

Mineral Industry Surveys

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PLATINUM-GROUP METALS IN MAY 2021

Imports for consumption of platinum-group metals (PGMs), including waste and scrap, were 23,600 kilograms (kg) in May 2021, a decrease of 7% compared with imports in April 2021 and an increase of 46% compared with imports in May 2020. Year-to-date imports through May 2021 increased 94% for all PGMs compared with year-to-date imports through May 2020 (table 1). The leading import sources for PGMs into the United States in May 2021 were, in descending order, Germany, South Africa, and Brazil (tables 3, 4). In May 2021, exports of palladium more than doubled and increased by 96% for platinum and by 78% for rhodium compared with those in April 2021. Exports of PGM scrap decreased by 8% compared with those in April 2021 (table 5). Year-to-date exports through May 2021 increased by 7% for palladium and 25% for PGM scrap compared with year-to-date exports through May 2020. Exports of platinum through May 2021 decreased by 5% and by 32% for rhodium compared with year-to-date exports through May 2021 (table 1).

The Engelhard average May prices increased by 4% for palladium and by 37% for ruthenium compared with average prices in the previous month. Prices of platinum and iridium were essentially unchanged and decreased by 6% for rhodium compared with average prices in April 2021. Compared with average prices in May 2020, the May 2021 average prices increased by 52% for palladium, by 53% for platinum, more than doubled for ruthenium, more than tripled for rhodium, and nearly quadrupled for iridium (fig. 1; tables 1, 2). The PGM price increases in the past year have been related to processing outages at refineries in South Africa and production delays caused by the global COVID-19 pandemic (Cowley, 2021, p. 5, 12).

Industry News

BASF SE (Germany) announced plans to expand its PGM refining plant in Seneca, SC. The expansion project would increase capacity to recycle precious metals from spent

catalysts, including automotive catalytic converters (BASF SE, 2021).

PJSC MMC Norilsk Nickel (Russia) reported its copper-nickel-PGM mine at Oktyabrsky on the Taimyr Peninsula in Russia resumed full operations on May 13th following underground flooding that began in February. The Oktyabrsky Mine was operating at 60% capacity in April, but continued water pumping allowed the company to restore operations to a full capacity of 14,100 metric tons of ore per day in May (de Liz, 2021).

References Cited

- BASF SE, 2021, BASF expands global PGM refining capacity, further driving circular economy business: Ludwigshafen, Germany, BASF SE news release, May 12. (Accessed July 15, 2021, at <https://www.basf.com/us/en/media/news-releases/2021/05/basf-expands-global-pgm-refining-capacity--further-driving-circu.html>.)
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- de Liz, Ana, 2021, Nor Nickel's Oktyabrsky mine back to full production: Fastmarkets AMM, May 13. (Accessed July 15, 2021, via <https://www.amm.com/>.)

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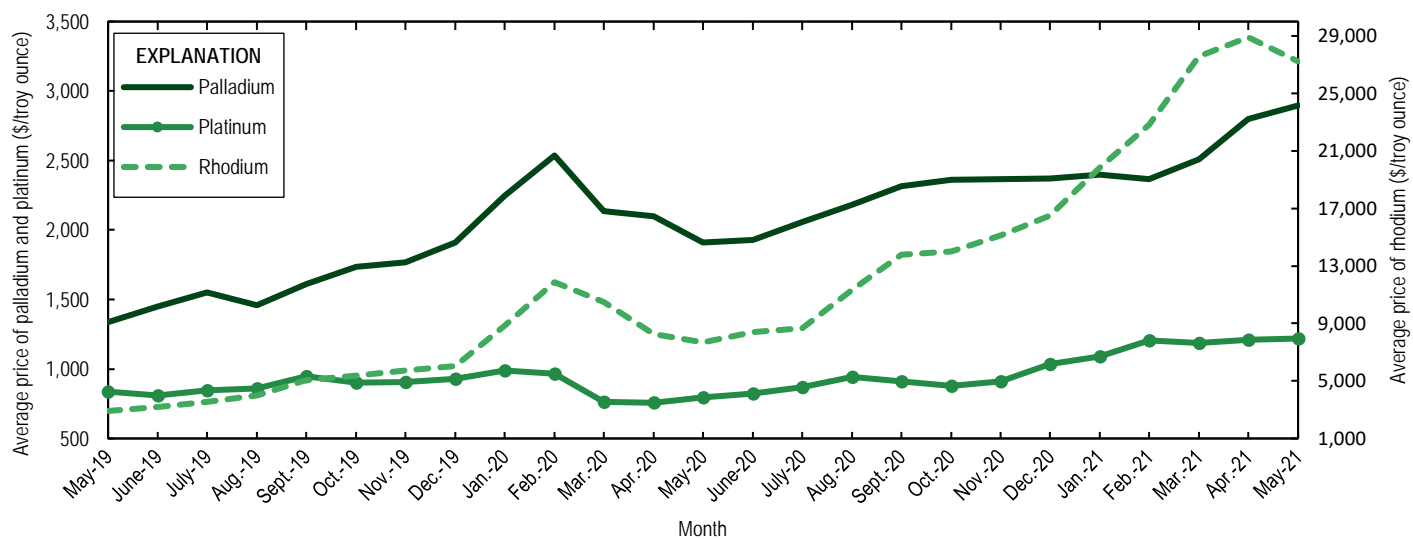


Figure 1. Engelhard unfabricated average monthly prices for palladium, platinum, and rhodium in dollars per troy ounce from May 2019 through May 2021.
Source: S&P Global Platts Metals Week.

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

(Kilograms metal content, unless otherwise specified)

	2020	2021			
	January– December	March	April	May	January– May
Mine production: ²					
Palladium	14,600	1,240	1,240	1,240	6,190
Platinum	4,200	363	363	363	1,820
Total	18,800	1,600	1,600	1,600	8,010
Imports for consumption: ³					
Palladium	76,400	6,920	9,010	5,180	36,300
Platinum	64,800	5,850	5,170	4,320	26,300
Iridium	1,620	103	266	422	1,160
Osmium	1	--	--	1	1
Rhodium	20,700	1,510	1,550	1,060	7,540
Ruthenium	13,900	4,490	2,260	1,320	11,700
Waste and scrap ⁴	188,000	41,200	7,070	11,200	118,000
Total	365,000	60,100	25,300	23,600	201,000
Exports: ³					
Palladium	48,600	3,040	2,240	5,390	17,000
Platinum	28,900	1,930	895	1,750	8,330
Iridium, osmium, ruthenium	1,440	130	74	99	742
Rhodium	1,470	87	46	82	459
Waste and scrap ⁴	33,200	7,990	2,930	2,680	18,100
Total	114,000	13,200	6,180	10,000	44,600
Price, average (dollars per troy ounce): ⁵					
Palladium	2,205.27	2,508.83	2,796.76	2,896.10	2,596.95
Platinum	886.02	1,187.48	1,212.19	1,219.30	1,184.30
Iridium	1,633.51	5,676.09	6,342.86	6,320.00	5,295.59
Rhodium	11,205.06	27,597.83	28,907.14	27,210.00	25,460.78
Ruthenium	271.83	380.65	435.95	596.75	406.18

-- Zero.

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

²Data 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
2020:					
Low:					
Price	1,585.00	610.00	1,490.00	6,000.00	255.00
Date	Mar. 17	Mar. 19	Jan.–Feb. ²	Mar. ²	Jan.–Apr. ²
High:					
Price	2,790.00	1,085.00	2,600.00	17,150.00	280.00
Date	Feb. 19	Dec. 31	Dec. 30 and 31	Dec. 31	May–Dec. ²
Price, average	2,205.27	886.02	1,633.51	11,205.06	271.83
2021:					
March:					
Low:					
Price	2,321.00	1,127.00	4,800.00	24,500.00	340.00
Date	Mar. 10	Mar. 5	Mar. 1	Mar. 12 and 15	Mar. 1
High:					
Price	2,710.00	1,225.00	6,250.00	30,000.00	415.00
Date	Mar. 18	Mar. 15 and 16	Mar. 31	Mar. 22	Mar. 31
Price, average	2,508.83	1,187.48	5,676.09	27,597.83	380.65
April:					
Low:					
Price	2,652.00	1,171.00	6,250.00	27,500.00	415.00
Date	Apr. 7	Apr. 13	Apr. ²	Apr. 1	Apr. ²
High:					
Price	3,001.00	1,248.00	6,400.00	29,500.00	450.00
Date	Apr. 30	Apr. 23	Apr. ²	Apr. ²	Apr. ²
Price, average	2,796.76	1,212.19	6,342.86	28,907.14	435.95
May:					
Low:					
Price	2,759.00	1,174.00	6,000.00	22,750.00	450.00
Date	May 25	May 28	May ²	May 26	May ²
High:					
Price	3,020.00	1,271.00	6,400.00	29,500.00	825.00
Date	May 4	May 10	Apr.–May ²	May 3 and 4	May 21 and 24
Price, average	2,896.10	1,219.30	6,320.00	27,210.00	596.75
January–May:					
Low:					
Price	2,283.00	1,009.00	3,000.00	17,650.00	280.00
Date	Feb. 2 and 4	Jan. 26	Jan. ²	Jan. 4	Jan. ²
High:					
Price	3,020.00	1,298.00	6,400.00	30,000.00	825.00
Date	May 4	Feb. 19	Apr.–May ²	Mar. 22	May 21 and 24
Price, average	2,596.95	1,184.30	5,295.59	25,460.78	406.18

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)
2020:										
January–December	162	\$4,780	30,900	\$874,000	5,370	\$255,000	25,900	853,000	2,510	\$75,300
2021:										
March	90	3,510	2,520	95,700	1,090	53,600	2,080	80,200	77	3,020
April	40	1,530	3,230	121,000	489	21,900	1,260	59,700	150	6,630
May:										
Belgium	--	--	404	16,400	--	--	--	--	--	--
Canada	13	521	--	--	--	--	39	1,530	19	744
Colombia	--	--	--	--	40	1,510	--	--	--	--
Costa Rica	--	--	--	--	--	--	83	3,020	--	--
Czechia	--	--	--	--	--	--	2	119	--	--
France	--	--	--	--	--	--	12	413	--	--
Germany	--	--	285	11,100	83	3,570	126	8,610	1	27
Hong Kong	(2)	18	--	--	--	--	--	--	--	--
Ireland	--	--	--	--	(2)	21	1	5	--	--
Italy	--	--	680	26,800	--	--	31	1,250	--	--
Japan	--	--	35	1,410	217	8,760	(2)	4	--	--
Mexico	--	--	--	--	--	--	--	--	1	4
Portugal	--	--	--	--	--	--	(2)	5	1	27
Russia	--	--	100	3,830	(2)	7	--	--	--	--
Singapore	--	--	--	--	(2)	30	15	582	--	--
South Africa	--	--	1,920	73,300	15	2,750	--	--	--	--
Switzerland	--	--	30	1,210	(2)	8	68	2,580	4	419
Taiwan	--	--	--	--	--	--	60	2,610	--	--
United Kingdom	--	--	1	53	--	--	27	851	3	290
Total	13	539	3,460	134,000	356	16,700	465	21,600	28	1,510
January–May	236	9,260	16,200	605,000	3,000	141,000	6,040	255,000	810	27,600

-- 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)
2020:												
January–December	76,400	#####	1,620	\$70,100	1	\$17	20,700	#####	13,900	\$117,000	188,000	#####
2021:												
March	6,920	527,000	103	11,900	--	--	1,510	1,120,000	4,490	45,600	41,200	226,000
April	9,010	538,000	266	35,800	--	--	1,550	1,290,000	2,260	26,800	7,070	202,000
May: ⁴												
Australia	--	--	--	--	--	--	--	--	--	--	220	9,580
Belgium	378	35,300	--	--	--	--	59	49,300	--	--	--	--
Brazil	--	--	--	--	--	--	--	--	--	--	2,700	11,000
Canada	458	45,100	--	--	--	--	1	63	--	--	374	47,700
Colombia	--	--	--	--	--	--	--	--	--	--	11	399
France	--	--	--	--	--	--	--	--	--	--	81	435
Germany	36	2,280	5	139	--	--	154	137,000	219	3,490	4,750	86,200
Italy	352	32,300	4	490	--	--	48	35,400	--	--	219	7,540
Japan	30	2,590	16	1,060	--	--	--	--	--	--	4	27
Korea, Republic of	326	30,600	--	--	--	--	37	34,100	--	--	25	801
Malaysia	--	--	--	--	--	--	--	--	--	--	23	997
Mexico	19	857	--	--	--	--	--	--	--	--	1,860	65,400
Nigeria	--	--	--	--	--	--	--	--	--	--	232	7,550
Philippines	--	--	--	--	--	--	--	--	--	--	15	305
Russia	1,650	150,000	--	--	--	--	44	38,000	--	--	--	--
Singapore	--	--	--	--	--	--	--	--	--	--	18	1,670
South Africa	1,790	155,000	147	25,200	--	--	707	615,000	547	7,560	--	--
Switzerland	98	7,960	--	--	--	--	(5)	29	--	--	--	--
Thailand	--	--	--	--	--	--	(5)	8	--	--	85	7,680
United Kingdom	30	434	250	9,490	--	--	6	2,630	550	10,400	575	18,700
Other	5	218	--	--	1	17	8	6,870	2	22	55	1,580
Total	5,180	463,000	422	36,400	1	17	1,060	918,000	1,320	21,500	11,200	267,000
January–May	36,300	2,610,000	1,160	112,000	1	17	7,540	4,870,000	11,700	125,000	118,000	970,000

-- 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)
2020:										
January–December	48,600	\$2,900,000	28,900	\$930,000	1,440	\$24,900	1,470	\$426,000	33,200	\$1,400,000
2021:										
March	3,040	252,000	1,930	112,000	130	3,920	87	50,100	7,990	492,000
April	2,240	198,000	895	31,900	74	2,640	46	40,800	2,930	309,000
May: ⁵										
Australia	3	213	36	849	--	--	--	--	--	--
Belgium	73	6,370	31	1,160	--	--	7	5,950	--	--
Brazil	--	--	95	2,390	--	--	--	--	--	--
Canada	808	84,300	218	9,260	--	--	(6)	4	135	6,880
China	4	298	15	355	11	99	(6)	19	--	--
Costa Rica	3	279	62	1,240	--	--	--	--	--	--
Germany	743	69,600	279	10,000	1	28	8	7,900	963	175,000
Hong Kong	6	468	24	770	25	640	--	--	--	--
India	(6)	3	40	1,550	--	--	--	--	--	--
Ireland	4	422	24	836	1	4	--	--	--	--
Israel	14	1,160	2	18	--	--	--	--	--	--
Italy	1,550	145,000	219	8,560	6	538	--	--	--	--
Japan	184	16,900	72	4,870	8	1,830	--	--	693	74,800
Korea, Republic of	149	13,000	28	1,120	--	--	20	14,800	71	2,720
Mexico	3	255	281	18,000	--	--	--	--	--	--
Singapore	1	73	169	6,290	--	--	--	--	--	--
South Africa	--	--	--	--	--	--	36	33,700	353	15,400
Switzerland	439	40,900	35	1,190	1	38	5	4,450	16	641
Taiwan	287	23,700	13	529	10	107	--	--	--	--
United Kingdom	1,120	103,000	94	3,770	31	289	5	4,360	451	67,900
Other	12	928	17	1,030	5	89	(6)	21	1	40
Total	5,390	507,000	1,750	73,900	99	3,660	82	71,200	2,680	344,000
January–May	17,000	1,450,000	8,330	361,000	742	18,800	459	314,000	18,100	1,470,000

-- 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.