

# Mineral Industry Surveys

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## PLATINUM-GROUP METALS IN DECEMBER 2017

Imports for consumption of platinum-group metals (PGMs) in December 2017 were dominated by palladium and platinum, excluding waste and scrap, which made up 55%, and 23%, respectively, of imports (tables 2, 3). Imports for consumption of PGMs, including waste and scrap, were 546,000 kilograms (kg)\* in 2017, an 81% increase compared with 302,000 kg\* in 2016. The majority of that increase came from imports of platinum waste and scrap, making up 90% of that increase. For December 2017, the leading import sources for PGMs into the United States were Germany, Russia, and South Africa (tables 2, 3).

Compared with the average November 2017 prices, the Engelhard average December prices decreased by 3% for platinum, but increased slightly for palladium, increased by 11% for rhodium, and increased by 45% for ruthenium. The average price for iridium was unchanged between November and December 2017. The December 2017 average prices of palladium, rhodium, iridium, and ruthenium increased by 44%, 103%, 41%, and 357%, respectively, compared with those in December 2016. However, the price of platinum was slightly lower than that in December 2016 (fig. 1, table 1).

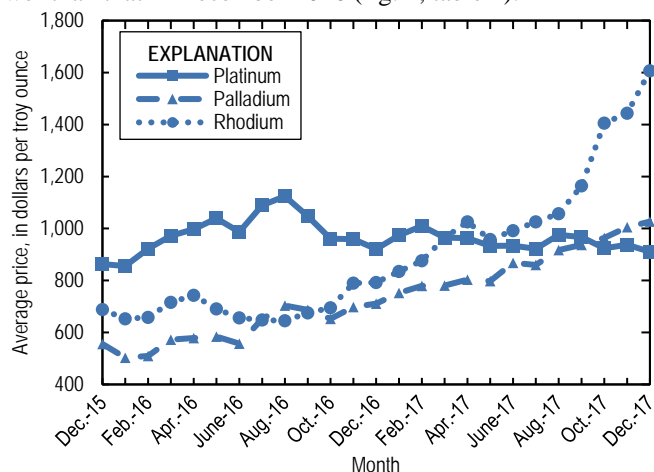


Figure 1. Engelhard average monthly prices for platinum, palladium, and rhodium from December 2015 through December 2017. Source: Platts Metals Week.

## Industry News

In December, there were two proposed acquisitions of platinum-group-metals-related operations. Belgium-based Umicore NV announced that it would acquire Materia Inc.'s metathesis catalyst business, expanding Umicore's range of catalyst technologies and increasing its demand for ruthenium (Argus Media group – Argus Metals International, 2017; Umicore NV, 2017). South Africa's Sibanye-Stillwater platinum-group metals mining company announced it would purchase Lonmin plc and, in doing so, would become the world's second-leading platinum producer behind Anglo American Platinum Ltd. (Shabalala and Stoddard, 2017; Thomson Reuters GFMS Surveys, 2017, p. 20).

## References Cited

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- Shabalala, Zandi and Stoddard, Ed, 2017, South Africa's Sibanye-Stillwater to be No. 2 platinum miner with Lonmin buy: Reuters, December 14. (Accessed February 15, 2018, at <https://www.reuters.com/article/us-lonmin-m-a-sibanye-gold/south-africas-sibanye-stillwater-to-be-no-2-platinum-miner-with-lonmin-buy-idUSKBN1E8165>.)
- Thomson Reuters GFMS Surveys, 2017, GFMS Platinum group metals survey 2017: London, United Kingdom, Thomson Reuters GFMS Surveys, 55 p.
- Umicore NV, 2017, Umicore to acquire Materia's metathesis catalyst business: Brussels, Belgium, Umicore NV press release, December 20, 2 p. (Accessed February 15, 2018, at <http://www.umicore.com/en/media/press/20171220-materia-en.pdf>.)

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\*Corrections posted on July 20, 2018.

TABLE 1  
PLATINUM-GROUP METALS PRICES<sup>1</sup>

(Dollars per troy ounce)

	Platinum	Palladium	Rhodium	Iridium	Ruthenium
<b>2016:</b>					
Low/date	816.00 Jan. 21	473.00 Jan. 12	625.00 July 29 and Aug. <sup>2</sup>	525.00 Jan.–May <sup>2</sup>	42.00 Jan.–Dec. <sup>2</sup>
High/date	1,184.00 Aug. 10	774.00 Nov. 30	850.00 Dec. 15 and 16	700.00 Nov.–Dec. <sup>2</sup>	42.00 Jan.–Dec. <sup>2</sup>
Average	989.52	617.39	696.84	586.90	42.00
<b>2017:</b>					
<b>November:</b>					
Low/date	922.00/6	986.00/15	1,300/9 and 10	990.00 <sup>2</sup>	105.00/1 and 2
High/date	959.00/28	1,022.00/9	1,540.00/30	990.00 <sup>2</sup>	165.00 <sup>2</sup>
Average	937.50	1,005.30	1,443.25	990.00	132.75
<b>December:</b>					
Low/date	880.00/13	997.00/5	1,530/1	990.00 <sup>2</sup>	170.00/1
High/date	940.00/29	1,062.00/28	1,725.00 <sup>2</sup>	990.00 <sup>2</sup>	195.00 <sup>2</sup>
Average	910.68	1,026.74	1,606.58	990.00	192.11
<b>January–December:</b>					
Low/date	880.00 Dec. 13	710.00 Jan. 3	765.00 Jan. 3	700.00 Jan. <sup>2</sup>	42.00 Jan.–Mar. <sup>2</sup>
High/date	1,035.00 Feb. 27	1,062.00 Dec. 28	1,725.00 Dec <sup>2</sup>	990.00 Aug. <sup>2</sup> and Oct.–Dec. <sup>2</sup>	195.00 Dec. <sup>2</sup>
Average	951.23	874.30	1,112.59	908.35	76.86

<sup>1</sup>Quotes from Engelhard.

<sup>2</sup>Occurred multiple days in month(s) listed.

Source: Platts Metals Week.

TABLE 2  
U.S. IMPORTS FOR CONSUMPTION OF PLATINUM METAL, BY COUNTRY OR LOCALITY<sup>1</sup>

(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	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
		(thousands)		(thousands)		(thousands)		(thousands)		(thousands)		(thousands)
2016	419	\$12,600	27,400	\$871,000	4,970	\$161,000	8,610	\$279,000	159,000	\$821,000	924	\$31,900
2017:												
October	4	113	2,940	90,600	213	6,650	268	8,670	6,820	127,000	67	2,100
November	3	83	3,070	94,900	300	9,500	1,030	32,900	17,900	77,800	105	3,310
December:												
Australia	--	--	--	--	--	--	--	--	33	639	41	1,040
Austria	--	--	--	--	--	--	--	--	--	--	11	364
Belgium	--	--	31	963	--	--	--	--	9	295	--	--
Brazil	--	--	--	--	--	--	--	--	42	616	--	--
Canada	4	130	--	--	--	--	30	943	167	6,100	64	2,060
Colombia	--	--	--	--	36	986	--	--	10	44	--	--
France	--	--	13	409	--	--	25	895	38	1,070	--	--
Germany	--	--	592	18,700	45	1,470	526	17,000	581	25,700	--	--
Italy	--	--	183	5,560	--	--	--	--	128	4,150	--	--
Japan	--	--	15	477	1	61	--	--	256	8,530	--	--
Korea, Republic of	--	--	47	1,480	--	--	--	--	--	--	--	--
Malaysia	--	--	--	--	--	--	--	--	55	1,130	--	--
Mexico	--	--	--	--	--	--	(2)	11	150	5,210	--	--
Nicaragua	--	--	--	--	--	--	--	--	32	970	--	--
Poland	--	--	--	--	--	--	--	--	149	4,300	--	--
Saudi Arabia	--	--	--	--	--	--	--	--	12	349	--	--
Singapore	--	--	--	--	(2)	14	14	528	358	11,000	--	--
South Africa	--	--	2,410	70,700	78	2,300	--	--	31	892	--	--
Switzerland	--	--	--	--	--	--	62	1,820	--	--	--	--
Taiwan	--	--	--	--	--	--	--	--	98	2,870	--	--
United Kingdom	--	--	686	19,900	--	--	28	795	295	9,340	--	--
Other	--	--	--	--	3	80	7	317	29	637	--	--
Total	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

-- Zero.

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

<sup>2</sup>Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 3  
U.S. IMPORTS FOR CONSUMPTION OF PLATINUM-GROUP METALS, BY COUNTRY OR LOCALITY<sup>1</sup>

(Kilograms metal content, unless otherwise specified)

Country or locality	Unwrought palladium		Palladium, other		Iridium <sup>2</sup>		Osmium <sup>2</sup>		Ruthenium <sup>2</sup>		Rhodium <sup>2</sup>	
	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)
2016	68,100	\$1,340,000	12,300	\$275,000	1,300	\$23,000	27	\$159	8,410	\$14,500	10,700	\$230,000
2017:												
October	5,670	170,000	446	15,300	61	1,840	790	1,330	926	4,270	1,150	48,600
November	10,200	322,000	558	18,900	79	2,470	4	26	1,770	3,860	809	35,700
December:												
Belgium	47	1,450	--	--	--	--	--	--	--	--	76	3,250
Canada	--	--	1,340	45,700	--	--	--	--	--	--	1	56
Germany	1,360	48,300	15	510	14	485	--	--	444	2,360	155	8,590
Italy	80	2,600	(3)	16	--	--	--	--	--	--	32	1,670
Japan	190	2,320	--	--	--	--	--	--	16	78	(3)	6
Korea, Republic of	139	4,140	--	--	--	--	--	--	--	--	--	--
Norway	568	18,300	--	--	--	--	--	--	--	--	6	302
Russia	3,030	98,100	49	1,570	--	--	--	--	19	127	80	3,330
South Africa	3,970	125,000	622	19,200	49	1,490	--	--	871	3,490	594	26,100
United Kingdom	580	18,100	(3)	6	6	203	--	--	124	778	18	1,810
Other	--	--	3	92	3	24	--	--	--	--	--	--
Total	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

-- Zero.

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

<sup>2</sup>Unwrought and other forms.

<sup>3</sup>Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 4  
U.S. EXPORTS OF PLATINUM-GROUP METALS, BY COUNTRY OR LOCALITY<sup>1</sup>

(Kilograms metal content, unless otherwise specified)

Country or locality	Platinum <sup>2</sup>		Platinum waste and scrap		Palladium <sup>2</sup>		Iridium, osmium and ruthenium <sup>2,3</sup>		Rhodium <sup>2</sup>	
	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)
2016	14,000	\$423,000	273,000	\$702,000	17,500	\$272,000	736	\$11,300	794	\$19,600
2017:										
October	1,580	47,600	2,930	45,100	7,640	114,000	34	414	92	3,840
November	1,230	39,000	1,890	46,200	3,630	73,600	342	1,730	57	2,390
December:										
Australia	7	220	--	--	6	184	--	--	--	--
Belgium	--	--	207	5,320	--	--	--	--	--	--
Canada	21	929	8	204	149	1,540	--	--	--	--
China	23	593	--	--	458	10,700	--	--	41	1,510
Costa Rica	16	208	--	--	--	--	--	--	--	--
Czechia	--	--	6	129	2	17	--	--	--	--
France	2	59	--	--	20	230	3	93	--	--
Germany	284	9,380	101	3,190	92	1,560	--	--	2	76
Hong Kong	11	289	--	--	480	14,200	3	36	--	--
India	95	2,790	5	155	14	350	2	15	--	--
Ireland	9	256	--	--	1	47	1	3	--	--
Israel	1	17	--	--	28	286	--	--	--	--
Italy	7	243	333	480	15	138	--	--	31	1,500
Japan	2	60	538	16,800	11	133	167	1,900	100	4,850
Korea, Republic of	303	8,810	--	--	96	1,340	--	--	--	--
Mexico	10	340	--	--	5	51	--	--	(4)	6
Saudi Arabia	--	--	--	--	20	176	--	--	--	--
Singapore	302	8,530	2	45	1	26	--	--	--	--
South Africa	--	--	90	4,780	--	--	--	--	--	--
Switzerland	1	53	315	8,370	3,310	44,600	--	--	--	--
Taiwan	13	403	--	--	230	6,620	36	250	--	--
Thailand	2	57	--	--	8	330	--	--	--	--
United Kingdom	143	3,730	1,220	39,400	4	10	1	8	1	114
Other	7	242	--	--	16	95	1	27	--	--
Total	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

-- Zero.

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

<sup>2</sup>Unwrought and other forms.

<sup>3</sup>Gross weight.

<sup>4</sup>Less than ½ unit.

Source: U.S. Census Bureau.