

# Mineral Industry Surveys

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# PLATINUM-GROUP METALS IN JANUARY 2018

Beginning in January 2018, this report will include monthly estimates of U.S. platinum-group-metals production from Sibanye-Stillwater's East Boulder and Stillwater mines based on quarterly company reports (table 1). Annual data is also estimated for 2017 as the reported annual production figures do not include production from the mines prior to Sibanye Gold Ltd.'s acquisition of Stillwater Mining Company in May 2017.

Imports for consumption of platinum-group metals (PGMs) in January 2018 were dominated by palladium, platinum waste and scrap, and platinum (excluding waste and scrap) which made up 34%, 30%, and 25%, respectively, of imports (fig. 1, tables 3, 4). Imports for consumption of PGMs, including waste and scrap, were 21,300 kilograms (kg)\* in January 2018, an 3% decrease compared with December 2017 and a 57% increase compared with January 2017. For January 2018, the leading import sources for PGMs into the United States were China, Germany, and South Africa (tables 3, 4).

## **Prices**

Compared with the average December 2017 prices, the Engelhard average January prices increased by 7% for palladium, 9% for platinum, 7% for rhodium, and slightly for ruthenium, whereas the average price for iridium was unchanged. The January 2018 average prices of palladium, platinum, iridium, rhodium, and ruthenium increased by 46%. slightly, 41%, 106%, and 364%, respectively, compared with those in January 2017 (figs. 2, 3, tables 1, 2). The recent

substantial increase in the price of ruthenium is more readily apparent as a price index (fig. 3).

## **Industry News**

Northam Platinum Ltd. finalized its acquisition of Glencore plc's Eland platinum mine in South Africa on January 30. Eland Platinum Holdings Ltd., a subsidiary of Northam, will send its PGM concentrate to Northam's Zondereinde smelter complex for processing (Mining Review, 2017; International Mining, 2018).

#### **References Cited**

International Mining, 2018, Northam finalizes Eland platinum mine deal: International Mining, January 30. (Accessed March 12, 2018, at https://immining.com/2018/01/30/42289/.)

Mining Review Africa, 2017, Northam Platinum acquires Eland platinum mine from Glencore Operations SA: Mining Review Africa, February 27. (Accessed March 12, 2018, at https://www.miningreview.com/northamplatinum-acquires-glencore-eland-platinum-mine/.)

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\*Corrections posted on July 20, 2018.

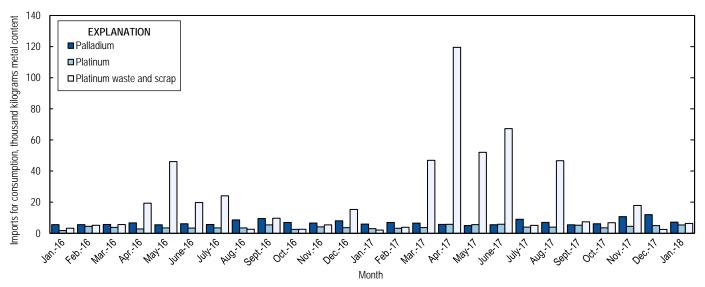


Figure 1. Palladium, platinum, and platinum waste and scrap imports for consumption from January 2016 through January 2018. Source: U.S. Census Bureau.

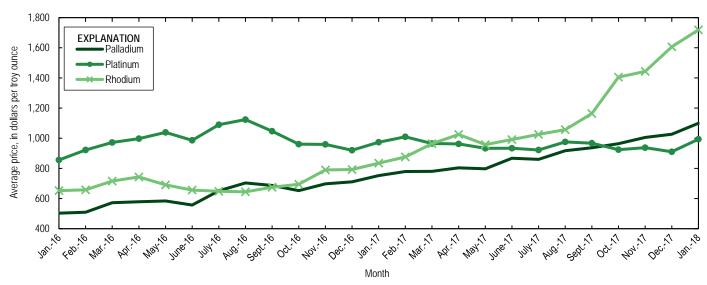


Figure 2. Engelhard unfabricated average monthly prices for platinum, palladium, and rhodium from January 2016 through January 2018. Source: Platts Metals Week.

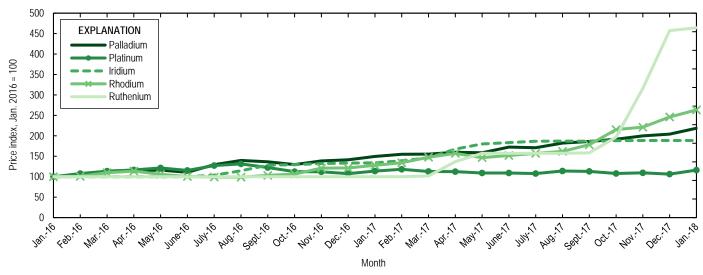


Figure 3. Indexed Engelhard unfabricated average monthly prices for palladium, platinum, iridium, rhodium, and ruthenium from January 2016 to January 2018. Prices are indexed to January 2016. Source: Platts Metals Week.

## TABLE 1 U.S. SALIENT PLATINUM-GROUP METALS STATISTICS $^{1}$

(Kilograms metal content, unless otherwise specified)

		2017		2018
			January-	
	November	December	December	January
Mine production: <sup>2</sup>				-
Platinum	331	331	3,980	331
Palladium	1,130	1,130	13,600	1,130
Total	1,460	1,460	17,600	1,460
Imports for consumption: <sup>3</sup>				
Platinum	22,400	7,430	431,000	11,700
Palladium	10,700	12,000	86,000	7,170
Iridium		72	1,430	71
Osmium	4		856	
Ruthenium	1,770	1,470	14,500	1,200
Rhodium	809	963	11,600	1,150
Total	35,800	21,900	546,000	21,300
Exports: <sup>3</sup>				
Platinum	3,120	4,090	197,000	4,830
Palladium	3,630	4,960	49,500	3,640
Iridium, osmium, ruthenium	342	213	939	299
Rhodium	57	176	844	213
Total	7,150	9,440	248,000	8,980
Price, average (dollars per troy ounce): <sup>4</sup>	_			
Palladium	1,005.30	1,026.74	874.30	1,099.45
Platinum	937.50	910.68	951.23	993.68
Iridium	990.00	990.00	908.35	990.00
Rhodium	1,443.25	1,606.58	1,112.59	1,718.86
Ruthenium	132.75	192.11	76.86	195.00

<sup>--</sup> Zero.

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

## TABLE 2 PLATINUM-GROUP METALS PRICES $^1$

# (Dollars per troy ounce)

	Palladium	Platinum	Iridium	Rhodium	Ruthenium
2017:					
Low:	<del></del>				
Price	710.00	880.00	700.00	765.00	42.00
Date	Jan. 3	Dec. 13	Jan. <sup>2</sup>	Jan. 3	Jan.–Mar. <sup>2</sup>
High:					
Price	1,062.00	1,035.00	990.00	1,725.00	195.00
Date	Dec. 28	Feb. 27	Aug. <sup>2</sup> and Oct.–Dec. <sup>2</sup>	Dec <sup>2</sup>	Dec. <sup>2</sup>
Price, average	874.30	951.23	908.35	1,112.59	76.86
2018, January:					
Low:	<del>_</del>				
Price	1,056.00	939.00	990.00	1,700.00	195.00
Date	Jan. 31	Jan. 2	(2)	(2)	(2)
High:					
Price	1,134.00	1,023.00	990.00	1,825.00	195.00
Date	Jan. 15	Jan. 25	(2)	Jan. 31	(2)
Price, average	1,099.45	993.68	990.00	1,718.86	195.00

Source: Platts Metals Week.

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

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

(Kilograms metal content, unless otherwise specified)

	Pla	tinum		Other						inum		
	grain ar	grain and nuggets Platinum sponge		m sponge	unwrought platinum		Platin	Platinum, other		nd scrap	Platinum coins	
		Value		Value		Value		Value		Value		Value
Country or locality	Quantity	(thousands)	Quantity	(thousands)	Quantity	(thousands)	Quantity	(thousands)	Quantity	(thousands)	Quantity	(thousands)
2017:												
November	3	\$83	3,070	\$94,900	300	\$9,500	1,030	\$32,900	17,900	\$77,800	105	\$3,310
December	4	130	3,980	118,000	163	4,910	692	22,300	2,470	83,900	116	3,460
January-December	1,580	49,000	39,300	1,200,000	3,530	113,000	8,030	255,000	378,000	1,050,000	837	27,600
2018:												
January: <sup>2</sup>												
Australia									49	937		
Belgium	4	116	27	833								
Brazil							1	41	105	2,210		
Canada	5	151					40	1,270	204	6,980	110	3,680
China							(3)	3	4,510	9,960		
Colombia					2	83			10	103		
Czechia							9	352				
France							19	353	93	2,710		
Germany			1,340	45,000	127	4,220	414	14,400	480	18,200		
Italy			310	9,990					32	1,030		
Japan					(3)	3	(3)	3	155	5,190		
Malaysia									26	594		
Mexico	(3)	21					(3)	23	62	2,080		
Norway			373	11,400					92	2,800		
Russia			340	11,100			(3)	5				
Singapore					15	522	15	547	287	9,050		
South Africa			1,740	51,800	156	4,500	24	745	25	807		
Switzerland			16	501			153	4,730			3	171
Taiwan									23	827		
United Kingdom	13	471	39	1,270	1	31	52	1,840	177	5,540		
Other					2	67	(3)	12	26	972	6	187
Total	22	759	4,180	132,000	303	9,420	728	24,300	6,360	70,000	119	4,030

<sup>--</sup> Zero.

Source: U.S. Census Bureau.

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

<sup>&</sup>lt;sup>2</sup>The 20 countries with the greatest total platinum imports are listed. All others are included in the Other category.

<sup>&</sup>lt;sup>3</sup>Less than ½ unit.

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

(Kilograms metal content, unless otherwise specified)

	Unwrought palladium		ight palladium Palladium, other Iridium <sup>2</sup>		lium <sup>2</sup>	Osr	nium <sup>2</sup>	Ruthenium <sup>2</sup>		Rhodium <sup>2</sup>		
		Value		Value		Value		Value		Value	-	Value
Country or locality	Quantity	(thousands)	Quantity	(thousands)	Quantity	(thousands)	Quantity	(thousands)	Quantity	(thousands)	Quantity	(thousands)
2017:												_
November	10,200	\$322,000	558	\$18,900	79	\$2,470	4	\$26	1,770	\$3,860	809	\$35,700
December	9,960	318,000	2,030	67,100	72	2,210			1,470	6,840	963	45,100
January-December	75,000	2,080,000	11,000	320,000	1,430	38,200	856	1,740	14,500	34,200	11,600	386,000
2018:												
January:												
Belgium	116	3,970									59	2,820
Canada	2	61	292	13,400								
Germany	2,110	80,400	2	64					108	346	178	10,800
Hong Kong									58	116		
Italy	360	12,800									32	1,860
Norway	202	7,160										
Russia	1,940	64,100	249	8,730	3	91			60	378	88	4,310
South Africa	1,420	47,200			67	2,070			688	3,570	457	21,100
Switzerland			177	6,220								
United Kingdom	292	10,500	12	481	(3)	12			284	1,770	336	18,100
Other <sup>4</sup>	(3)	2	(3)	8								
Total	6,440	226,000	732	28,900	71	2,170			1,200	6,190	1,150	59,000

<sup>--</sup> Zero.

Source: U.S. Census Bureau.

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

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

<sup>3</sup>Less than ½ unit.

<sup>&</sup>lt;sup>4</sup>Includes countries with total exports of platinum-group metals of less than 1 kilogram.

 $\label{eq:table 5} \text{U.S. EXPORTS OF PLATINUM-GROUP METALS, BY COUNTRY OR LOCALITY}^1$ 

(Kilograms metal content, unless otherwise specified)

	DI .:	2		Platinum waste and scrap		ı: 2		n, osmium	D1 11 2	
	Platinum <sup>2</sup>		1		Pall	Palladium <sup>2</sup>		henium <sup>2, 3</sup>	Rhodium <sup>2</sup>	
G	0	Value	0	Value	0	Value	0	Value	0	Value
Country or locality	Quantity	(thousands)	Quantity	(thousands)	Quantity	(thousands)	Quantity	(thousands)	Quantity	(thousands)
2017:		<b>#20.000</b>	1.000	445.200	2 (20	ATC 500	2.12	<b>0.1.72</b> 0		<b>#2.2</b> 00
November	1,230	\$39,000	1,890	\$46,200	3,630	\$73,600	342	\$1,730	57	\$2,390
December	1,260	37,200	2,830	78,900	4,960	82,600	213	2,330	176	8,050
January-December	16,700	494,000	180,000	676,000	49,500	849,000	939	11,700	844	30,700
2018:										
January:4										
Australia	3	67			3	102	13	174		
Belgium			768	13,000						
Brazil	5	163							19	870
Canada	11	411	8	189	62	1,200			(5)	7
China	15	431			229	7,200	2	11	23	1,030
France	2	59			38	351				
Germany	880	28,900	239	6,310	134	1,920	1	7	31	1,850
Hong Kong	3	103			67	2,370	7	71		
India	28	870	10	310	10	228	11	111	(5)	18
Ireland	18	422			25	189	1	3		
Israel					132	1,070				
Italy	12	387	125	5,810	4	144			20	389
Japan	114	3,190	327	11,400	77	612	243	1,640	16	858
Korea, Republic of	17	526			48	627	(5)	5	(5)	6
Mexico	45	1,450			36	485			(5)	6
Singapore	479	15,100			173	6,110				
South Africa									104	5,070
Switzerland	57	1,910	829	16,300	1,690	30,000				
Taiwan	2	65			249	8,340	7	102		
United Kingdom	19	605	777	27,200	635	22,600	10	239	1	86
Other	38	1,220			21	403	2	55	(5)	9
Total	1,750	55,900	3,080	80,500	3,640	83,900	299	2,420	213	10,200

<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>Gross weight.

<sup>&</sup>lt;sup>4</sup>The 20 countries with the greatest total platinum-group metal exports are listed. All others are included in the Other category.

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