

Mineral Industry Surveys

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PLATINUM-GROUP METALS IN JULY 2019

Imports for consumption of platinum-group metals (PGMs), including waste and scrap, were 18,100 kilograms (kg) in July 2019, an increase of 14% compared with imports in June 2019 and a decrease of 5% compared with imports in July 2018, respectively. The leading import sources for PGMs into the United States were, in descending order, South Africa, Russia, and Germany. For July 2019, exports of palladium, platinum, and PGM scrap were 7,040 kg, 2,080 kg, and 1,650 kg, an increase of 63%, 55%, and 179%, respectively, compared with imports in June 2019 (table 5).

Compared with the prior month, the Engelhard average July prices increased by 11% for rhodium, 7% for palladium, and 4% for platinum. Prices decreased slightly for ruthenium and were unchanged for iridium compared with June 2019. Compared with average prices in July 2018, the July 2019 average prices increased by 66%, 53%, 4%, and slightly for palladium, rhodium, iridium, and platinum, respectively. The price of ruthenium was unchanged in July 2019 compared with the price in July 2018 (figs. 1, 2; tables 1, 2).

Industry News

Platinum Group Metals Ltd. (Canada) announced a new joint venture, Lion Battery Technologies Inc., with Anglo American Platinum Limited (South Africa) in July 2019. The joint venture entered into an agreement with Florida International University in Miami, Florida, to advance research using platinum and palladium to enhance discharge capacity and cyclability in lithium-air and lithium-sulfur batteries (Platinum Group Metals Ltd., 2019).

Mkango Resources Ltd. (Canada) was granted a 3-year prospecting license in the Mchinji district by the Government of Malawi. The license granted the company the right to explore for cobalt, gold, graphite, and nickel, as well as chromite,

ilmeneite, PGMs, rare earth elements, uranium, and vanadium (Arnoldi, 2019).

ValOre Metals Corporation (Canada) entered into a purchase agreement with Jangada Mines Plc (United Kingdom) to acquire 100% interest in the Pedra Branca Project. The Pedra Branca Project is in a PGMs district in Brazil that covers 38,940 hectares (96,223 acres) (ValOre Metals Corporation, 2019). The transaction was subject to shareholder and regulatory approvals as well as completion of financial transactions.

References Cited

- Arnoldi, Marleny, 2019, Mkango granted fourth exploration license in Malawi: Bedfordview, South Africa, Creamer Media's Mining Weekly, July 4. (Accessed September 23, 2019, at https://www.miningweekly.com/article/mkango-granted-fourth-exploration-licence-in-malawi-2019-07-04/rep_id:3650.)
- Platinum Group Metals Ltd., 2019, Anglo American Platinum and Platinum Group Metals Ltd. launch new venture to develop next generation battery technology: Vancouver, British Columbia, Canada, Platinum Group Metals Ltd. press release, July 15. (Accessed September 23, 2019, at <https://www.newsfilecorp.com/release/46253>.)
- ValOre Metals Corporation, 2019, ValOre signs definitive agreement to acquire Pedra Branca: Vancouver, British Columbia, Canada, ValOre Metals Corporation press release, July 16. (Accessed September 23, 2019, at <http://www.globenewswire.com/news-release/2019/07/16/1883672/0/en/ValOre-Signs-Definitive-Agreement-to-Acquire-Pedra-Branca.html?print=1>.)

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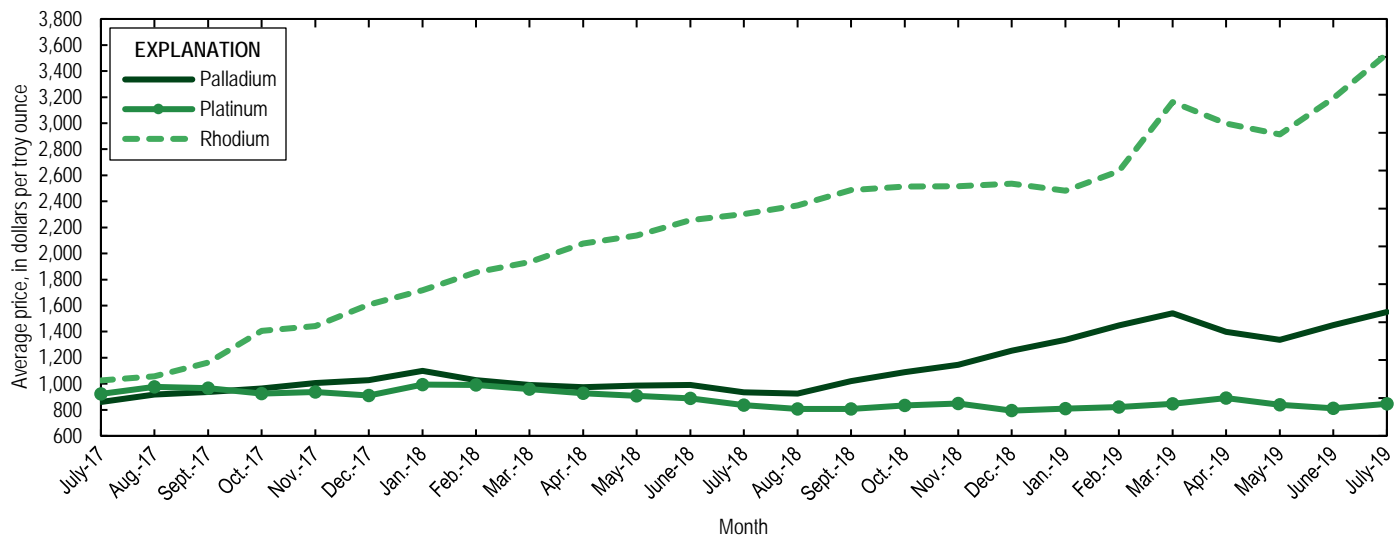


Figure 1. Engelhard unfabricated average monthly prices for palladium, platinum, and rhodium from July 2017 through July 2019. Source: Platts Metals Week.

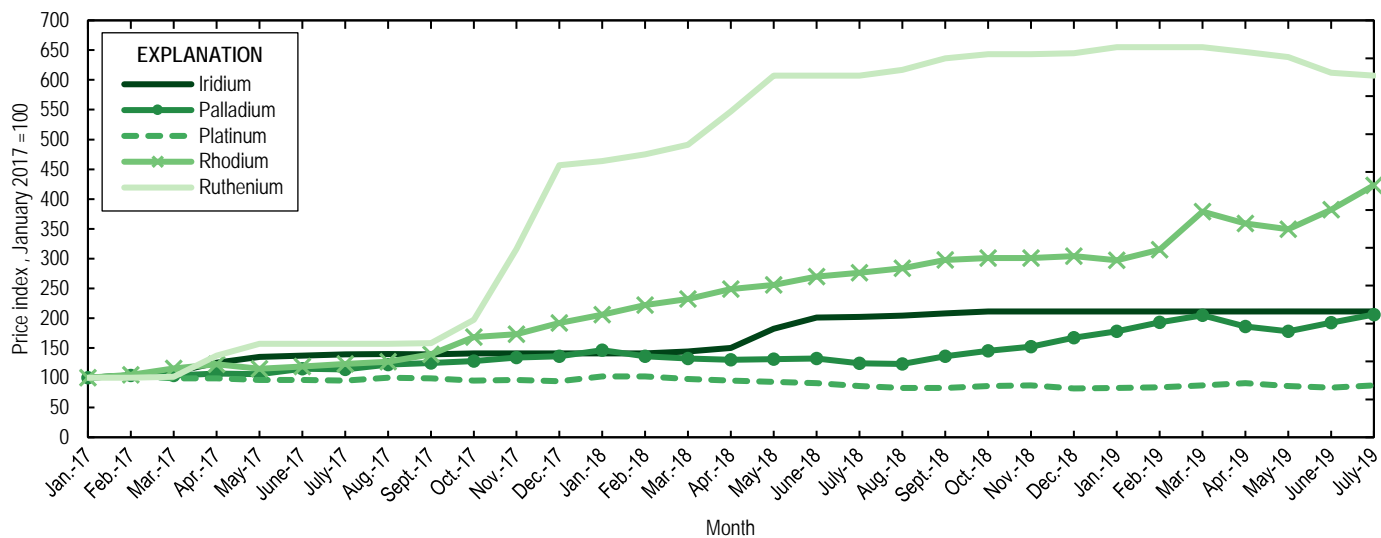


Figure 2. Indexed Engelhard unfabricated average monthly prices for iridium, palladium, platinum, rhodium, and ruthenium from January 2017 through July 2019. Prices are indexed to January 2017. Source: Platts Metals Week.

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

(Kilograms metal content, unless otherwise specified)

	2018	2019			
	January– December	May	June	July	January– July
Mine production: ²					
Palladium	14,300	2,290 ^r	2,290 ^r	2,290	12,300
Platinum	4,170	665 ^r	665 ^r	665	3,580
Total	18,400	2,950 ^r	2,950 ^r	2,950	15,900
Imports for consumption: ³					
Palladium	92,900	5,330	6,560	7,450	44,200
Platinum	58,500	3,100	2,410	4,050	22,300
Iridium	1,020	150	35	97	533
Osmium	25	--	--	--	--
Rhodium	14,500	1,220	1,210	1,330	8,080
Ruthenium	17,900	1,190	590	881	5,760
Waste and scrap ⁴	40,700	3,860	5,030	4,320	22,300
Total	225,000	14,800	15,800	18,100	103,000
Exports: ³					
Palladium	53,300	4,270	4,320	7,040	33,600
Platinum	18,900	784	1,340	2,080	11,200
Iridium, osmium, ruthenium	2,600	184	131	143	872
Rhodium	2,010	62	61	114	1,040
Waste and scrap ⁴	31,800	1,240	592	1,650	12,900
Total	109,000	6,540	6,450	11,000	59,700
Price, average (dollars per troy ounce): ⁵					
Palladium	1,036.43	1,337.14	1,449.65	1,550.86	1,437.76
Platinum	882.66	838.00	811.20	846.95	837.68
Iridium	1,293.27	1,485.00	1,485.00	1,485.00	1,485.00
Rhodium	2,225.30	2,913.81	3,191.50	3,531.59	2,990.62
Ruthenium	244.41	268.10	257.00	255.00	268.03

^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.

⁴Includes waste and scrap for all platinum-group elements. Previously included within platinum.

⁵Source: Platts Metals Week.

TABLE 2
PLATINUM-GROUP METALS PRICES¹

(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. ²	Jan. ²	Jan. ² , 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. ²	Nov.–Dec. ²	Sep.–Nov. ²
Price, average	1,036.43	882.66	1,293.27	2,225.30	244.41
2019:					
June:					
Low:					
Price	1,346.00	798.00	1,485.00	2,850.00	255.00
Date	Jun. 3	Jun. 17	(2)	(2)	(2)
High:					
Price	1,538.00	830.00	1,485.00	3,525.00	260.00
Date	Jun. 26	Jun. 5	(2)	Jun. 13 and 14	(2)
Price, average	1,449.65	811.20	1,485.00	3,191.50	257.00
July:					
Low:					
Price	1,504.00	812.00	1,485.00	3,400.00	255.00
Date	Jul. 22	Jul. 9	(2)	(2)	(2)
High:					
Price	1,586.00	880.00	1,485.00	3,675.00	255.00
Date	Jul. 10	Jul. 30	(2)	Jul. 31	(2)
Price, average	1,550.86	846.95	1,485.00	3,531.59	255.00
January–July:					
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	1,610.00	917.00	1,485.00	3,675.00	275.00
Date	Mar. 21	Apr. 8	(2)	Jul. 31	(2)
Price, average	1,437.76	837.68	1,485.00	2,990.62	268.03

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 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:										
May	14	387	2,140	58,400	129	4,010	775	22,500	38	1,110
June	19	498	1,340	35,900	260	17,100	681	17,500	111	4,630
July:										
Australia	--	--	--	--	--	--	(2)	7	24	634
Belgium	--	--	376	9,940	--	--	--	--	--	--
Canada	17	472	--	--	--	--	25	714	53	1,500
Colombia	3	63	--	--	34	982	--	--	--	--
Costa Rica	--	--	--	--	--	--	(2)	7	--	--
Dominican Republic	--	--	--	--	--	--	1	21	--	--
France	--	--	--	--	--	--	16	423	--	--
Germany	--	--	591	16,200	80	2,430	837	31,400	--	--
Ireland	--	--	--	--	--	--	1	13	--	--
Italy	--	--	430	13,900	--	--	6	137	--	--
Japan	--	--	--	--	1	73	1	42	--	--
Norway	--	--	93	2,510	30	963	--	--	--	--
Singapore	--	--	--	--	335	12,500	30	873	--	--
South Africa	--	--	838	22,200	--	--	--	--	--	--
Switzerland	--	--	--	--	--	--	131	3,600	--	--
Taiwan	--	--	--	--	--	--	81	880	--	--
United Kingdom	--	--	7	202	(2)	9	6	146	(2)	13
Total	20	534	2,340	64,900	481	16,900	1,140	38,300	78	2,150
January–July	242	9,220	13,800	369,000	2,040	75,300	5,500	170,000	754	23,000

-- Zero.

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

²Less 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	Palladium ²		Iridium ²		Osmium ²		Rhodium ²		Ruthenium ²		Waste and scrap ³	
	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:												
May	5,330	231,000	150	6,420	--	--	1,220	116,000	1,190	10,300	3,860	118,000
June	6,560	281,000	35	1,410	--	--	1,210	110,000	590	4,990	5,030	87,400
July: ⁴												
Australia	--	--	--	--	--	--	--	--	--	--	84	2,300
Belgium	127	4,040	--	--	--	--	148	13,600	--	--	1	34
Canada	514	21,100	--	--	--	--	3	69	--	--	1,020	15,200
Chile	--	--	--	--	--	--	--	--	--	--	310	9,060
Colombia	--	--	--	--	--	--	--	--	--	--	15	259
France	(5)	9	--	--	--	--	--	--	--	--	24	670
Germany	218	9,800	8	261	--	--	201	22,500	380	3,180	720	25,500
Italy	707	32,900	2	86	--	--	64	7,020	--	--	1	24
Japan	132	4,540	--	--	--	--	11	1,080	--	--	469	21,500
Korea, Republic of	93	4,730	2	80	--	--	--	--	--	--	--	--
Lebanon	--	--	--	--	--	--	--	--	--	--	12	394
Malaysia	--	--	--	--	--	--	--	--	--	--	27	630
Mexico	(5)	13	--	--	--	--	--	--	--	--	166	5,430
Norway	124	6,220	--	--	--	--	13	1,400	--	--	--	--
Russia	3,240	160,000	--	--	--	--	101	9,750	--	--	--	--
Singapore	--	--	--	--	--	--	--	--	--	--	1,120	40,600
South Africa	1,930	91,400	21	997	--	--	504	49,400	501	3,740	55	2,490
Switzerland	348	17,100	--	--	--	--	--	--	--	--	--	--
Thailand	--	--	--	--	--	--	--	--	--	--	98	2,470
United Kingdom	18	789	63	2,460	--	--	285	32,100	--	--	158	5,160
Other	2	52	--	--	--	--	(5)	19	--	--	49	1,170
Total	7,450	353,000	97	3,880	--	--	1,330	137,000	881	6,920	4,320	133,000
January–July	44,200	1,920,000	533	22,900	--	--	8,080	740,000	5,760	50,200	22,300	608,000

-- Zero.

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

²Unwrought and other forms.

³Includes waste and scrap for all platinum-group elements.

⁴The 20 countries and (or) localities with the greatest total platinum imports are listed. All others are included in the "Other" category.

⁵Less 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	Palladium ²		Platinum ²		Iridium, osmium and ruthenium ^{2,3}		Rhodium ²		Waste and scrap ⁴	
	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:										
May	4,270	111,000	784	22,100	184	3,460	62	4,910	1,240	44,800
June	4,320	114,000	1,340	36,900	131	1,390	61	6,000	592	19,300
July: ⁵										
Australia	10	164	23	704	8	221	1	131	--	--
Brazil	285	13,200	74	1,920	--	--	--	--	--	--
Canada	452	21,400	9	347	--	--	(6)	12	16	474
China	25	290	6	188	11	108	--	--	--	--
Costa Rica	5	205	50	817	--	--	--	--	--	--
France	70	829	2	52	4	23	--	--	--	--
Germany	516	22,300	345	14,000	5	76	--	--	202	8,690
Hong Kong	37	531	1	27	--	--	--	--	--	--
India	9	29	9	243	--	--	--	--	--	--
Ireland	8	210	24	717	--	--	1	32	--	--
Israel	124	1,150	1	26	--	--	--	--	--	--
Italy	5	204	55	1,470	17	571	--	--	3	135
Japan	164	5,150	129	3,380	92	934	10	3,330	432	20,700
Korea, Republic of	201	7,190	914	33,700	--	--	100	11,400	--	--
Mexico	41	289	106	1,530	(6)	12	--	--	2	53
South Africa	--	--	--	--	--	--	--	--	65	3,220
Switzerland	3,050	31,200	300	7,780	1	4	--	--	--	--
Taiwan	85	977	3	82	--	--	--	--	--	--
Thailand	31	394	3	102	--	--	--	--	--	--
United Kingdom	1,880	93,700	23	629	1	20	1	44	929	38,800
Other	39	672	9	325	4	122	--	--	--	--
Total	7,040	200,000	2,080	68,100	143	2,090	114	14,900	1,650	72,100
January–July	33,600	930,000	11,200	327,000	872	15,900	1,040	76,300	12,900	372,000

-- Zero.

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

²Unwrought and other forms.

³Gross weight.

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

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

⁶Less than ½ unit.

Source: U.S. Census Bureau.