	4	202	--	--	--	--	(6)	6
Ireland	2	112	53	1,970	(6)	4	--	--	--	--
Israel	14	787	1	24	--	--	--	--	--	--
Italy	1	64	25	7,250	--	--	--	--	35	1,200
Japan	592	24,500	382	17,000	--	--	--	--	39	1,260
Mexico	7	427	26	1,090	--	--	--	--	--	--
Singapore	(6)	8	15	528	--	--	--	--	--	--
South Africa	--	--	--	--	--	--	--	--	18	841
Spain	6	355	1	27	--	--	--	--	--	--
Switzerland	2,060	32,500	4	130	1	91	--	--	49	1,560
Taiwan	12	694	1	29	--	--	--	--	--	--
Thailand	4	254	4	173	--	--	--	--	--	--
United Kingdom	10	547	130	4,430	86	12,500	--	--	48	2,250
Other	6	359	11	745	1	73	(6)	27	1	32
Total	4,840	158,000	835	44,000	92	13,200	23	9,010	580	36,600
January–July	18,600	818,000	7,620	398,000	349	42,700	117	46,300	7,330	591,000

-- Zero.

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

²Unwrought and other forms.

³Gross weight.

⁴Includes waste and scrap for all platinum-group elements. Previously categorized as “Platinum waste and scrap.”

⁵The 20 countries and (or) localities with the greatest total platinum-group metal exports are listed. All others are included in the “Other” category.

⁶Less than ½ unit.

Source: U.S. Census Bureau.