

Mineral Industry Surveys

For information, contact:

Ruth F. Schulte, PGM Commodity Specialist
National Minerals Information Center
U.S. Geological Survey
989 National Center
Reston, VA 20192
Telephone: (703) 648-4963, Fax: (703) 648-7757
Email: rschulte@usgs.gov

Christine Pisut (Data)
Telephone: (703) 648-7942
Fax: (703) 648-7975
Email:

Internet: <https://www.usgs.gov/centers/national-minerals-information-center>

PLATINUM-GROUP METALS IN NOVEMBER 2021

Imports for consumption of platinum-group metals (PGMs), including waste and scrap, were 22,400 kilograms (kg) in November 2021, an increase of 4% compared with imports in October 2021 and a decrease of 40% compared with imports in November 2020. Year-to-date imports through November 2021 decreased by 11% for all PGMs compared with year-to-date imports through November 2020 (table 1). The leading import sources for PGMs into the United States in November 2021 were, in descending order of quantity, the United Kingdom, South Africa, and Canada (tables 3, 4).

In November 2021, exports of platinum decreased by 3%, PGM scrap by 35%, and rhodium by 76% compared with those in October 2021 whereas exports of palladium increased by 56%. The leading destinations for PGM exports were, in descending order of quantity, Switzerland, United Kingdom, and Japan (tables 1, 5).

The Engelhard average November 2021 prices increased slightly for palladium, platinum, and rhodium, each, and

decreased by 4% for ruthenium and by 5% for iridium, compared with average prices in the previous month. Compared with average prices in November 2020, the November 2021 average prices increased by 15% for platinum and more than doubled for iridium and ruthenium, each. The average price of rhodium decreased by 5% and the average price of palladium decreased by 14% (fig. 1; tables 1, 2).

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

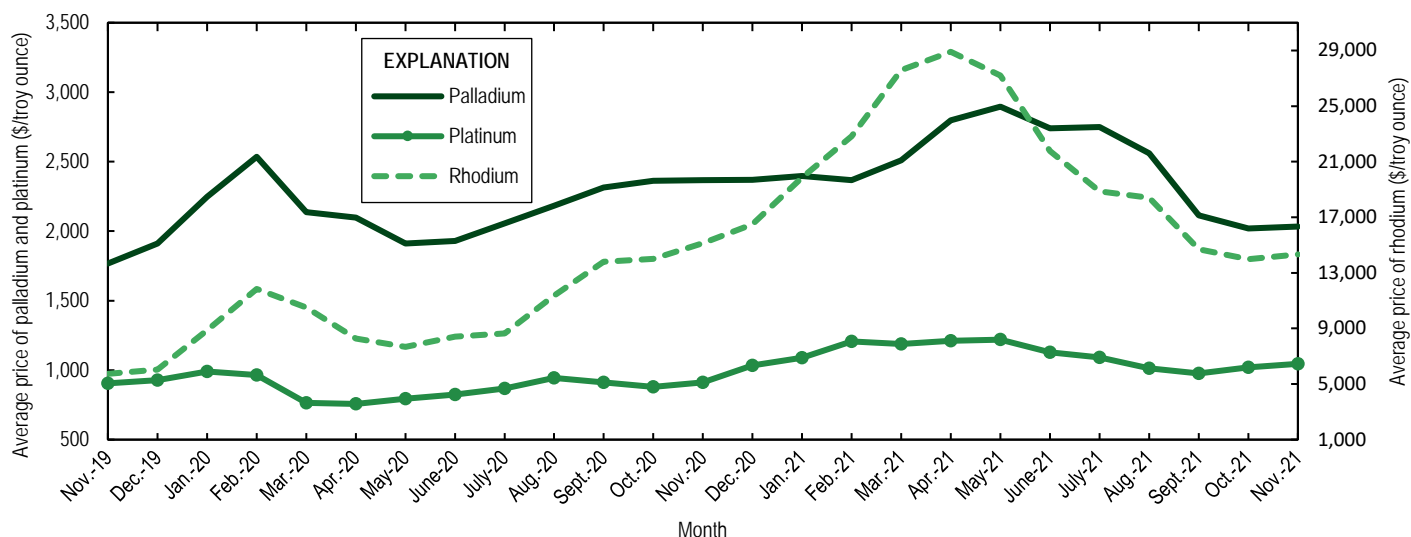


Figure 1. Engelhard unfabricated average monthly prices for palladium, platinum, and rhodium in dollars per troy ounce from November 2019 through November 2021. Source: S&P Global Platts Metals Week.

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

(Kilograms metal content, unless otherwise specified)

	2020	2021			
	January– December	September	October	November	January– November
Mine production: ²					
Palladium	14,600	1,160	1,160	1,160	13,000
Platinum	4,200	337	337	337	3,790
Total	18,800	1,500	1,500	1,500	16,800
Imports for consumption: ³					
Palladium	76,400	6,630	5,010	4,600	67,000
Platinum	64,800	5,200	6,020	11,000	59,700
Iridium	1,620	213	105	134	2,090
Osmium	1	--	--	--	1
Rhodium	20,700	1,090	1,580	1,150	14,900
Ruthenium	13,900	633	837	756	17,400
Waste and scrap ⁴	188,000	5,070	8,030	4,780	160,000
Total	365,000	18,800	21,600	22,400	322,000
Exports: ³					
Palladium	48,600	1,930	3,860	6,020	40,300
Platinum	28,900	1,680	1,720	1,670	25,300
Iridium, osmium, ruthenium	1,440	62	39	22	2,010
Rhodium	1,470	118	197	48	1,220
Waste and scrap ⁴	33,200	3,150	3,310	2,140	36,300
Total	114,000	6,940	9,120	9,900	105,000
Price, average (dollars per troy ounce): ⁵					
Palladium	2,205.27	2,114.76	2,018.33	2,033.90	2,474.94
Platinum	886.02	977.05	1,020.86	1,046.30	1,107.74
Iridium	1,633.51	5,142.86	4,714.29	4,500.00	5,244.76
Rhodium	11,205.06	14,700.00	13,990.48	14,325.00	20,812.34
Ruthenium	271.83	691.67	655.95	630.00	574.48

-- Zero.

¹Data, excluding prices, 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:					
September:					
Low:					
Price	1,912.00	935.00	5,000.00	12,000.00	675.00
Date	Sep. 29	Sep. 20	Sep. ²	Sep. 15 and 16	Sep. ²
High:					
Price	2,490.00	1,016.00	5,200.00	17,400.00	725.00
Date	Sep. 1	Sep. 1	Sep. ²	Sep. 1	Sep. ²
Price, average	2,114.76	977.05	5,142.86	14,700.00	691.67
October:					
Low:					
Price	1,880.00	954.00	4,500.00	13,400.00	650.00
Date	Oct. 6	Oct. 4	Oct. ²	Oct. 4	Oct. ²
High:					
Price	2,170.00	1,066.00	5,000.00	14,300.00	675.00
Date	Oct. 14	Oct. 22	Oct. ²	Oct. 7	Oct. ²
Price, average	2,018.33	1,020.86	4,714.29	13,990.48	655.95
November:					
Low:					
Price	1,775.00	948.00	4,500.00	13,700.00	625.00
Date	Nov. 30	Nov. 30	Nov. ²	Nov. 29	Nov. ²
High:					
Price	2,180.00	1,098.00	4,500.00	14,500.00	650.00
Date	Nov. 18	Nov. 16	Nov. ²	Nov. ²	Nov. ²
Price, average	2,033.90	1,046.30	4,500.00	14,325.00	630.00
January–November:					
Low:					
Price	1,775.00	935.00	3,000.00	12,000.00	280.00
Date	Nov. 30	Sep. 20	Jan. ²	Sep. 15 and 16	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	2,474.94	1,107.74	5,244.76	20,812.34	574.48

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:										
September	20	649	4,270	139,000	371	15,300	508	19,200	34	1,190
October	118	3,800	3,870	125,000	576	23,200	1,350	56,000	114	3,930
November:										
Australia	--	--	--	--	2	130	(2)	5	66	2,430
Austria	--	--	--	--	--	--	(2)	10	--	--
Belgium	--	--	492	15,600	--	--	--	--	--	--
Canada	28	980	--	--	--	--	44	1,500	16	517
China	--	--	--	--	--	--	--	--	1	25
Colombia	--	--	--	--	22	752	--	--	--	--
Costa Rica	--	--	--	--	--	--	102	3,760	--	--
Czechia	--	--	--	--	--	--	1	54	--	--
France	--	--	10	261	--	--	29	711	(2)	6
Germany	--	--	482	17,100	69	2,530	411	23,900	(2)	13
Hong Kong	--	--	--	--	(2)	15	(2)	3	--	--
Ireland	--	--	--	--	--	--	(2)	3	--	--
Italy	--	--	422	14,900	--	--	--	--	--	--
Japan	--	--	20	680	103	3,620	17	805	--	--
Korea, Republic of	--	--	95	3,180	--	--	--	--	--	--
Poland	--	--	--	--	--	--	--	--	(2)	7
Russia	--	--	200	6,710	--	--	--	--	--	--
Singapore	--	--	--	--	30	3,420	4	215	--	--
South Africa	--	--	4,870	186,000	178	5,800	10	317	--	--
Switzerland	--	--	40	1,370	24	878	55	1,690	26	903
Taiwan	--	--	--	--	--	--	23	857	--	--
Thailand	--	--	--	--	(2)	6	--	--	--	--
United Kingdom	--	--	13	430	1	70	3,070	108,000	3	105
Total	28	980	6,650	246,000	430	17,200	3,770	142,000	112	4,000
January–November	506	18,200	38,100	1,370,000	5,130	236,000	14,700	622,000	1,360	47,800

-- 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	\$4,490,000	1,620	\$70,100	1	\$17	20,700	\$4,590,000	13,900	\$117,000	188,000	\$1,500,000
2021:												
September	6,630	509,000	213	28,800	--	--	1,090	644,000	633	12,500	5,070	156,000
October	5,010	350,000	105	16,300	--	--	1,580	700,000	837	17,000	8,030	171,000
November: ⁴												
Belgium	544	34,900	--	--	--	--	45	18,100	--	--	--	--
Brazil	--	--	--	--	--	--	--	--	--	--	102	6,050
Canada	363	25,200	--	--	--	--	1	75	--	--	732	39,400
China	--	--	--	--	--	--	--	--	--	--	10	311
Colombia	--	--	--	--	--	--	--	--	--	--	18	556
France	--	--	--	--	--	--	--	--	--	--	67	1,550
Germany	130	8,790	--	--	--	--	229	112,000	411	8,270	1,330	43,400
Hungary	--	--	--	--	--	--	--	--	--	--	22	1,400
Italy	129	8,580	3	384	--	--	47	18,300	1	17	75	2,440
Japan	11	269	3	569	--	--	1	697	--	--	1	30
Korea, Republic of	234	15,700	--	--	--	--	20	10,200	--	--	--	--
Lebanon	--	--	--	--	--	--	--	--	--	--	10	315
Malaysia	--	--	--	--	--	--	--	--	--	--	47	1,490
Mexico	(5)	6	--	--	--	--	--	--	--	--	1,130	41,200
Poland	--	--	--	--	--	--	--	--	--	--	78	7,990
Portugal	--	--	--	--	--	--	--	--	--	--	324	10,900
Russia	1,160	76,200	--	--	--	--	66	28,700	--	--	--	--
South Africa	1,990	148,000	91	11,000	--	--	725	338,000	305	5,860	--	--
United Arab Emirates	--	--	--	--	--	--	--	--	--	--	250	8,140
United Kingdom	29	2,140	37	5,240	--	--	16	6,950	39	602	550	17,900
Other	8	365	(5)	55	--	--	--	--	--	--	32	1,650
Total	4,600	320,000	134	17,300	--	--	1,150	534,000	756	14,800	4,780	185,000
January–November	67,000	5,030,000	2,090	257,000	1	17	14,900	9,080,000	17,400	238,000	160,000	2,310,000

-- 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:										
September	1,930	143,000	1,680	64,100	62	1,940	118	65,300	3,150	215,000
October	3,860	244,000	1,720	56,600	39	587	197	85,400	3,310	265,000
November: ⁵										
Belgium	39	2,500	18	599	--	--	5	2,210	--	--
Brazil	102	6,680	--	--	--	--	--	--	--	--
Canada	385	25,700	77	2,660	--	--	(6)	20	(6)	15
China	100	6,360	44	1,620	--	--	--	--	--	--
Costa Rica	13	863	35	1,310	2	35	--	--	--	--
Germany	171	11,200	314	11,100	1	8	30	13,800	997	108,000
Hong Kong	7	466	594	20,300	--	--	(6)	50	70	2,990
Ireland	2	107	23	857	1	12	--	--	--	--
Italy	461	30,000	51	2,340	--	--	--	--	--	--
Japan	231	15,200	1	45	--	--	--	--	633	58,300
Korea, Republic of	213	13,800	2	61	--	--	--	--	--	--
Russia	--	--	22	1,930	--	--	--	--	--	--
Singapore	1	53	58	1,970	--	--	--	--	--	--
South Africa	--	--	--	--	--	--	--	--	73	4,210
Sweden	(6)	25	--	--	--	--	--	--	54	1,780
Switzerland	2,770	118,000	223	10,500	--	--	--	--	49	1,730
Taiwan	35	2,200	4	117	3	56	--	--	--	--
Thailand	6	380	16	546	--	--	--	--	--	--
United Arab Emirates	--	--	(6)	12	--	--	--	--	34	1,130
United Kingdom	1,440	100,000	147	4,810	2	51	13	5,480	230	48,300
Other	34	2,190	44	1,630	13	506	(6)	17	--	--
Total	6,020	336,000	1,670	62,400	22	668	48	21,600	2,140	226,000
January–November	40,300	3,160,000	25,300	985,000	2,010	50,500	1,220	752,000	36,300	3,180,000

-- 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.