

Mineral Industry Surveys

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PLATINUM-GROUP METALS IN APRIL 2018

Imports for consumption of platinum-group metals (PGMs) in April 2018 were dominated by palladium, platinum waste and scrap, and platinum, which made up 34%, 14%, and 34%, respectively, of imports (tables 3, 4). Imports for consumption of PGMs, including waste and scrap, were 16,800 kilograms (kg) in April 2018, a 21% decrease compared with those in March 2018 and an 88% decrease compared with those in April 2017. For April 2018, the leading import sources for PGMs into the United States were, in descending order, South Africa, Germany, and Russia (tables 3, 4).

Prices

Compared with the prior month, the Engelhard average April prices decreased slightly for palladium and by 3% for platinum and increased by 4%, by 7%, and by 11% for iridium, rhodium, and ruthenium, respectively. Compared with April 2017, the April 2018 average price of platinum decreased by 4%, whereas prices of iridium, palladium, rhodium, and ruthenium increased by 20%, 21%, 102%, and 300%, respectively (tables 1, 2; figs. 1, 2). According to news sources, rhodium's price increase was related to increased demand by industrial users in conjunction with a limited supply (Thomson Reuters, 2017). Ruthenium's price increase was the result of increased purchases of the metal likely owing to reports of new uses for it in chemical catalysts, hard-disk drives, and semiconductors (Jonson, 2017).

Industry News

Sibanye Gold Ltd. produced 4,620 kg of platinum and palladium from its U.S. mines in the first quarter of 2018. Production included 3,588 kg of palladium and 1,032 kg of platinum from the Stillwater and East Boulder Mines in Montana. Sibanye-Stillwater also recovered (defined as recycling sold plus tolled returned) 6,025 kg of palladium, platinum, and rhodium from recycled catalytic converters at its Columbus Metallurgical Complex in Columbus, MT, during the first quarter of 2018. The Blitz project, an expansion of the Stillwater Mine, continued and was forecast to add about 9,000 kilograms per year of combined platinum and palladium production by 2022 (Sibanye Gold Ltd., 2018).

On April 2, six miners employed by African Rainbow Minerals Ltd. in South Africa were killed by a petrol bomb thrown at their bus on their way to the Modikwa Mine. Since the beginning of 2016, the eastern portion of the platinum belt in South Africa has seen more than 400 incidents of social unrest, according to data from Anglo American Platinum Ltd. The incidents were reportedly linked to conflicts between rival unions and grievances over jobs and revenue flows (Stoddard, 2018a, b).

References Cited

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*Corrections posted on July 20, 2018.

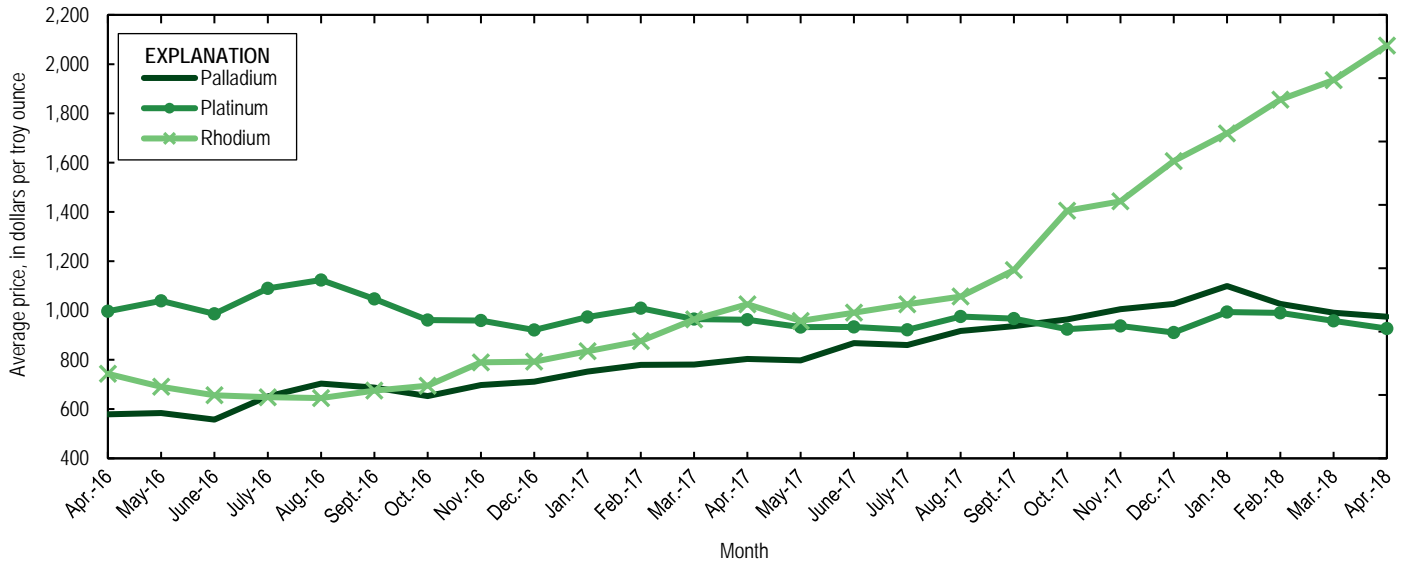


Figure 1. Engelhard unfabricated average monthly prices for palladium, platinum, and rhodium from April 2016 through April 2018. Source: Platts Metals Week.

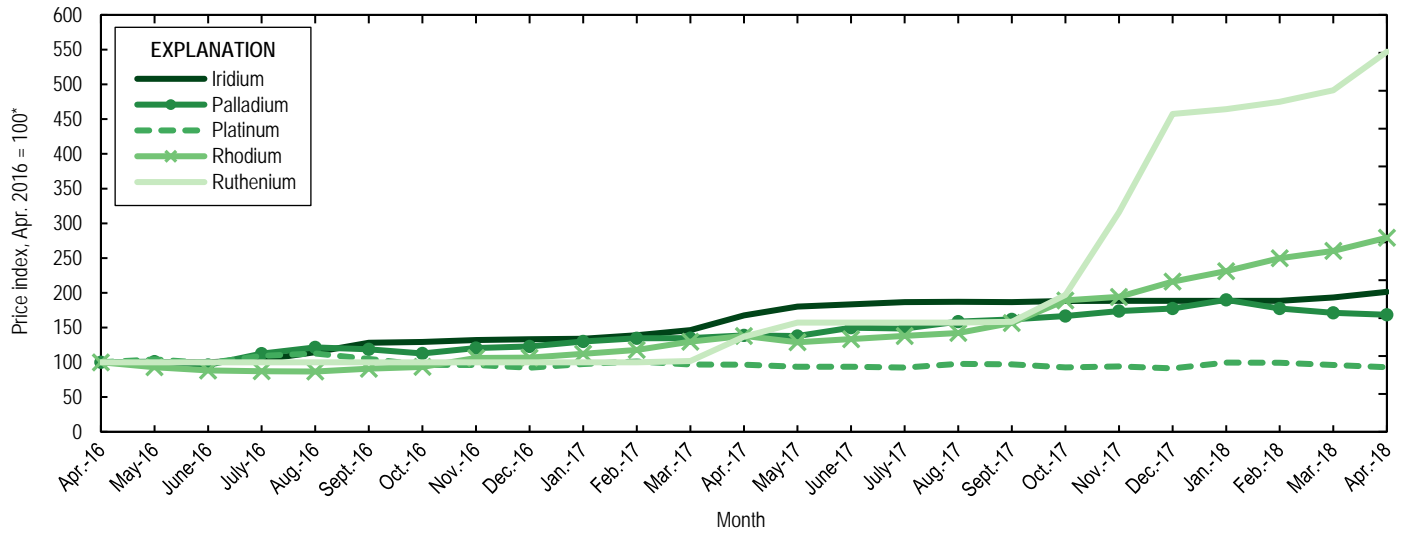


Figure 2. Indexed Engelhard unfabricated average monthly prices for iridium, palladium, platinum, rhodium, and ruthenium from April 2016 to April 2018. Prices are indexed to April 2016. Source: Platts Metals Week.

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

(Kilograms metal content, unless otherwise specified)

	2017		2018		
	January– December	February	March	April	January– April
Mine production:²					
Platinum	3,980	344	344	344	1,380
Palladium	13,600	1,200	1,200	1,200	4,780
Total	17,600	1,540	1,540	1,540	6,160
Imports for consumption:³					
Platinum	416,000 ^r	6,210	10,200	8,110	36,300
Palladium	86,000	8,200	6,390	5,710	27,500
Iridium	1,420 ^r	52	107	65	295
Osmium	856	--	--	--	--
Ruthenium	14,500	1,290	2,670	1,560	6,720
Rhodium	11,600	1,040	1,700	1,320	5,210
Total	530,000 ^r	16,800	21,100	16,800	75,900
Exports:³					
Platinum	211,000 ^r	3,320	2,790	6,620	17,600
Palladium	52,300 ^r	4,610	5,050	5,740	19,000
Iridium, osmium, ruthenium	939	273	277	94	942
Rhodium	844	160	468	416	1,260
Total	266,000 ^r	8,360	8,580	12,900	38,800
Price, average (dollars per troy ounce):⁴					
Palladium	874.30	1,026.84	991.33	974.81	1,023.11
Platinum	951.23	990.32	957.86	927.05	967.23
Iridium	908.35	990.00	1,015.00	1,057.62	1,013.15
Rhodium	1,112.59	1,856.05	1,935.24	2,075.48	1,896.41
Ruthenium	76.86	199.47	206.43	229.76	207.67

^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.

⁴Source: Platts Metals Week.

TABLE 2
PLATINUM-GROUP METALS PRICES¹

(Dollars per troy ounce)

	Palladium	Platinum	Iridium	Rhodium	Ruthenium
2017:					
Low:					
Price	710.00	880.00	700.00	765.00	42.00
Date	Jan. 3	Dec. 13	Jan. ²	Jan. 3	Jan.–Mar. ²
High:					
Price	1,062.00	1,035.00	990.00	1,725.00	195.00
Date	Dec. 28	Feb. 27	Aug. ² and Oct.–Dec. ²	Dec. ²	Dec. ²
Average	874.30	951.23	908.35	1,112.59	76.86
2018:					
March:					
Low:					
Price	975.00	939.00	1,000.00	1,865.00	200.00
Date	Mar. 29	Mar. 29	(2)	(2)	(2)
High:					
Price	1,016.00	974.00	1,030.00	2,050.00	215.00
Date	Mar. 1	Mar. 13	(2)	Mar. 28 and 29	(2)
Average	991.33	957.86	1,015.00	1,935.24	206.43
April:					
Low:					
Price	914.00	908.00	1,030.00	2,040.00	215.00
Date	Apr. 6	Apr. 30	(2)	Apr. 6 and 30	(2)
High:					
Price	1,042.00	949.00	1,150.00	2,135.00	255.00
Date	Apr. 19	Apr. 18	Apr. 30	Apr. 20	Apr. 30
Average	974.81	927.05	1,057.62	2,075.48	229.76
January–April:					
Low:					
Price	914.00	908.00	990.00	1,700.00	195.00
Date	Apr. 6	Apr. 30	Jan.–Feb. ²	Jan. ²	Jan. ² , Feb. 1 and 2
High:					
Price	1,134.00	1,023.00	1,150.00	2,135.00	255.00
Date	Jan. 15	Jan. 25	Apr. 30	Apr. 20	Apr. 30
Average	1,023.11	967.23	1,013.15	1,896.41	207.67

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 waste and scrap		Platinum coins	
	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)
2017:												
January–December	1,580	\$49,000	39,300	\$1,200,000	3,530	\$113,000	8,040 ^r	\$255,000	363,000 ^r	\$1,050,000	837	\$27,600
2018:												
February	2	63	2,380	77,200	291	10,400	652	23,200	2,850	90,400	32	1,080
March	97	2,980	4,770	150,000	181	6,750	1,140	38,200	3,980	117,000	66	2,450
April: ²												
Australia	--	--	--	--	--	--	(3)	5	31	603	--	--
Belgium	--	--	181	5,550	--	--	--	--	--	--	--	--
Brazil	--	--	--	--	--	--	--	--	257	7,280	--	--
Canada	4	121	--	--	--	--	34	1,110	491	9,680	18	588
China	--	--	--	--	--	--	--	--	55	2,600	--	--
Colombia	--	--	--	--	31	880	13	221	10	118	--	--
France	--	--	15	463	--	--	23	627	25	725	--	--
Germany	--	--	331	10,300	113	3,730	758	25,000	574	20,700	--	--
Italy	--	--	785	24,300	--	--	(3)	6	75	2,450	--	--
Japan	--	--	--	--	(3)	4	2	47	185	7,620	--	--
Korea, Republic of	--	--	205	6,140	--	--	--	--	--	--	--	--
Mexico	10	262	--	--	--	--	--	--	154	5,360	--	--
Norway	--	--	62	1,830	--	--	--	--	--	--	--	--
Russia	--	--	29	905	--	--	--	--	--	--	--	--
Singapore	--	--	--	--	(3)	6	13	419	127	4,370	--	--
South Africa	--	--	2,660	81,000	--	--	--	--	--	--	--	--
Switzerland	--	--	32	979	156	4,760	84	2,480	--	--	--	--
Thailand	--	--	--	--	--	--	--	--	26	821	--	--
Trinidad and Tobago	--	--	--	--	--	--	--	--	82	2,530	--	--
United Kingdom	--	--	83	2,500	--	--	51	1,530	262	7,040	--	--
Other	--	--	--	--	8	221	4	151	52	1,310	--	--
Total	14	382	4,380	134,000	307	9,600	981	31,600	2,400	73,200	18	588
January–April	135	4,190	15,700	493,000	1,080	36,100	3,500	117,000	15,600	350,000	234	8,150

^rRevised. -- Zero.

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

²The 20 countries with the greatest total platinum imports are listed. All others are included in the "Other" category.

³Less 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	Unwrought palladium		Palladium, other		Iridium ²		Osmium ²		Ruthenium ²		Rhodium ²	
	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)
2017:												
January–December	75,000	\$2,080,000	11,000	\$320,000	1,420 [†]	\$38,100 [†]	856	\$1,740	14,500	\$34,200	11,600	\$386,000
2018:												
February	7,370	250,000	834	27,500	52	1,580	--	--	1,290	8,800	1,040	56,700
March	5,440	186,000	956	37,500	107	3,310	--	--	2,670	19,700	1,700	95,500
April:												
Belgium	41	1,300	--	--	--	--	--	--	--	--	141	8,580
Canada	--	--	496	22,200	--	--	--	--	--	--	1	28
Germany	1,230	40,100	6	209	(3)	3	--	--	582	2,980	311	21,300
Hong Kong	--	--	--	--	--	--	--	--	92	239	--	--
Italy	346	10,900	1	47	--	--	--	--	--	--	28	1,860
Japan	42	646	1	40	--	--	--	--	--	--	--	--
Mexico	(3)	10	1	17	--	--	--	--	--	--	--	--
Netherlands	--	--	--	--	1	31	--	--	--	--	--	--
Norway	187	5,540	--	--	--	--	--	--	--	--	--	--
Russia	1,100	34,000	351	11,000	--	--	--	--	70	461	83	4,920
South Africa	1,510	51,400	--	--	38	1,180	--	--	736	4,900	735	43,400
Switzerland	--	--	30	1,010	--	--	--	--	--	--	--	--
Taiwan	--	--	--	--	--	--	--	--	76	490	--	--
United Kingdom	357	11,100	(3)	7	26	606	--	--	--	--	23	1,450
Total	4,820	155,000	886	34,500	65	1,820	--	--	1,560	9,070	1,320	81,500
January–April	24,100	818,000	3,410	128,000	295	8,870	--	--	6,720	43,700	5,210	293,000

[†]Revised. -- Zero.

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

²Unwrought and other forms.

³Less 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	Platinum ²		Platinum waste and scrap		Palladium ²		Iridium, osmium and ruthenium ^{2,3}		Rhodium ²	
	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)
2017:										
January–December	16,700	\$494,000	195,000 ^r	\$679,000 ^r	52,300 ^r	\$888,000 ^r	939	\$11,700	844	\$30,700
2018:										
February	1,830	60,200	1,490	31,500	4,610	77,400	273	9,570	160	9,780
March	462	14,100	2,330	66,200	5,050	92,000	277	6,520	468	12,800
April: ⁴										
Argentina	47	2,390	--	--	--	--	--	--	--	--
Australia	10	287	--	--	6	142	16	203	--	--
Belgium	33	1,070	227	8,830	57	1,680	--	--	9	348
Canada	7	228	1	20	136	2,180	--	--	(5)	34
China	6	172	--	--	397	12,500	13	459	29	1,700
Costa Rica	25	252	--	--	4	46	--	--	--	--
France	7	214	--	--	23	422	3	67	(5)	4
Germany	868	27,100	3,930	8,820	1,460	26,400	(5)	3	24	2,490
Hong Kong	9	261	--	--	39	959	15	165	(5)	48
India	58	1,720	--	--	10	326	20	201	1	41
Israel	--	--	--	--	174	1,170	--	--	--	--
Italy	7	242	206	6,810	1,390	42,900	3	82	2	137
Japan	341	10,400	249	7,490	332	9,800	--	--	10	1,090
Korea, Republic of	62	1,910	--	--	85	986	--	--	25	1,560
Mexico	48	1,630	--	--	16	226	3	88	(5)	8
South Africa	--	--	53	512	--	--	--	--	308	5,120
Switzerland	1	30	226	3,750	1,370	30,200	--	--	--	--
Taiwan	2	74	--	--	131	5,120	16	172	--	--
Thailand	3	86	--	--	41	252	--	--	--	--
United Kingdom	150	4,450	19	677	41	1,190	3	23	8	599
Other	31	926	--	--	21	418	2	20	--	--
Total	1,710	53,400	4,910	36,900	5,740	137,000	94	1,480	416	13,200
January–April	5,760	184,000	11,800	215,000	19,000	390,000	942	20,000	1,260	46,000

^rRevised. -- Zero.

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

²Unwrought and other forms.

³Gross weight.

⁴The 20 countries with the greatest total platinum-group metal exports are listed. All others are included in the "Other" category.

⁵Less than ½ unit.

Source: U.S. Census Bureau.