

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: cpisut@usgs.gov

Internet: <https://www.usgs.gov/centers/nmic>

PLATINUM-GROUP METALS IN DECEMBER 2019

Imports for consumption of platinum-group metals (PGMs), including waste and scrap, were 37,300 kilograms (kg) in December 2019, which was more than double compared with imports in November 2019 and nearly double compared with imports in December 2018, respectively. The leading import sources for PGMs into the United States in December 2019 were, in descending order, the United Kingdom, South Africa, and Russia. For December 2019, exports of palladium and platinum increased by 13% and 17% respectively, compared with exports in November 2019 (table 5). Exports of PGM scrap decreased by 35% in December 2019 compared with exports in November 2019.

Compared with the prior month, the Engelhard average December prices increased for palladium, platinum, and rhodium by 8%, 3%, and 5%, respectively. Prices were unchanged in December 2019 for iridium and ruthenium compared with those in November 2019. Compared with average prices in December 2018, the December 2019 average prices increased by 52% for palladium, by 17% for platinum, and more than doubled for rhodium. The average price of iridium in December 2019 was essentially unchanged and ruthenium decreased by 6% compared with prices in December 2018 (figs. 1, 2; tables 1, 2).

Industry News

Twin Metals Minnesota LLC (St. Paul, MN), a subsidiary of Antofagasta PLC (United Kingdom), submitted a Mine Plan of Operations to the U.S. Bureau of Land Management and a Scoping Environmental Assessment Worksheet Data Submittal to the Minnesota Department of Natural Resources. In doing so, Twin Metals began the process of a multi-year scoping and environmental review process for the construction of an underground cobalt, copper, nickel, and platinum-group metals mine in Minnesota (Twin Metals Minnesota LLC, 2019).

Reference Cited

Twin Metals Minnesota LLC, 2019, Twin Metals Minnesota submits mine plan to state and federal agencies for review: St. Paul, MN, Twin Metals Minnesota LLC press release, December 18. (Accessed February 3, 2020, at <http://www.twin-metals.com/twin-metals-minnesota-submits-mine-plan-to-state-and-federal-agencies-for-review/>.)

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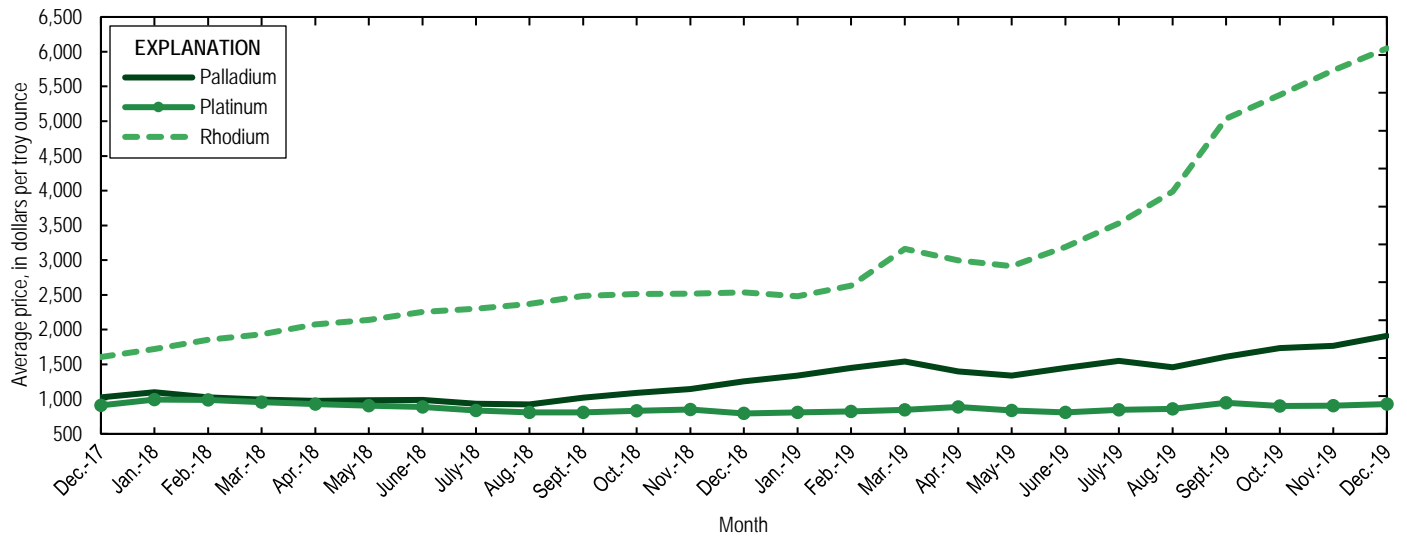


Figure 1. Engelhard unfabricated average monthly prices for palladium, platinum, and rhodium from December 2017 through December 2019. Source: Platts Metals Week.

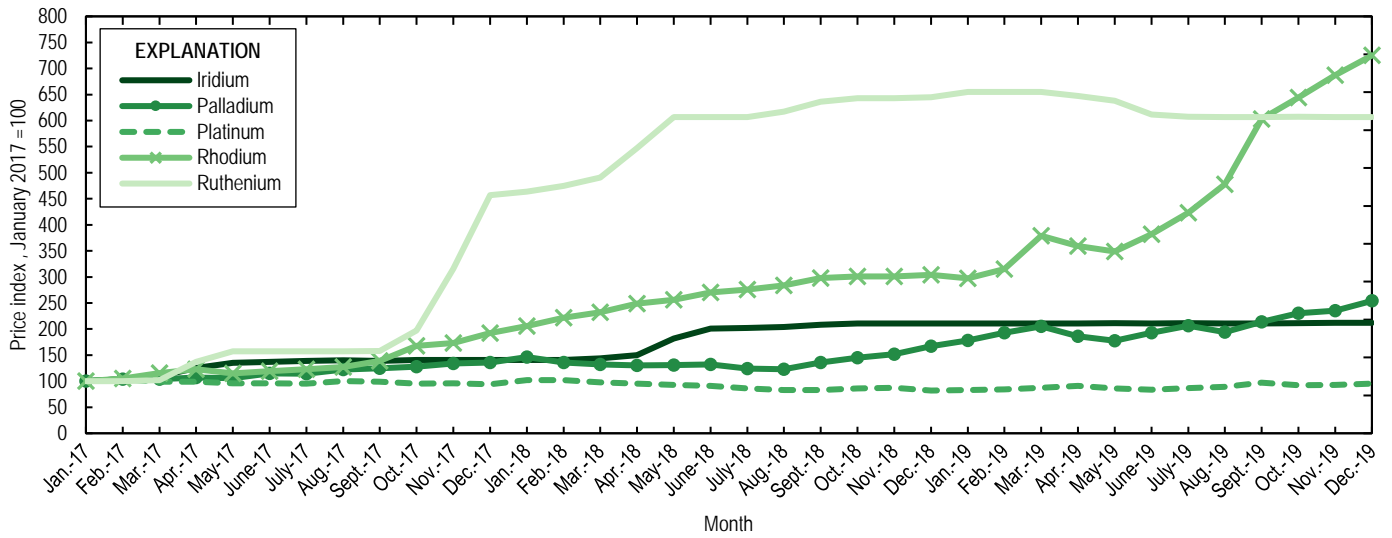


Figure 2. Indexed Engelhard unfabricated average monthly prices for iridium, palladium, platinum, rhodium, and ruthenium from January 2017 through December 2019. Prices are indexed to January 2017. Source: Platts Metals Week.

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

(Kilograms metal content, unless otherwise specified)

	2018	2019			
	January– December	October	November	December	January– December
Mine production:²					
Palladium	14,300	1,180	1,180	1,180	17,100
Platinum	4,170	344	344	344	4,970
Total	18,400	1,530	1,530	1,530	22,100
Imports for consumption:³					
Palladium	92,900	6,440	10,200	8,710	84,300
Platinum	58,500	4,820	3,860	3,520	42,300
Iridium	1,020	48	59	113	875
Osmium	25	--	--	--	(4)
Rhodium	14,500	1,370	1,090	1,560	15,000
Ruthenium	17,900	1,060	705	1,220	11,200
Waste and scrap ⁵	40,700	2,370	2,320	22,100 ⁶	54,300
Total	225,000	16,100	18,200	37,300	208,000
Exports:³					
Palladium	53,300	5,490	3,670	4,130	55,000
Platinum	18,900	2,200	949	1,110	17,400
Iridium, osmium, ruthenium	2,600	64	94	108	1,370
Rhodium	2,010	73	57	154	1,470
Waste and scrap ⁵	31,800	2,660	842	544	20,700
Total	109,000	10,500	5,610	6,050	95,900
Price, average (dollars per troy ounce):⁷					
Palladium	1,036.43	1,735.22	1,767.16	1,910.85	1,544.31
Platinum	882.66	900.52	905.21	929.00	866.94
Iridium	1,293.27	1,485.22	1,490.00	1,490.00	1,485.80
Rhodium	2,225.30	5,379.57	5,734.21	6,048.00	3,918.78
Ruthenium	244.41	255.00	255.00	255.00	262.59

-- 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.

⁴Less than ½ unit.

⁵Includes waste and scrap for all platinum-group elements. Previously included within platinum.

⁶Referred to the U.S. Census Bureau for verification.

⁷Source: Platts Metals Week.

TABLE 2
PLATINUM-GROUP METALS PRICES¹

(Dollars per troy ounce)

	Palladium	Platinum	Iridium	Rhodium	Ruthenium
2018:					
Low:					
Price	854.00	775.00	990.00	1,700.00	195.00
Date	Aug. 15	Sep. 4	Jan.–Feb. ²	Jan. ²	Jan. ² , Feb. 1 and 2
High:					
Price	1,277.00	1,023.00	1,485.00	2,600.00	275.00
Date	Dec. 20	Jan. 25	Sep.–Dec. ²	Nov.–Dec. ²	Sep.–Nov. ²
Price, average	1,036.43	882.66	1,293.27	2,225.30	244.41
2019:					
November:					
Low:					
Price	1,704.00	870.00	1,490.00	5,350.00	255.00
Date	Nov. 12	Nov. 13	Nov. ²	Nov. 1 and 4	(2)
High:					
Price	1,811.00	950.00	1,490.00	6,025.00	255.00
Date	Nov. 1	Nov. 4	Oct.–Nov. ²	Nov. ²	(2)
Price, average	1,767.16	905.21	1,490.00	5,734.21	255.00
December:					
Low:					
Price	1,855.00	892.00	1,490.00	5,900.00	255.00
Date	Dec. 3	Dec. 5	Dec. ²	Dec. 2	(2)
High:					
Price	1,977.00	985.00	1,490.00	6,150.00	255.00
Date	Dec. 13	Dec. 31	Dec. ²	Dec. 12, 13 and 16	(2)
Price, average	1,910.85	929.00	1,490.00	6,048.00	255.00
January–December:					
Low:					
Price	1,273.00	785.00	1,485.00	2,460.00	255.00
Date	Jan. 2	Feb. 14	Nov. ²	(2)	(2)
High:					
Price	1,977.00	985.00	1,490.00	6,150.00	275.00
Date	Dec. 13	Dec. 31	Oct.–Dec. ²	Dec. 12, 13 and 16	(2)
Price, average	1,544.31	866.94	1,485.80	3,918.78	262.59

¹Quotes from Engelhard.

²Occurred multiple days in month(s) listed.

Source: 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)
2018:										
January–December	1,040	\$28,100	43,100	\$1,250,000	3,370	\$110,000	9,780	\$305,000	1,160	\$34,900
2019:										
October	25	782	3,100	90,200	373	18,300	1,210	34,200	111	3,450
November	25	701	2,520	74,000	520	25,400	670	16,300	120	3,660
December:										
Australia	--	--	--	--	--	--	--	--	20	636
Belgium	--	--	36	1,070	--	--	--	--	--	--
Canada	16	468	--	--	--	--	15	455	30	949
Colombia	2	56	--	--	8	317	5	100	--	--
Costa Rica	--	--	--	--	--	--	54	2,110	--	--
Czechia	--	--	--	--	--	--	1	22	--	--
France	(2)	10	9	271	--	--	12	334	--	--
Germany	--	--	311	9,090	70	2,390	197	7,220	(2)	3
India	--	--	--	--	1	18	--	--	--	--
Ireland	--	--	--	--	(2)	9	--	--	--	--
Italy	--	--	160	4,760	--	--	--	--	--	--
Japan	--	--	--	--	1	24	2	61	--	--
Norway	--	--	70	2,020	--	--	--	--	--	--
Russia	--	--	--	--	--	--	--	--	(2)	4
Singapore	--	--	--	--	97	7,050	16	577	--	--
South Africa	--	--	2,120	60,600	20	605	9	409	(2)	8
Switzerland	--	--	51	1,510	12	362	18	517	--	--
United Kingdom	--	--	--	--	--	--	153	4,570	3	91
Total	18	534	2,760	79,400	209	10,800	482	16,400	53	1,690
January–December	360	12,700	26,200	726,000	3,880	168,000	10,600	320,000	1,320	40,600

-- 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)
2018:												
January–December	92,900	\$3,110,000	1,020	\$38,000	25	\$136	14,500	\$987,000	17,900	\$133,000	40,700	\$1,060,000
2019:												
October	6,440	349,000	48	2,090	--	--	1,370	211,000	1,060	8,010	2,370	79,200
November	10,200	319,000	59	2,650	--	--	1,090	168,000	705	5,280	2,320	80,000
December: ⁴												
Australia	--	--	--	--	--	--	--	--	--	--	76	2,430
Austria	36	169	--	--	--	--	--	--	--	--	--	--
Bahrain	--	--	--	--	--	--	--	--	--	--	61	2,260
Belgium	545	32,000	--	--	--	--	130	23,200	--	--	--	--
Canada	666	34,600	--	--	--	--	(5)	10	--	--	498	18,000
China	--	--	--	--	--	--	--	--	--	--	231	33,000
France	--	--	--	--	--	--	--	--	--	--	37	1,040
Germany	616	36,600	24	1,180	--	--	435	83,600	412	3,110	209	10,500
Italy	340	12,000	--	--	--	--	396	8,380	--	--	106	3,460
Japan	25	1,170	--	--	--	--	--	--	20	140	727	23,400
Kuwait	--	--	--	--	--	--	--	--	--	--	93	2,720
Malaysia	--	--	--	--	--	--	--	--	--	--	45	1,080
Mexico	--	--	--	--	--	--	--	--	--	--	495	16,400
Norway	93	5,570	--	--	--	--	12	2,310	--	--	7	309
Russia	3,150	179,000	--	--	--	--	90	15,400	--	--	--	--
Singapore	--	--	--	--	--	--	--	--	--	--	550	16,700
South Africa	2,960	162,000	74	3,480	--	--	484	84,700	672	4,830	10	1,690
Switzerland	204	11,400	--	--	--	--	--	--	--	--	--	--
Trinidad and Tobago	--	--	--	--	--	--	--	--	--	--	67	1,920
United Kingdom	76	3,620	15	724	--	--	13	812	119	983	18,800	12,300
Other	--	--	--	--	--	--	--	--	--	--	135	5,090
Total	8,710	478,000	113	5,380	--	--	1,560	218,000	1,220	9,060	22,100 ⁶	152,000
January–December	84,300	3,770,000	875	38,300	(5)	2	15,000	1,660,000	11,200	91,600	54,300	1,100,000

-- 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.

⁶Referred to the U.S. Census Bureau for verification.

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)
2018:										
January–December	53,300	\$1,060,000	18,900	\$587,000	2,600	\$42,600	2,010	\$130,000	31,800	\$616,000
2019:										
October	5,490	159,000	2,200	82,300	64	575	73	13,800	2,660	135,000
November	3,670	110,000	949	50,100	94	1,210	57	6,720	842	37,400
December: ⁵										
Australia	6	162	10	301	4	141	--	--	--	--
Brazil	--	--	51	1,500	--	--	--	--	--	--
Canada	179	5,610	11	255	--	--	--	--	(6)	4
China	145	2,820	9	182	3	31	--	--	--	--
Costa Rica	--	--	44	829	2	16	--	--	--	--
France	30	509	2	52	1	3	--	--	--	--
Germany	54	1,080	294	9,650	5	37	23	4,160	181	5,440
Hong Kong	91	2,710	6	175	3	22	--	--	--	--
Ireland	18	218	13	399	--	--	--	--	--	--
Italy	4	162	17	453	3	71	--	--	30	912
Japan	16	293	103	2,910	17	150	31	6,040	246	7,480
Korea, Republic of	27	860	215	6,210	64	297	46	8,940	--	--
Mexico	7	199	10	363	--	--	--	--	--	--
Norway	1	78	45	1,330	--	--	--	--	--	--
Saudi Arabia	--	--	203	1,630	--	--	--	--	--	--
South Africa	1	5	--	--	--	--	44	8,700	41	1,230
Switzerland	1,790	23,700	2	41	--	--	--	--	--	--
Taiwan	67	5,040	6	192	4	18	--	--	--	--
Thailand	21	620	5	143	--	--	--	--	--	--
United Kingdom	1,650	103,000	49	1,360	1	33	9	1,790	45	2,350
Other	27	509	16	851	1	8	--	--	1	33
Total	4,130	147,000	1,110	28,800	108	828	154	29,600	544	17,500
January–December	55,000	1,570,000	17,400	547,000	1,370	20,800	1,470	152,000	20,700	722,000

-- 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.