

Mineral Industry Surveys

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PLATINUM-GROUP METALS IN SEPTEMBER 2021

Imports for consumption of platinum-group metals (PGMs), including waste and scrap, were 18,800 kilograms (kg) in September 2021, a decrease of 9% compared with imports in August 2021 and a decrease of 47% compared with imports in September 2020. Year-to-date imports through September 2021 increased by 8% for all PGMs compared with year-to-date imports through September 2020 (table 1). The leading import sources for PGMs into the United States in September 2021 were, in descending order of quantity, South Africa, Russia, and Germany (tables 3, 4).

In September 2021, exports of PGM scrap increased by 14% compared with those in August 2021, whereas exports decreased by 47% for rhodium, by 53% for platinum, and by 60% for palladium. The leading destinations for PGM exports were, in descending order of quantity, Japan, Germany, and the United Kingdom (tables 1, 5).

The Engelhard average September 2021 prices decreased by 4% for platinum, by 5% for iridium, by 7% for ruthenium, by 17% for palladium, and by 20% for rhodium compared with average prices in the previous month. Compared with average prices in September 2020, the September 2021 average prices increased by 7% for platinum and rhodium, each, more than doubled for ruthenium, and more than tripled for iridium (fig. 1; tables 1, 2). Price decreases in September were owing to ongoing shortages in the semiconductor industry that have reduced global automobile manufacturing (Warwick, 2021).

Industry News

A 1-ounce platinum bullion Gibraltar Castle Coin was released by Manfra, Tordella and Brooks, Inc. for purchase in 2022. Produits Artistiques Métaux Précieux SA, a precious metals refinery in Switzerland, was selected to produce the coin in 99.95% pure platinum and could be used as legal tender in Gibraltar, with a face value of five Gibraltar pounds (GIP). The

GIP is exchangeable with the British pound sterling at face value (World Platinum Investment Council, 2021).

References Cited

- Warwick, Filip, 2021, PGM prices face headwinds amid ongoing semiconductor shortage: London, United Kingdom, S&P Global Platts, September 20. (Accessed November 17, 2021, at <https://www.spglobal.com/platts/en/market-insights/latest-news/metals/092021-pgm-prices-face-headwinds-amid-ongoing-semiconductor-shortage>.)
- World Platinum Investment Council, 2021, Platinum Gibraltar: London, United Kingdom, 60 Seconds in Platinum, September 29, 2 p. (Accessed November 17, 2021, at https://platinuminvestment.com/files/sixtysecs/WPIC_60seconds_Platinum_Gibraltar_09292021.pdf.)

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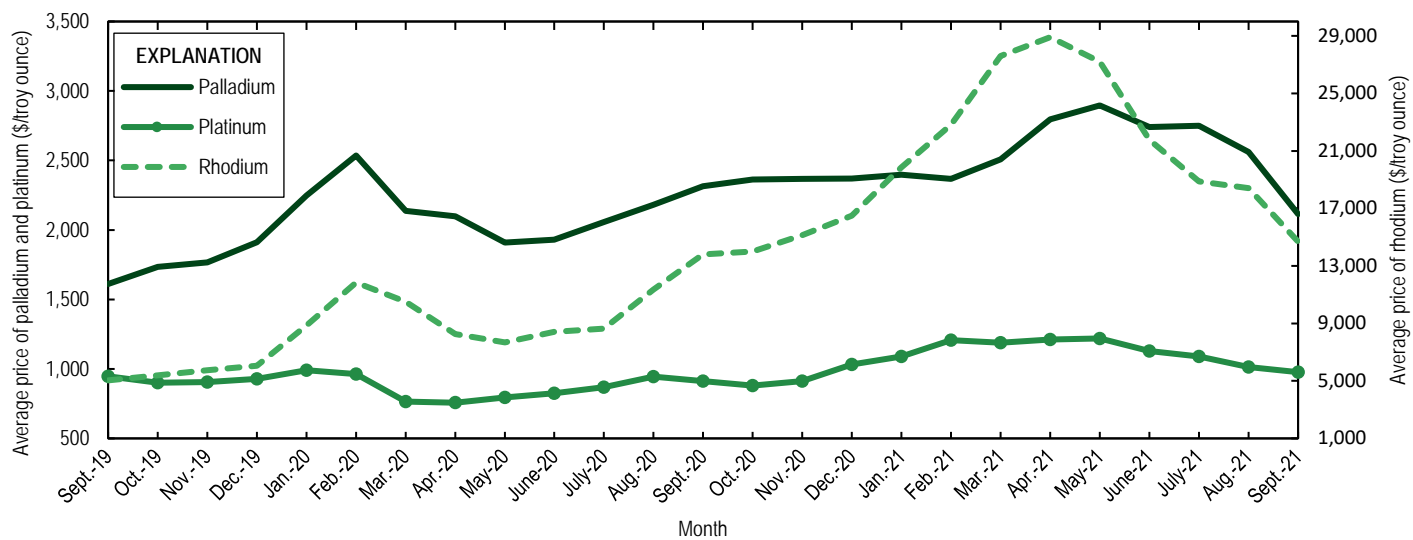


Figure 1. Engelhard unfabricated average monthly prices for palladium, platinum, and rhodium in dollars per troy ounce from September 2019 through September 2021. Source: S&P Global Platts Metals Week.

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

(Kilograms metal content, unless otherwise specified)

	2020	2021			
	January– December	July	August	September	January– September
Mine production: ²					
Palladium	14,600	1,160 ^r	1,160 ^r	1,160	10,700
Platinum	4,200	337 ^r	337 ^r	337	3,120
Total	18,800	1,500 ^r	1,500 ^r	1,500	13,800
Imports for consumption: ³					
Palladium	76,400	4,990	4,690	6,630	57,400
Platinum	64,800	3,040	3,800	5,200	42,700
Iridium	1,620	168	134	213	1,850
Osmium	1	--	--	--	1
Rhodium	20,700	1,180	1,180	1,090	12,200
Ruthenium	13,900	941	1,340	633	15,900
Waste and scrap ⁴	188,000	7,510	9,510	5,070	148,000
Total	365,000	17,800	20,600	18,800	278,000
Exports: ³					
Palladium	48,600	3,170	4,780	1,930	30,400
Platinum	28,900	6,050	3,570	1,680	21,900
Iridium, osmium, ruthenium	1,440	180	42	62	1,950
Rhodium	1,470	121	223	118	977
Waste and scrap ⁴	33,200	1,920	2,760	3,150	30,800
Total	114,000	11,400	11,400	6,940	86,100
Price, average (dollars per troy ounce): ⁵					
Palladium	2,205.27	2,749.86	2,561.09	2,114.76	2,572.86
Platinum	886.02	1,090.43	1,012.55	977.05	1,123.98
Iridium	1,633.51	5,504.76	5,404.55	5,142.86	5,383.24
Rhodium	11,205.06	18,869.05	18,410.23	14,700.00	22,264.49
Ruthenium	271.83	750.00	742.05	691.67	559.47

^rRevised. -- 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:					
July:					
Low:					
Price	2,613.00	1,048.00	5,500.00	17,750.00	750.00
Date	Jul. 20	Jul. 30	Jul. ²	Jul. 9	Jul. ²
High:					
Price	2,889.00	1,138.00	5,600.00	19,750.00	750.00
Date	Jul. 6	Jul. 16	Jul. 1	Jul. ²	Jul. ²
Price, average	2,749.86	1,090.43	5,504.76	18,869.05	750.00
August:					
Low:					
Price	2,316.00	976.00	5,200.00	17,000.00	725.00
Date	Aug. 20	Aug. 19	Aug. ²	Aug. 24	Aug. ²
High:					
Price	2,701.00	1,065.00	5,500.00	19,300.00	750.00
Date	Aug. 2 and 3	Aug. 2	Aug. ²	Aug. 4	Aug. ²
Price, average	2,561.09	1,012.55	5,404.55	18,410.23	742.05
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
January–September:					
Low:					
Price	1,912.00	935.00	3,000.00	12,000.00	280.00
Date	Sep. 29	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	2,572.86	1,123.98	5,383.24	22,264.49	559.47

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:										
July	22	694	2,090	75,200	200	16,700	638	39,500	93	3,470
August	61	2,010	2,660	90,800	234	8,990	694	37,100	146	5,260
September:										
Australia	--	--	--	--	--	--	(2)	7	28	958
Austria	--	--	--	--	--	--	47	2,770	1	38
Belgium	--	--	255	8,380	--	--	--	--	--	--
Canada	19	623	--	--	--	--	42	1,410	2	71
Colombia	--	--	--	--	49	1,480	--	--	--	--
Costa Rica	--	--	--	--	--	--	56	2,110	--	--
Czechia	--	--	--	--	--	--	17	482	--	--
Denmark	--	--	--	--	--	--	(2)	11	--	--
France	--	--	--	--	--	--	11	266	--	--
Germany	--	--	177	5,900	75	2,600	154	6,290	1	50
Hong Kong	(2)	3	--	--	--	--	--	--	--	--
Ireland	--	--	--	--	(2)	21	1	13	--	--
Italy	--	--	227	7,220	(2)	11	--	--	--	--
Japan	--	--	48	1,520	(2)	91	13	458	--	--
Korea, Republic of	--	--	30	965	--	--	--	--	1	8
Russia	--	--	200	6,400	104	3,300	--	--	--	--
Singapore	--	--	--	--	18	3,240	6	263	--	--
South Africa	--	--	3,330	108,000	13	1,040	--	--	(2)	9
Switzerland	--	--	--	--	112	3,530	41	1,360	--	--
Taiwan	--	--	--	--	--	--	86	2,820	--	--
United Kingdom	(2)	22	--	--	--	--	33	970	2	57
Total	20	649	4,270	139,000	371	15,300	508	19,200	34	1,190
January–September	359	13,400	27,600	996,000	4,130	196,000	9,550	424,000	1,130	39,800

-- 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:												
July	4,990	412,000	168	29,100	--	--	1,180	650,000	941	18,200	7,510	256,000
August	4,690	410,000	134	22,600	--	--	1,180	731,000	1,340	29,700	9,510	271,000
September: ⁴												
Belgium	234	19,100	--	--	--	--	72	40,200	--	--	--	--
Brazil	--	--	--	--	--	--	--	--	--	--	195	7,560
Canada	244	17,100	--	--	--	--	1	81	--	--	1,170	27,200
Colombia	--	--	--	--	--	--	--	--	--	--	24	758
France	--	--	--	--	--	--	--	--	--	--	60	2,190
Germany	549	44,500	25	3,550	--	--	276	156,000	413	8,160	1,290	42,100
Ireland	1	18	--	--	--	--	--	--	--	--	25	583
Italy	333	24,000	1	198	--	--	68	26,800	--	--	302	9,830
Japan	148	10,600	6	970	--	--	1	797	--	--	--	--
Korea, Republic of	260	17,500	--	--	--	--	26	19,600	--	--	9	1,690
Malaysia	--	--	--	--	--	--	--	--	--	--	49	1,480
Mexico	(5)	13	--	--	--	--	--	--	--	--	1,060	33,900
Netherlands	--	--	--	--	--	--	--	--	--	--	54	1,890
New Zealand	--	--	--	--	--	--	--	--	--	--	82	648
Russia	2,830	216,000	40	6,580	--	--	128	73,000	--	--	--	--
Saudi Arabia	--	--	--	--	--	--	--	--	--	--	40	1,290
South Africa	1,600	132,000	102	11,000	--	--	515	328,000	220	4,360	--	--
Switzerland	417	27,000	--	--	--	--	--	--	--	--	--	--
United Arab Emirates	--	--	--	--	--	--	--	--	--	--	148	4,820
United Kingdom	4	373	39	6,450	--	--	1	212	--	--	478	17,800
Other	3	77	--	--	--	--	--	--	--	--	85	1,930
Total	6,630	509,000	213	28,800	--	--	1,090	644,000	633	12,500	5,070	156,000
January–September	57,400	4,360,000	1,850	224,000	1	17	12,200	7,840,000	15,900	206,000	148,000	1,950,000

-- 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:										
July	3,170	277,000	6,050	223,000	180	4,360	121	83,100	1,920	253,000
August	4,780	404,000	3,570	122,000	42	1,190	223	141,000	2,760	305,000
September: ⁵										
Belgium	58	4,020	38	1,160	1	9	10	4,530	578	17,300
Brazil	84	6,840	62	1,990	--	--	--	--	--	--
Canada	385	31,800	87	2,860	1	23	(6)	25	10	300
China	2	152	27	744	2	24	--	--	--	--
Costa Rica	7	585	57	1,200	--	--	--	--	--	--
France	2	215	11	249	3	57	--	--	--	--
Germany	389	28,200	281	15,300	3	26	10	5,710	848	57,600
Hong Kong	13	1,020	21	583	--	--	33	19,300	--	--
India	23	1,810	113	3,610	--	--	--	--	--	--
Ireland	2	149	45	1,340	--	--	--	--	--	--
Italy	33	2,560	123	3,970	3	257	(6)	11	--	--
Japan	200	15,900	336	15,000	6	223	--	--	1,180	76,400
Korea, Republic of	22	1,850	1	25	--	--	--	--	--	--
Mexico	3	278	203	7,430	--	--	--	--	--	--
Singapore	1	105	95	3,200	--	--	4	2,420	--	--
South Africa	--	--	--	--	--	--	--	--	228	9,440
Switzerland	237	14,800	16	455	9	791	--	--	82	2,720
Taiwan	46	4,130	12	401	16	153	--	--	--	--
United Arab Emirates	--	--	--	--	--	--	--	--	44	1,720
United Kingdom	418	28,300	129	4,020	8	90	61	33,200	168	48,900
Other	8	712	19	488	11	287	(6)	4	10	386
Total	1,930	143,000	1,680	64,100	62	1,940	118	65,300	3,150	215,000
January–September	30,400	2,580,000	21,900	866,000	1,950	49,300	977	645,000	30,800	2,690,000

-- 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.