

# Mineral Industry Surveys

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## PLATINUM-GROUP METALS IN SEPTEMBER 2019

Imports for consumption of platinum-group metals (PGMs), including waste and scrap, were 17,700 kilograms (kg) in September 2019, an increase of 14% compared with imports in August 2019 and a slight decrease compared with imports in September 2018. The leading import sources for PGMs into the United States in September 2019 were, in descending order, South Africa, Russia, and the United Kingdom. For September 2019, exports of palladium, platinum, and PGM scrap decreased by 32%, 11%, and 15%, respectively, compared with exports in August 2019 (table 5).

Compared with those in the prior month, the Engelhard average September prices increased by 26% for rhodium, 10% for palladium, and 10% for platinum. Prices were unchanged in September 2019 for iridium and ruthenium compared with those in August 2019. Compared with average prices in September 2018, the September 2019 average prices more than doubled for rhodium and increased by 58% for palladium and 17% for platinum. The average price of iridium was essentially unchanged, and ruthenium decreased by 5% in September 2019

compared with the price in September 2018 (figs. 1, 2; tables 1, 2).

### References Cited

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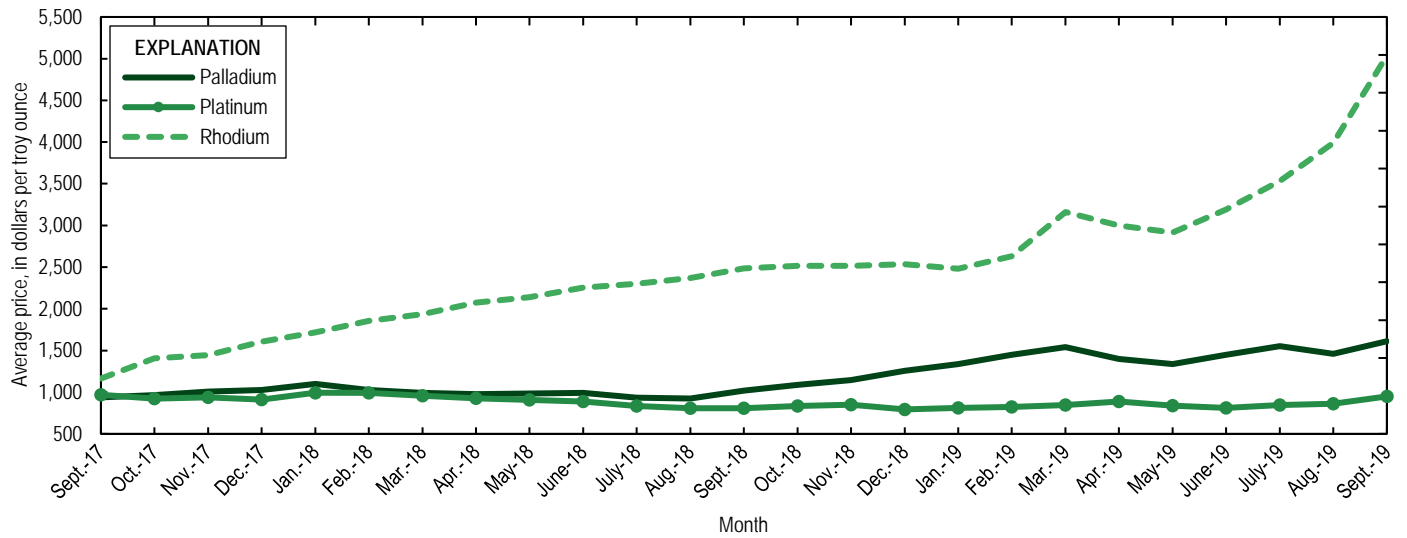


Figure 1. Engelhard unfabricated average monthly prices for palladium, platinum, and rhodium from September 2017 through September 2019. Source: Platts Metals Week.

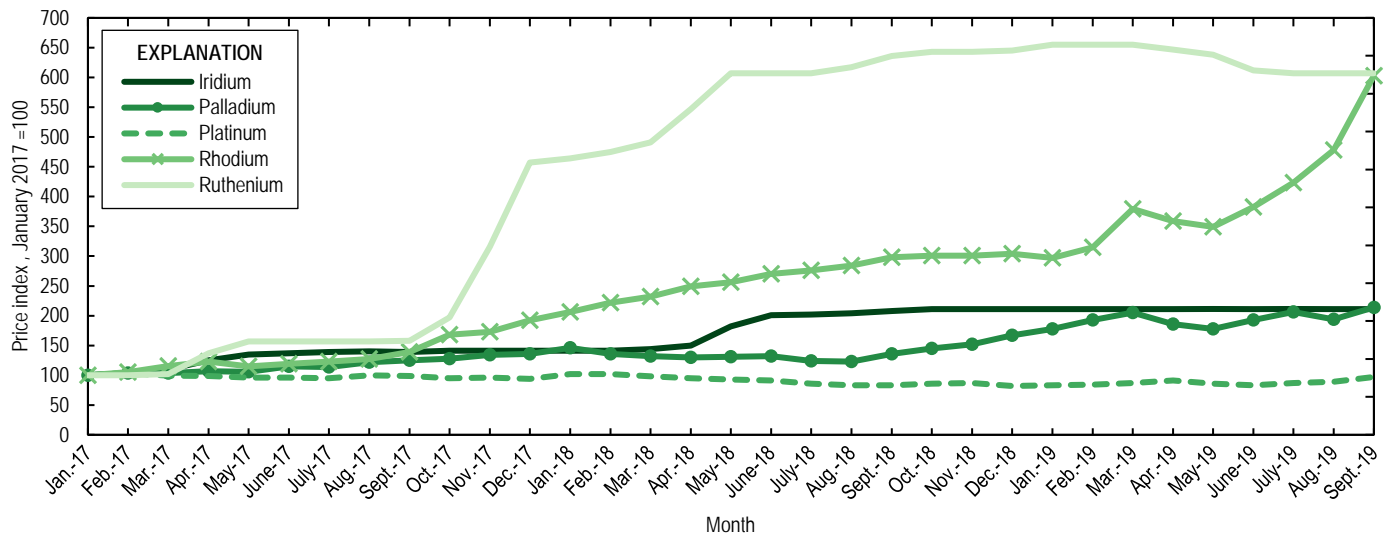


Figure 2. Indexed Engelhard unfabricated average monthly prices for iridium, palladium, platinum, rhodium, and ruthenium from January 2017 through September 2019. Prices are indexed to January 2017. Source: Platts Metals Week.

TABLE 1  
U.S. SALIENT PLATINUM-GROUP METALS STATISTICS<sup>1</sup>

(Kilograms metal content, unless otherwise specified)

	2018	2019			
	January– December	July	August	September	January– September
<b>Mine production:<sup>2</sup></b>					
Palladium	14,300	1,180 <sup>r</sup>	1,180 <sup>r</sup>	1,180	13,600
Platinum	4,170	344 <sup>r</sup>	344 <sup>r</sup>	344	3,940
Total	18,400	1,530 <sup>r</sup>	1,530 <sup>r</sup>	1,530	17,500
<b>Imports for consumption:<sup>3</sup></b>					
Palladium	92,900	7,450	7,290	7,520	59,000
Platinum	58,500	4,050	3,180	4,630	30,100
Iridium	1,020	97	27	95	655
Osmium	25	--	(4)	--	(4)
Rhodium	14,500	1,330	1,460	1,470	11,000
Ruthenium	17,900	881	1,020	1,390	8,180
Waste and scrap <sup>5</sup>	40,700	4,320	2,530	2,590	27,500
Total	225,000	18,100	15,500	17,700	136,000
<b>Exports:<sup>3</sup></b>					
Palladium	53,300	7,040	4,810	3,280	41,700
Platinum	18,900	2,080	1,020	908	13,100
Iridium, osmium, ruthenium	2,600	143	162	70	1,100
Rhodium	2,010	114	64	82	1,180
Waste and scrap <sup>5</sup>	31,800	1,650	2,000	1,700	16,600
Total	109,000	11,000	8,060	6,040	73,800
<b>Price, average (dollars per troy ounce):<sup>6</sup></b>					
Palladium	1,036.43	1,550.86	1,460.73	1,611.00	1,458.99
Platinum	882.66	846.95	861.86	947.70	852.29
Iridium	1,293.27	1,485.00	1,485.00	1,485.00	1,485.00
Rhodium	2,225.30	3,531.59	3,988.41	5,037.50	3,326.93
Ruthenium	244.41	255.00	255.00	255.00	265.11

<sup>r</sup>Revised. -- Zero.

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

<sup>4</sup>Less than ½ unit.

<sup>5</sup>Includes waste and scrap for all platinum-group elements. Previously included within platinum.

<sup>6</sup>Source: Platts Metals Week.

TABLE 2  
PLATINUM-GROUP METALS PRICES<sup>1</sup>

(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. <sup>2</sup>	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	Sep.–Dec. <sup>2</sup>	Nov.–Dec. <sup>2</sup>	Sep.–Nov. <sup>2</sup>
Price, average	1,036.43	882.66	1,293.27	2,225.30	244.41
2019:					
August:					
Low:					
Price	1,395.00	836.00	1,485.00	3,630.00	255.00
Date	Aug. 2	Aug. 16	(2)	Aug. 6	(2)
High:					
Price	1,548.00	942.00	1,485.00	5,000.00	255.00
Date	Aug. 30	Aug. 30	(2)	Aug. 30	(2)
Price, average	1,460.73	861.86	1,485.00	3,988.41	255.00
September:					
Low:					
Price	1,531.00	903.00	1,485.00	4,400.00	255.00
Date	Sep. 3	Sep. 30	(2)	Sep. 9	(2)
High:					
Price	1,680.00	980.00	1,485.00	5,500.00	255.00
Date	Sep. 30	Sep. 4	(2)	Sep. 23 and 24	(2)
Price, average	1,611.00	947.70	1,485.00	5,037.50	255.00
January–September:					
Low:					
Price	1,273.00	785.00	1,485.00	2,460.00	255.00
Date	Jan. 2	Feb. 14	(2)	(2)	(2)
High:					
Price	1,680.00	980.00	1,485.00	5,500.00	275.00
Date	Sep. 30	Sep. 4	(2)	Sep. 23 and 24	(2)
Price, average	1,458.99	852.29	1,485.00	3,326.93	265.11

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

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

Source: Platts Metals Week.

TABLE 3  
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 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:										
July	20	534	2,340	64,900	481	16,900	1,140	38,300	78	2,150
August	23	642	1,440	38,800	199	6,480	1,430	43,700	94	2,720
September:										
Australia	--	--	--	--	--	--	--	--	69	2,260
Belgium	--	--	461	12,500	--	--	--	--	--	--
Canada	23	736	--	--	--	--	41	1,240	122	3,860
Colombia	3	62	--	--	--	--	--	--	--	--
Costa Rica	--	--	--	--	--	--	(2)	5	--	--
France	--	--	--	--	--	--	11	375	--	--
Germany	--	--	671	19,700	71	2,700	362	13,400	--	--
India	--	--	--	--	1	49	--	--	--	--
Ireland	--	--	--	--	(2)	8	--	--	--	--
Italy	--	--	325	9,870	--	--	(2)	6	--	--
Japan	--	--	--	--	(2)	15	10	299	--	--
Korea, Republic of	--	--	--	--	--	--	(2)	4	--	--
Norway	--	--	62	1,880	--	--	--	--	--	--
Portugal	--	--	--	--	--	--	(2)	4	--	--
Singapore	(2)	12	--	--	447	28,500	19	681	--	--
South Africa	--	--	1,070	30,600	10	383	--	--	--	--
Switzerland	--	--	--	--	16	478	732	22,500	--	--
Taiwan	--	--	--	--	--	--	100	1,060	--	--
Thailand	--	--	--	--	--	--	(2)	3	--	--
United Kingdom	--	--	--	--	--	--	2	61	--	--
Total	26	811	2,590	74,600	545	32,200	1,280	39,700	190	6,120
January–September	292	10,700	17,800	482,000	2,780	114,000	8,210	253,000	1,040	31,800

-- 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 4  
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	Palladium <sup>2</sup>		Iridium <sup>2</sup>		Osmium <sup>2</sup>		Rhodium <sup>2</sup>		Ruthenium <sup>2</sup>		Waste and scrap <sup>3</sup>	
	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:												
July	7,450	353,000	97	3,880	--	--	1,330	137,000	881	6,920	4,320	133,000
August	7,290	344,000	27	1,190	(4)	2	1,460	147,000	1,020	8,090	2,530	89,200
September: <sup>5</sup>												
Australia	--	--	--	--	--	--	--	--	--	--	105	3,340
Austria	85	4,380	--	--	--	--	--	--	--	--	--	--
Belgium	329	15,200	--	--	--	--	195	19,300	--	--	177	11,700
Canada	667	30,000	--	--	--	--	1	47	--	--	315	13,900
Columbia	--	--	--	--	--	--	--	--	--	--	8	199
Germany	58	1,240	1	41	--	--	108	17,200	11	97	369	12,800
Hungary	--	--	--	--	--	--	--	--	--	--	18	889
Italy	621	31,700	--	--	--	--	56	8,820	57	555	43	1,760
Japan	403	9,100	19	789	--	--	--	--	--	--	195	6,260
Malaysia	--	--	--	--	--	--	--	--	--	--	40	951
Mexico	3	21	--	--	--	--	--	--	--	--	177	5,620
Norway	124	6,170	--	--	--	--	--	--	--	--	--	--
Philippines	--	--	--	--	--	--	--	--	--	--	63	3,200
Poland	--	--	--	--	--	--	--	--	--	--	163	4,810
Russia	3,160	156,000	4	112	--	--	106	13,400	--	--	--	--
Singapore	--	--	--	--	--	--	--	--	--	--	410	16,400
South Africa	1,900	92,700	48	2,250	--	--	622	80,200	394	2,860	--	--
Switzerland	9	164	--	--	--	--	--	--	--	--	--	--
Taiwan	11	503	--	--	--	--	--	--	--	--	--	--
United Kingdom	154	7,520	20	777	--	--	382	40,400	931	7,480	468	4,840
Other	--	--	1	40	--	--	--	--	--	--	35	1,880
Total	7,520	354,000	95	4,010	--	--	1,470	179,000	1,390	11,000	2,590	88,500
January–September	59,000	2,620,000	655	28,100	(4)	2	11,000	1,070,000	8,180	69,200	27,500	786,000

-- 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>Includes waste and scrap for all platinum-group elements.

<sup>4</sup>Less than ½ unit.

<sup>5</sup>The 20 countries and (or) localities with the greatest total platinum imports are listed. All others are included in the "Other" category.

Source: U.S. Census Bureau.

TABLE 5  
U.S. EXPORTS OF PLATINUM-GROUP METALS, BY COUNTRY OR LOCALITY<sup>1</sup>

(Kilograms metal content, unless otherwise specified)

Country or locality	Palladium <sup>2</sup>		Platinum <sup>2</sup>		Iridium, osmium and ruthenium <sup>2,3</sup>		Rhodium <sup>2</sup>		Waste and scrap <sup>4</sup>	
	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:										
July	7,040	200,000	2,080	68,100	143	2,090	114	14,900	1,650	72,100
August	4,810	146,000	1,020	30,100	162	1,460	64	6,460	2,000	79,400
September: <sup>5</sup>										
Argentina	--	--	45	1,560	--	--	--	--	--	--
Australia	8	134	8	228	5	136	--	--	--	--
Belgium	68	2,540	21	890	--	--	3	874	78	2,980
Brazil	3	22	16	442	--	--	--	--	--	--
Canada	277	13,200	37	1,190	--	--	(6)	13	6	174
China	65	1,750	22	651	7	63	2	177	--	--
Costa Rica	--	--	32	563	2	16	--	--	--	--
France	14	187	2	35	10	87	--	--	--	--
Germany	137	2,970	485	16,500	2	31	25	5,830	168	5,340
Hong Kong	34	560	7	155	2	17	11	1,660	--	--
Ireland	22	368	22	669	5	173	1	140	--	--
Israel	78	895	--	--	3	13	--	--	--	--
Italy	4	157	47	1,220	14	216	9	1,460	28	926
Japan	9	69	106	3,180	1	3	--	--	382	20,700
Korea, Republic of	30	842	2	27	(6)	7	5	885	--	--
Mexico	12	248	19	634	5	50	(6)	56	--	--
South Africa	--	--	--	--	--	--	24	7,520	6	440
Switzerland	2,130	32,800	2	42	1	8	--	--	27	1,820
Taiwan	37	2,330	--	--	13	70	--	--	--	--
United Kingdom	315	16,100	17	455	1	5	2	306	1,000	48,300
Other	31	574	19	620	(6)	8	--	--	--	--
Total	3,280	75,700	908	29,100	70	901	82	18,900	1,700	80,700
January–September	41,700	1,150,000	13,100	386,000	1,100	18,200	1,180	102,000	16,600	532,000

-- 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>Gross weight.

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

<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>6</sup>Less than ½ unit.

Source: U.S. Census Bureau.