

Mineral Industry Surveys

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PLATINUM-GROUP METALS IN OCTOBER 2019

Imports for consumption of platinum-group metals (PGMs), including waste and scrap, were 16,100 kilograms (kg) in October 2019, a decrease of 9% compared with imports in September 2019 and a decrease of 22% compared with imports in October 2018. The leading import sources for PGMs into the United States in October 2019 were, in decending order, South Africa, Russia, and Germany. For October 2019, exports of palladium and PGM scrap increased by 68% and 56%, respectively, compared with exports in September 2019 (table 5). Exports of platinum more than doubled in October 2019 compared with exports in September 2019 and decreased by 64% compared with exports in October 2018.

Compared with prices in the prior month, the Engelhard average October prices increased by 8% for palladium and 7% for rhodium. Prices were unchanged in October 2019 for iridium and ruthenium compared with those in September 2019, and platinum decreased by 5%. Compared with average prices in October 2018, the October 2019 average prices more than doubled for rhodium, and increased by 59% for palladium and 8% for platinum. The average price of iridium was essentially unchanged, and ruthenium decreased by 6% in October 2019 compared with prices in October 2018 (figs. 1, 2; tables 1, 2).

Industry News

Great Dyke Investments (Pvt) Ltd, a 50-50 joint venture between Vi Holding (Russia) and Landela Mining Venture (Pvt) Ltd (Zimbabwe), announced financial negotiations were in progress to develop the first phase of the Darwendale integrated platinum-group-metals project in Zimbabwe. An

intergovernmental agreement was signed by the Governments of Russia and Zimbabwe and a special mining lease was granted for the project (Vi Holding, undated). The agreement was expected to be completed in late March 2020, with production projected to start in 2021 (Dzirutwe, 2019; Great Dyke Investments (Pvt) Ltd., 2019).

References Cited

Dzirutwe, MacDonald, 2019, Russia-Zimbabwe Great Dyke Investments needs \$500 mln for phase 1 of platinum mine: Harare, Zimbabwe, Reuters, October 22. (Accessed December 9, 2019, at https://www.nasdaq.com/articles/russia-zimbabwe-great-dyke-investments-needs-%24500-mln-for-phase-1-of-platinum-mine-2019-10.)

Great Dyke Investments (Pvt) Ltd., 2019, Great Dyke Investments secures partners for its Darwendale project in Zimbabwe: Harare, Zimbabwe, Great Dyke Investments (Pvt) Ltd. press release, October 22. (Accessed December 9, 2019, at

http://www.greatdykeinvest.com/press_center/project_news/press_release_great_dyke_investments_secures_partners_for_its_darwendale_project_in_zim_babwe/)

Vi Holding, [undated], Great Dyke Investments—Darwendale—World class platinum mine: Moscow, Russia, Vi Holding website. (Accessed March 3, 2020, at http://www.viholding.com/en/projects/great-dyke-investments/.)

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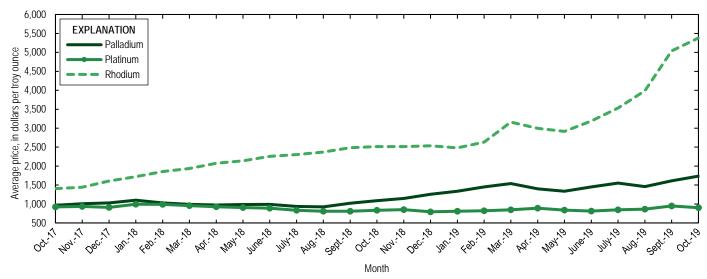


Figure 1. Engelhard unfabricated average monthly prices for palladium, platinum, and rhodium from October 2017 through October 2019. Source: Platts Metals Week.

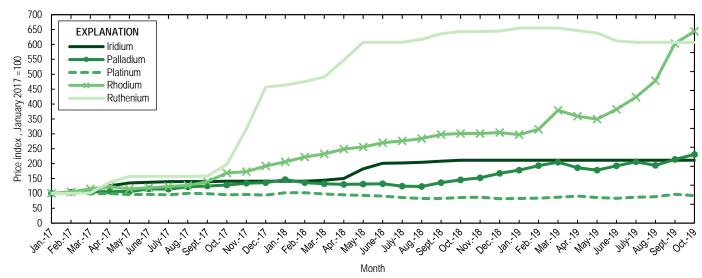


Figure 2. Indexed Engelhard unfabricated average monthly prices for iridium, palladium, platinum, rhodium, and ruthenium from January 2017 through October 2019. Prices are indexed to January 2017. Source: Platts Metals Week.

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

	2018		2019				
	January-				January-		
	December	August	September	October	October		
Mine production: ²							
Palladium	14,300	1,180	1,180	1,180	14,800		
Platinum	4,170	344	344	344	4,290		
Total	18,400	1,530	1,530	1,530	19,000		
Imports for consumption: ³	<u> </u>						
Palladium	92,900	7,290	7,520	6,440	65,400		
Platinum	58,500	3,180	4,630	4,820	34,900		
Iridium	1,020	27	95	48	704		
Osmium	25	(4)			(4)		
Rhodium	14,500	1,460	1,470	1,370	12,400		
Ruthenium	17,900	1,020	1,390	1,060	9,240		
Waste and scrap ⁵	40,700	2,530	2,590	2,370	29,800		
Total	225,000	15,500	17,700	16,100	153,000		
Exports: ³	<u> </u>						
Palladium	53,300	4,810	3,280	5,490	47,200		
Platinum	18,900	1,020	908	2,200	15,300		
Iridium, osmium, ruthenium	2,600	162	70	64	1,170		
Rhodium	2,010	64	82	73	1,260		
Waste and scrap ⁵	31,800	2,000	1,700	2,660	19,300		
Total	109,000	8,060	6,040	10,500	84,200		
Price, average (dollars per troy ounce): ⁶							
Palladium	1,036.43	1,460.73	1,611.00	1,735.22	1,489.24		
Platinum	882.66	861.86	947.70	900.52	857.57		
Iridium	1,293.27	1,485.00	1,485.00	1,485.22	1,485.02		
Rhodium	2,225.30	3,988.41	5,037.50	5,379.57	3,551.74		
Ruthenium	244.41	255.00	255.00	255.00	264.00		

⁻⁻ 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.

⁴Less than ½ unit.

⁵Includes waste and scrap for all platinum-group elements. Previously included within platinum.

⁶Source: 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	SepDec. ²	NovDec. ²	SepNov. ²
Price, average	1,036.43	882.66	1,293.27	2,225.30	244.41
2019:					
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
October:					
Low:	_				
Price	1,648.00	876.00	1,485.00	5,175.00	255.00
Date	Oct. 8	Oct. 4	(2)	Oct. 8 and 9	(2)
High:					
Price	1,809.00	938.00	1,490.00	5,550.00	255.00
Date	Oct. 31	Oct. 31	Oct. 31	(2)	(2)
Price, average	1,735.22	900.52	1,485.22	5,379.57	255.00
January-October:					
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	1,809.00	980.00	1,490.00	5,550.00	275.00
Date	Oct. 31	Sep. 4	Oct. 31	(2)	(2)
Price, average	1,489.24	857.57	1,485.02	3,551.74	264.00

Source: Platts Metals Week.

¹Quotes from Engelhard. ²Occurred multiple days in month(s) listed.

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

	Plati	inum			Oth	ner				
	grain and nuggets		Platinur	Platinum sponge		unwrought platinum		um, other	Platinum coins	
		Value		Value		Value		Value		Value
Country or locality	Quantity	(thousands)	Quantity	(thousands)	Quantity	(thousands)	Quantity	(thousands)	Quantity	(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:										
August	23	642	1,440	38,800	199	6,480	1,430	43,700	94	2,720
September	26	811	2,590	74,600	545	32,200	1,280	39,700	190	6,120
October:										
Australia									47	1,420
Austria							27	1,020	20	605
Belgium			200	6,080						
Canada	25	774					61	1,950	36	1,110
China									7	254
Colombia					1	26				
Costa Rica							78	1,610		
France							23	643		
Germany			337	9,750	94	3,020	161	6,090		
Italy			705	20,500						
Japan	(2)	9			(2)	12	2	55		
Norway			96	2,710						
Russia			343	11,300						
Singapore					252	14,300	7	264		
South Africa			1,350	37,900	25	872			1	38
Saint Helena							1	51		
Switzerland			65	1,870			661	19,300		
Taiwan							120	1,250		
United Kingdom			6	171	1	56	69	1,990	1	22
Total	25	782	3,100	90,200	373	18,300	1,210	34,200	111	3,450
January-October	317	11,500	20,900	573,000	3,150	132,000	9,420	287,000	1,150	35,300

⁻⁻ Zero.

Source: U.S. Census Bureau.

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

²Less than ½ unit.

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

	Palla	adium ²	Irio	lium ²	Osr	nium ²	Rho	odium ²	Ruth	enium ²	Waste and scrap ³	
		Value		Value		Value		Value		Value		Value
Country or locality	Quantity	(thousands)	Quantity	(thousands)	Quantity	(thousands)	Quantity	(thousands)	Quantity	(thousands)	Quantity	(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:												
August	7,290	344,000	27	1,190	(4)	2	1,460	147,000	1,020	8,090	2,530	89,200
September	7,520	354,000	95	4,010			1,470	179,000	1,390	11,000	2,590	88,500
October:5												
Australia											129	4,070
Belgium	164	8,370					139	22,900				
Brazil											16	691
Canada	781	36,800					1	21			427	17,400
China											17	356
Dominican Republic											22	706
Estonia	19	989										
France											123	1,960
Germany	122	5,600	1	18			267	43,100	264	2,340	315	11,300
Hungary											18	989
Italy	274	14,900					52	8,240	31	300	85	2,780
Japan	230	7,680							5	39	445	14,300
Malaysia											21	494
Mexico											420	13,800
Norway	130	6,670										
Peru											14	131
Russia	2,860	164,000					79	11,600				
South Africa	1,770	101,000	28	1,390			606	90,800	707	4,900	6	415
Switzerland	38	986										
United Kingdom	48	2,450	19	690			226	34,200	52	437	265	8,490
Other	(4)	2									41	1,340
Total	6,440	349,000	48	2,090			1,370	211,000	1,060	8,010	2,370	79,200
January-October	65,400	2,970,000	704	30,200	(4)	2	12,400	1,280,000	9,240	77,300	29,800	865,000

⁻⁻ Zero.

Source: U.S. Census Bureau.

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.

⁴Less than ½ unit.

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

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

	Palla	dium ²	Iridium, osmium Platinum ² and ruthenium ^{2, 3} Rhodium ²				dium ²	Waste and scrap ⁴		
		Value		Value		Value		Value		Value
Country or locality	Quantity	(thousands)	Quantity	(thousands)	Quantity	(thousands)	Quantity	(thousands)	Quantity	(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:										
August	4,810	146,000	1,020	30,100	162	1,460	64	6,460	2,000	79,400
September	3,280	75,700	908	29,100	70	901	82	18,900	1,700	80,700
October: ⁵										
Australia	17	185	5	164	1	37				
Belgium	10	341	8	229			1	104	32	1,700
Brazil			124	3,670						
Canada	179	5,470	54	1,750			(6)	24	152	4,560
China	92	2,550	10	241	(6)	6	1	133		
Costa Rica			58	877	1	16				
France	18	253	8	199	14	121				
Germany	845	41,000	684	20,800			8	2,330	324	15,700
Hong Kong	194	4,930	16	496						
Ireland	9	140	19	591						
Israel	39	411	1	29						
Italy	254	8,990	76	2,650	3	65	2	306	257	8,090
Japan	21	184	306	8,720	15	150	9	1,720	510	27,200
Korea, Republic of	66	2,730	1	39						
Mexico	17	425	21	584			(6)	37		
Norway	1	47	39	1,400						
South Africa							45	8,030	47	2,060
Switzerland	3,530	81,000	48	1,820						
Taiwan	71	4,730	11	321	28	163				
United Kingdom	99	5,180	689	37,000	1	17	7	1,100	1,340	76,100
Other	38	865	24	658			(6)	4		
Total	5,490	159,000	2,200	82,300	64	575	73	13,800	2,660	135,000
January-October	47,200	1,310,000	15,300	468,000	1,170	18,800	1,260	115,000	19,300	667,000

⁻⁻ Zero

Source: U.S. Census Bureau.

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.