

Mineral Industry Surveys

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PLATINUM-GROUP METALS IN JULY 2022

Imports for consumption of platinum-group metals (PGMs), including waste and scrap, were 17,300 kilograms (kg) in July 2022, an increase of 11% compared with imports in June 2022, and a decrease of 3% compared with imports in July 2021 (table 1). The leading import sources for PGMs into the United States in July 2022 were, in descending order of quantity, Canada, South Africa, and Germany (tables 3, 4).

In July 2022, exports of rhodium decreased by 84%, by 37% for palladium, by 30% for PGM waste and scrap, and by 22% for platinum compared with those in June 2022. The leading destinations for PGM exports were, in descending order of quantity, Japan, Germany, and the United Kingdom (tables 1, 5).

The Engelhard average July 2022 prices increased by 3% for palladium and slightly for rhodium compared with the average prices in June 2022. The average prices decreased by 9% for platinum and by 3% for iridium and ruthenium, each, compared with the average prices in the previous month. Compared with average prices in July 2021, the July 2022 average price decreased by 28% for palladium, by 24% for rhodium, by 20% for platinum, by 19% for ruthenium, and by 11% for iridium (fig. 1; tables 1, 2).

Industry News

PolyMet Mining Corp. signed a 50:50 joint venture (JV) agreement with Teck American Inc. (a subsidiary of Teck Resources Ltd.) to form NewRange Copper Nickel JV. The JV will combine their PolyMet and Teck's resources at the NorthMet and Mesaba copper, nickel, cobalt, and PGM deposits (PolyMet Mining Corp., 2022).

Almalyk Mining and Metallurgical Combine JSC (Uzbekistan) announced plans to increase the production of

PGMs at one of its copper smelters. Expansion of the smelter will accommodate PGM-bearing ore from the Pirmirab and Kuchbulak mines located in the Tashkent and Namangan Regions of Uzbekistan (Rzayeva, 2022).

The Finance Minister of Zimbabwe announced plans to increase the royalty rate on platinum producers to 5% beginning in January 2023. Recent inflation and slow growth were cited as economic conditions for the royalty rate increase (Marawanyika and Ndlovu, 2022).

References Cited

Marawanyika, Godfrey, and Ndlovu, Ray, 2022, Zimbabwe to raise taxes on platinum, lithium to boost revenue: New York City, NY, Bloomberg News, July 28. (Accessed August 30, 2022, at

https://www.bloomberg.com/news/articles/2022-07-28/zimbabwe-will-raise-taxes-on-platinum-lithium-to-boost-revenue#xj4y7vzkg.)

PolyMet Mining Corp., 2022, PolyMet strikes 50:50 joint venture with Teck Resources: St. Paul, MN, PolyMet Mining Corp. press release, July 20. (Accessed August 29, 2022, at

https://polymetmining.com/investors/news/polymet-strikes-5050-joint-venture-agreement-with-teck-resources/.)

Rzayeva, Natavan, 2022, Large Uzbek plant plans to launch production of platinum group metals: Baku, Azerbaijan, Trend News Agency, July 31. (Accessed August 29, 2022, at

https://en.trend.az/casia/uzbekistan/3627479.html.)

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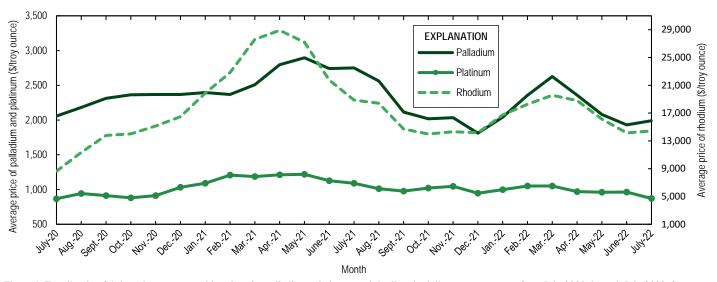


Figure 1. Engelhard unfabricated average monthly prices for palladium, platinum, and rhodium in dollars per troy ounce from July 2020 through July 2022. Source: S&P Global Platts Metals Week.

 $\label{eq:table 1} \textbf{TABLE 1} \\ \textbf{U.S. SALIENT PLATINUM-GROUP METALS STATISTICS}^1$

	2021		2022				
	January-				January–		
	December	May	June	July	July		
Mine production: ²		-		-			
Palladium	13,700	862 r	862 r	862	6,390		
Platinum	4,020	254 ^r	254 ^r	254	1,880		
Total	17,700	1,120 ^r	1,120 ^r	1,120	8,270		
Imports for consumption: ³							
Palladium	72,600	6,090	2,890	3,110	36,200		
Platinum	67,900	6,790	6,070	4,330	33,200		
Iridium	2,310	57	112	78	970		
Osmium	1						
Rhodium	16,500	1,050	952	858	7,360		
Ruthenium	18,000	1,310	1,180	1,440	8,470		
Waste and scrap ⁴	185,000	4,710	4,470	7,520	29,100		
Total	362,000	20,000	15,700	17,300	115,000		
Exports: ³							
Palladium	43,900	3,960	4,380	2,740	26,300		
Platinum	29,400	3,940	1,960	1,530	15,800		
Iridium, osmium, ruthenium	2,180	11	24	17	791		
Rhodium	1,350	37	68	11	450		
Waste and scrap ⁴	37,800	3,270	4,310	3,020	21,900		
Total	114,000	11,200	10,700	7,320	65,300		
Price, average (dollars per troy ounce): ⁵							
Palladium	2,419.18	2,080.05	1,931.55	1,991.10	2,201.21		
Platinum	1,094.31	962.19	962.59	872.30	981.65		
Iridium	5,158.40	5,000.00	5,000.00	4,875.00	4,731.38		
Rhodium	20,254.10	16,133.33	14,154.55	14,420.00	16,873.45		
Ruthenium	576.12	625.00	625.00	605.00	598.62		

^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
2021:					
Low:					
Price	1,584.00	915.00	3,000.00	12,000.00	280.00
Date	Dec. 15	Dec. 14 and 15	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	2,419.18	1,094.31	5,158.40	20,254.10	576.12
2022:	·	·	·	·	
May:					
Low:					
Price	1,937.00	935.00	5,000.00	14,850.00	625.00
Date	May 12	May 2	May ²	May 20	May ²
High:	•	•		•	
Price	2,260.00	995.00	5,000.00	18,000.00	625.00
Date	May 2 and 5	May 5	May ²	May 2 and 3	May ²
Price, average	2,080.05	962.19	5,000.00	16,133.33	625.00
June:					
Low:					
Price	1,835.00	910.00	5,000.00	13,750.00	625.00
Date	Jun. 14	Jun. 30	Jun. ²	Jun. ²	Jun. ²
High:					
Price	2,045.00	1,035.00	5,000.00	15,000.00	625.00
Date	Jun. 3	Jun. 3 and 6	Jun. ²	Jun. 1 and 2	Jun. ²
Price, average	1,931.55	962.59	5,000.00	14,154.55	625.00
July:					
Low:					
Price	1,880.00	834.00	4,750.00	13,500.00	585.00
Date	Jul. 15	Jul. 14	Jul. ²	Jul. 5	Jul. ²
High:					
Price	2,170.00	893.00	5,000.00	15,250.00	625.00
Date	Jul. 11	Jul. 28	Jul. ²	Jul. ²	Jul. ²
Price, average	1,991.10	872.30	4,875.00	14,420.00	605.00
January–July:					
Low:					
Price	1,835.00	834.00	4,150.00	13,500.00	530.00
Date	Jun. 14	Jul. 14	Jan.–Mar. ²	Jul. 5	Jan.–Mar. ²
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	MarJul. ²
Price, average	2,201.21	981.65	4,731.38	16,873.45	598.62
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¹Quotes from Engelhard.

Source: S&P Global Platts Metals Week.

²Occurred multiple days in month(s) listed.

 $\label{eq:table 3} \textbf{U.S. IMPORTS FOR CONSUMPTION OF PLATINUM METAL, BY COUNTRY OR LOCALITY}^1$

	Plat	inum			Ot	her					
	grain and nuggets		Platinur	Platinum sponge		unwrought platinum		Platinum, other		Platinum coins	
		Value		Value		Value		Value		Value	
Country or locality	Quantity	(thousands)	Quantity	(thousands)	Quantity	(thousands)	Quantity	(thousands)	Quantity	(thousands)	
2021, January–December	590	\$20,800	44,700	\$1,600,000	5,400	\$247,000	15,800	\$662,000	1,400	\$49,200	
2022:											
May	289	10,900	4,780	159,000	443	47,800	1,170	47,400	111	3,640	
June	37	1,180	4,610	148,000	200	14,000	1,210	54,900	17	671	
July:											
Australia							1	22	(2)	12	
Austria							32	1,850			
Belgium			908	25,400							
Canada	15	451					31	1,000	71	2,090	
Colombia					4	113	85	2,420			
Costa Rica							112	4,410			
Czechia							3	200			
Ecuador					(2)	5					
France			19	450			19	458			
Germany			310	9,710	53	1,720	328	19,500	(2)	16	
Ireland					(2)	19	1	29			
Italy			328	9,350			(2)	5			
Japan			53	1,520	31	978	4	164			
Korea, Republic of			62	1,730							
Singapore							10	405			
South Africa			1,500	45,700	19	508	15	395	3	74	
Sweden							(2)	4			
Switzerland	2	47	16	434	(2)	48	99	2,840			
Turkey									(2)	4	
United Kingdom			104	2,880	(2)	20	92	4,100			
Total	17	498	3,300	97,100	109	3,410	832	37,800	75	2,200	
January–July	801	27,100	23,100	749,000	1,610	112,000	7,330	331,000	355	12,000	

⁻⁻ Zero.

Source: U.S. Census Bureau.

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

²Less than ½ unit.

 ${\it TABLE~4} \\ {\it U.S.~IMPORTS~FOR~CONSUMPTION~OF~PLATINUM-GROUP~METALS,~BY~COUNTRY~OR~LOCALITY}^1$

	Palladium ²		Iri	dium ²	Os	mium ²	Rhodium ²		Ruthenium ²		Waste and scrap ³	
		Value		Value		Value		Value		Value		Value
Country or locality	Quantity	(thousands)	Quantity	(thousands)	Quantity	(thousands)	Quantity	(thousands)	Quantity	(thousands)	Quantity	(thousands)
2021, January–December	72,600	\$5,390,000	2,310	\$286,000	1	\$17	16,500	\$9,850,000	18,000	\$247,000	185,000	\$2,380,000
2022:												
May	6,090	407,000	57	9,850			1,050	621,000	1,310	25,500	4,710	172,000
June	2,890	184,000	112	17,600			952	513,000	1,180	21,700	4,470	125,000
July: ⁴												
Belgium	240	14,200					77	34,600				
Brazil											29	2,170
Canada	352	24,200					(5)	73			5,300	19,800
Colombia											14	427
France											34	1,250
Germany	306	16,800	3	62			241	132,000	751	13,500	558	14,300
Guatemala											16	178
Italy	127	7,970	2	365			60	27,300			163	5,300
Japan	120	3,440	7	1,230			5	2,280	28	721		
Korea, Republic of	156	9,780					12	7,450				
Malaysia											80	2,280
Mexico											463	13,400
New Zealand											191	6,240
Nigeria											19	605
Russia	423	26,700					16	7,380				
Slovakia											49	1,740
South Africa	1,160	70,400	53	6,180			447	185,000	660	11,700	(5)	2
Switzerland	219	14,300										
United Arab Emirates											60	1,450
United Kingdom	5	336	12	2,180			(5)	27			487	15,600
Other	1	172					(5)	13			62	3,970
Total	3,110	188,000	78	10,000			858	396,000	1,440	26,000	7,520	88,600
January–July	36,200	2,530,000	970	118,000			7,360	3,990,000	8,470	150,000	29,100	859,000

⁻⁻ Zero.

Source: U.S. Census Bureau.

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.

 ${\it TABLE 5}$ U.S. EXPORTS OF PLATINUM-GROUP METALS, BY COUNTRY OR LOCALITY 1

	Palladium ²		Palladium ² Platinum ²		inum²		osmium nenium ^{2, 3}	Rho	dium ²	Waste and scrap ⁴		
		Value		Value		Value		Value		Value		
Country or locality	Quantity	(thousands)	Quantity	(thousands)	Quantity	(thousands)	Quantity	(thousands)	Quantity	(thousands)		
2021, January–December	43,900	\$3,370,000	29,400	\$1,110,000	2,180	\$57,400	1,350	\$809,000	37,800	\$3,370,000		
2022:												
May	3,960	267,000	3,940	147,000	11	1,210	37	20,900	3,270	284,000		
June	4,380	215,000	1,960	75,100	24	3,520	68	32,600	4,310	298,000		
July: ⁵												
Belgium									192	17,500		
Brazil	79	5,020	1	20								
Canada	350	20,700	8	289	(6)	9	7	3,360	252	7,560		
China	5	336	29	1,150	3	418	1	372				
Costa Rica	6	403	15	710	1	84						
France	4	232	11	346	(6)	38						
Germany	649	30,900	101	4,700	(6)	18	3	1,240	640	115,000		
Hong Kong	3	187	12	370								
India	(6)	7	71	2,070	3	398						
Ireland	4	311	43	1,550	(6)	4						
Israel	18	1,180	1	61								
Italy	388	25,400	128	3,800	(6)	36						
Japan	828	49,200	185	5,380	2	172			1,670	78,600		
Korea, Republic of	69	5,110	2	64			(6)	158				
Mexico	10	670	19	712								
Singapore	(6)	29	17	1,470								
South Africa			(6)	12					66	4,730		
Switzerland	303	18,700	33	1,040	1	59			65	1,900		
Taiwan	22	1,490	8	256								
United Kingdom	(6)	23	826	23,300	(6)	20			122	7,120		
Other	5	350	20	1,110	7	731			10	975		
Total	2,740	160,000	1,530	48,400	17	1,990	11	5,130	3,020	233,000		
January–July	26,300	1,710,000	15,800	597,000	791	23,600	450	248,000	21,900	2,100,000		

⁻⁻ Zero.

Source: U.S. Census Bureau.

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

²Unwrought and other forms.

Gross 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 1/2 unit.