

# Mineral Industry Surveys

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## PLATINUM-GROUP METALS IN JANUARY 2019

Imports for consumption of platinum-group metals (PGMs), including waste and scrap, were 13,300 kilograms (kg) in January 2019, representing decreases of 30% and 38% compared with imports in December 2018 and January 2018, respectively. For January 2019, imports of palladium, platinum, and PGM scrap were 5,370 kg, 4,510 kg, and 1,880 kg, decreases of 25%, 16%, and 70%, respectively, compared with imports in the similar period in 2018. The leading import sources for PGMs into the United States were, in decending order, South Africa, Russia, and Germany (tables 3, 4).

## **Prices**

Compared with the prior month, the Engelhard average January prices increased by 7% for palladium, increased slightly for platinum and ruthenium, were essentially unchanged for iridium, and decreased slightly for rhodium. Compared with January 2018, the January 2019 average prices increased by 50%, 44%, 41%, and 22% for iridium, rhodium, ruthenium, and palladium, respectively. The price of platinum decreased by 19% (figs. 1, 2; tables 1, 2).

## **Industry News**

On January 15, the African Export-Import Bank (Afeximbank) and Great Dyke Investments (Pvt) Ltd. signed a memorandum of understanding, which stated that Afreximbank could potentially finance up to \$192 million for developing Great Dyke Investments' Darwendale platinum deposit in Zimbabwe. Full annual production and capacity of the mine and associated recovery plant was estimated at 26,700 kg of PGMs (Russia & CIS Metals and Mining Weekly, 2019).

### **Reference Cited**

Russia & CIS Metals and Mining Weekly, 2019, Afreximbank might lend almost \$200 mln for Russian-Zimbabwean JV's platinum project: Russia & CIS Metals and Mining Weekly [published by Interfax Ltd.], v. 29, issue 02, January 11–17, p. 5.

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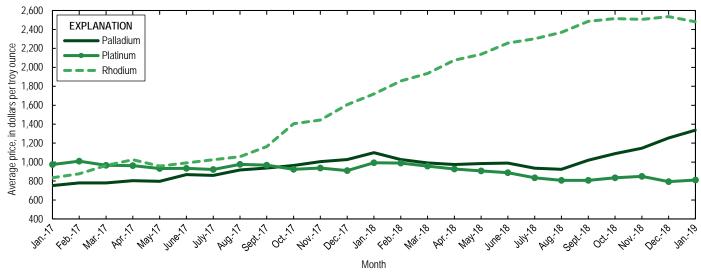


Figure 1. Engelhard unfabricated average monthly prices for palladium, platinum, and rhodium from January 2017 through January 2019. Source: Platts Metals Week.

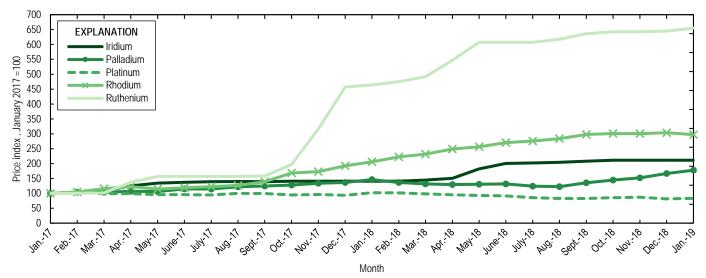


Figure 2. Indexed Engelhard unfabricated average monthly prices for iridium, palladium, platinum, rhodium, and ruthenium from January 2017 through January 2019. Prices are indexed to January 2017. Source: Platts Metals Week.

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

		2018		2019
			January-	
	November	December	December	January
Mine production: <sup>2</sup>				
Palladium	1,300 <sup>r</sup>	1,300 <sup>r</sup>	14,300	1,300
Platinum	370 <sup>r</sup>	370 <sup>r</sup>	4,160	370
Total	1,700 °	1,700 <sup>r</sup>	18,400	1,700
Imports for consumption: <sup>3</sup>				
Palladium	9,670	7,870	93,300	5,370
Platinum	4,570 <sup>r</sup>	3,940 <sup>r</sup>	58,000 <sup>r</sup>	4,510
Iridium	78	92	1,020	55
Osmium	- 		25	
Rhodium	1,270	1,240	14,500	1,190
Ruthenium	1,270	1,820	17,900	292
Waste and scrap <sup>4</sup>	2,790	3,910	40,800	1,880
Total	19,600	18,900	226,000	13,300
Exports: <sup>3</sup>				
Palladium	2,410	2,790	51,700	3,720
Platinum	1,080 <sup>r</sup>	1,300 <sup>r</sup>	18,100 <sup>r</sup>	1,580
Iridium, osmium, ruthenium	261	57	2,600	84
Rhodium	46	217	3,650	111
Waste and scrap <sup>4</sup>	4,590	1,490	34,800	2,780
Total	8,380	5,840	111,000	8,270
Price, average (dollars per troy ounce): <sup>5</sup>	_			
Palladium	1,146.45	1,254.79	1,036.43	1,337.05
Platinum	849.50	793.68	882.66	809.77
Iridium	1,485.00	1,485.00	1,293.27	1,485.00
Rhodium	2,505.75	2,535.26	2,224.47	2,480.91
Ruthenium	270.00	270.79	244.41	275.00

Revised. -- Zero.

 $<sup>^{1}\</sup>mathrm{Data}$  are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>2</sup>Data estimated based on publicly reported quarterly data.

<sup>&</sup>lt;sup>3</sup>Source: U.S. Census Bureau.

 $<sup>^4</sup>$ Includes waste and scrap for all platinum-group elements. Previously included within platinum.

<sup>&</sup>lt;sup>5</sup>Source: Platts Metals Week.

# TABLE 2 PLATINUM-GROUP METALS PRICES $^{\rm l}$

# (Dollars per troy ounce)

	Palladium	Platinum	Iridium	Rhodium	Ruthenium
2018:					
Low:	<del></del>				
Price	854.00	775.00	990.00	1,700.00	195.00
Date	Aug. 15	Sep. 4	JanFeb.2	Jan. <sup>2</sup>	Jan. <sup>2</sup> , 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	SepDec. <sup>2</sup>	NovDec. <sup>2</sup>	SepNov. <sup>2</sup>
Price, average	1,036.43	882.66	1,293.27	2,224.47	244.41
2019, January:					
Low:					
Price	1,273.00	788.00	1,485.00	2,460.00	275.00
Date	Jan. 2	Jan. 2	(2)	(2)	(2)
High:					
Price	1,398.00	826.00	1,485.00	2,515.00	275.00
Date	Jan. 17	Jan. 7	(2)	Jan. 31	(2)
Price, average	1,337.05	809.77	1,485.00	2,480.91	275.00

Source: Platts Metals Week.

<sup>&</sup>lt;sup>1</sup>Quotes from Engelhard. <sup>2</sup>Occurred multiple days in month(s) listed.

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

		tinum				ther				
	grain and nuggets		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)
2018:										
November	16	\$492	3,310	\$90,200	195	\$5,970	945	\$28,700	103	\$3,070
December	49	1,460	2,820	75,500	174	6,350	721	20,300	171	4,400
January-December	1,040	28,100	43,000	1,240,000	3,090	101,000	9,780	304,000	1,160	34,900
2019:										
January:										
Australia									46	1,290
Austria							(2)	7	6	151
Canada	1	37					33	816	107	2,970
Colombia					11	408				
Costa Rica					2	41	(2)	5		
France							7	193		
Germany			349	9,360	119	3,400	455	15,300	3	84
Hong Kong							(2)	2		
Ireland					(2)	16				
Italy			216	5,710						
Japan			25	692	(2)	40	1	16		
Korea, Republic of			261	6,670						
Norway			78	1,980			6	170		
Poland							(2)	7		
Russia			114	2,890					(2)	9
Singapore					323	11,300	8	288		
Slovenia							2	62		
South Africa			1,470	38,400			32	841	(2)	33
Switzerland			114	3,220			611	16,000		
United Kingdom			44	1,130	(2)	7	52	1,230	14	388
Total	1	37	2,670	70,100	454	15,300	1,210	35,000	177	4,930

<sup>--</sup> Zero.

Source: U.S. Census Bureau.

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>2</sup>Less than ½ unit.

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

	Palladium <sup>2</sup>		Iri	dium <sup>2</sup>	Osr	mium <sup>2</sup>	Rho	dium <sup>2</sup>	Ruth	enium <sup>2</sup>	Waste a	and scrap <sup>3</sup>
		Value		Value		Value		Value		Value		Value
Country or locality	Quantity	(thousands)	Quantity	(thousands)	Quantity	(thousands)	Quantity	(thousands)	Quantity	(thousands)	Quantity	(thousands)
2018:												
November	9,670	\$340,000	78	\$3,370			1,270	\$99,500	1,270	\$10,900	2,790	\$83,100
December	7,870	286,000	92	3,870			1,240	103,000	1,820	16,300	3,910	117,000
January-December	93,300	3,120,000	1,020	38,000	25	\$136	14,500	987,000	17,900	133,000	40,800	1,070,000
2019:												
January: <sup>4</sup>												
Australia											101	2,090
Belgium							113	8,740				
Brazil											132	2,730
Canada	254	10,200					1	39			237	8,590
Chile											47	118
Colombia											7	137
France											69	1,970
Germany	132	5,280	1	38			330	27,100	77	760	29	1,540
India											34	130
Italy	109	4,550					45	3,580			34	1,120
Japan	1	76									311	9,700
Korea, Republic of	132	5,590									81	2250
Malaysia											17	386
Mexico											165	5,690
Norway	93	3,810										
Russia	1,950	78,700					85	6860				
Singapore											27	828
South Africa	2,600	95,900	32	1,490			584	48,000	167	1,420		
Taiwan											32	1,290
United Kingdom	98	3,990	22	900			28	2,190	49	425	529	12,900
Other	(5)	21									30	737
Total	5,370	208,000	55	2,430			1,190	96,500	292	2,610	1,880	52,200

<sup>--</sup> Zero.

Source: U.S. Census Bureau.

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>2</sup>Unwrought and other forms.

<sup>&</sup>lt;sup>3</sup>Includes waste and scrap for all platinum-group elements.

<sup>&</sup>lt;sup>4</sup>The 20 countries and (or) localities with the greatest total platinum imports are listed. All others are included in the "Other" category.

<sup>&</sup>lt;sup>5</sup>Less than ½ unit.

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

_	Pallad	ium <sup>2</sup>	Dlas	tinum <sup>2</sup>		Iridium, osmium and ruthenium <sup>2, 3</sup> Rhodium <sup>2</sup>			Waste and scrap <sup>4</sup>		
	I anau	Value	110	Value	and fut	Value	Kiid	Value	waste	Value	
Country or locality	Quantity	(thousands)	Quantity	(thousands)	Quantity	(thousands)	Quantity	(thousands)	Quantity	(thousands)	
2018:	· ·	(	Quantity	(	Quantity	(	<b>Q</b>	()	· Carrera	(	
November	2,410	\$56,500	1,080	\$31,500	261	\$2,730	46	\$3,920	4,590	\$98,700	
December	2,790	46,200	1,300	36,100	57	750	217	6,490	1,490	44,200	
January-December	51,700	1,040,000	18,100	545,000	2,600	42,600	3,650	130,000	34,800	706,000	
2019:											
January: <sup>5</sup>											
Australia	4	113	24	954	12	169	25	933			
Belarus	15	183									
Belgium			(6)	3					63	1,740	
Canada	255	9,720	12	487			(6)	20	201	5,830	
China	151	3,570	11	342	1	7	4	324			
Costa Rica	14	229	58	881							
Germany	1,210	39,200	1,320	48,400	(6)	3	18	1,410	766	22,600	
Hong Kong	128	1,340	1	30	2	18					
India	2	52	13	350	10	102					
Ireland	31	341	31	826	1	5					
Israel	362	2,840	1	30	1	7					
Italy	7	268	16	375	5	151	2	145	70	2,730	
Japan	74	2,480	26	699	6	86	17	2,980	270	10,600	
Korea, Republic of	40	322	1	22							
Mexico	35	385	20	648			(6)	29			
South Africa							45	3,710			
Switzerland	1,310	26,600	3	75	2	68			1,100	14,300	
Taiwan	19	346	8	230							
Thailand	39	443	1	44							
United Kingdom	5	113	18	576	44	2,030			311	12,800	
Other	21	356	10	292							
Total	3,720	88,900	1,580	55,200	84	2,640	111	9,560	2,780	70,500	

<sup>--</sup> Zero.

Source: U.S. Census Bureau.

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>2</sup>Unwrought and other forms.

<sup>&</sup>lt;sup>3</sup>Gross weight.

<sup>&</sup>lt;sup>4</sup>Includes waste and scrap for all platinum-group elements. Previously categorized as "Platinum waste and scrap".

<sup>&</sup>lt;sup>5</sup>The 20 countries and (or) localities with the greatest total platinum-group metal exports are listed. All others are included in the "Other" category.

<sup>&</sup>lt;sup>6</sup>Less than ½ unit.