

Mineral Industry Surveys

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PLATINUM-GROUP METALS IN MARCH 2021

Imports for consumption of platinum-group metals (PGMs), including waste and scrap, were 60,100 kilograms (kg) in March 2021, an increase of 22% compared with imports in February 2021 and more than double PGM imports in March 2020 (table 1). The leading import sources for PGMs into the United States in March 2021 were, in descending order, the United Kingdom, Germany, and South Africa (tables 3, 4). In March 2021, exports of PGM waste and scrap were 7,990 kg, more than six times those in February 2021; palladium exports increased slightly. Exports of platinum decreased by 27% and exports of rhodium decreased by 30% compared with exports in February 2021 (table 5).

The Engelhard average March prices increased by 6% for palladium, by 17% for ruthenium, by 21% for rhodium, and by 29% for iridium compared with average prices in the previous month. However, the average price for platinum decreased slightly compared with the price in February 2021. Compared with average prices in March 2020, the March 2021 average prices increased by 17% for palladium, by 49% for ruthenium, by 55% for platinum, more than doubled for rhodium, and more than tripled for iridium (fig. 1; tables 1, 2).

Industry News

Thefts of catalytic converters increased in the United States as the price of rhodium reached record highs in 2020 and 2021. PGMs including palladium, platinum, and rhodium are used in catalytic converters to filter fumes and toxic pollutants from automobile exhaust (Kraker, 2021; Wroughton and Bearak, 2021).

Canada's Minister of Natural Resources announced a list of 31 minerals in March considered critical for the sustainable economic success of Canada and its allies and to position Canada as the leading mining nation. This list included PGMs (Bedder, 2021).

Platinum Group Metals Ltd. (Canada) received a notice that the mining right for the Waterburg Project, a PGM and gold

mine located in the northern limb of the Bushveld Complex in South Africa, was being appealed. The Department of Mineral Resources had 130 days to consider the appeal; however, the mining right would remain active until a final decision was made (Platinum Group Metals Ltd., 2021).

References Cited

- Bedder, Jack, 2021, Critical minerals—Canada unveils critical minerals list: London, United Kingdom, Roskill Information Services Ltd., March 12. (Accessed May 13, 2021, at <https://roskill.com/news/critical-materials-canada-unveils-critical-minerals-list/>.)
- Kraker, Dan, 2021, As precious metals prices soar, Minnesota becomes hot spot for catalytic converter thefts: Duluth, MN, Minnesota Public Radio, March 16. (Accessed May 13, 2021, at <https://www.mprnews.org/story/2021/03/16/as-precious-metals-prices-soar-minnesota-becomes-a-hotspot-for-catalytic-converter-thefts>.)
- Platinum Group Metals Ltd., 2021, Platinum Group Metals Ltd. reports notice of appeal: Vancouver, British Columbia, Canada, and Johannesburg, South Africa, Platinum Group Metals Ltd. press release, March 8. (Accessed May 13, 2021, at <https://www.platinumgroupmetals.net/investor-relations/news/press-releases/press-releases-details/2021/Platinum-Group-Metals-Ltd.-Reports-Notice-of-Appeal/default.aspx>.)
- Wroughton, Lesley, and Bearak, Max, 2021, A precious metal that costs 15 times the price of gold is driving a surge in thefts of catalytic converters: Washington [DC] Post, March 4. (Accessed May 13, 2021, at https://www.washingtonpost.com/world/africa/catalytic-converter-theft-south-africa-rhodium/2021/03/03/dc288192-777d-11eb-9489-8f7daced51e75_story.html.)

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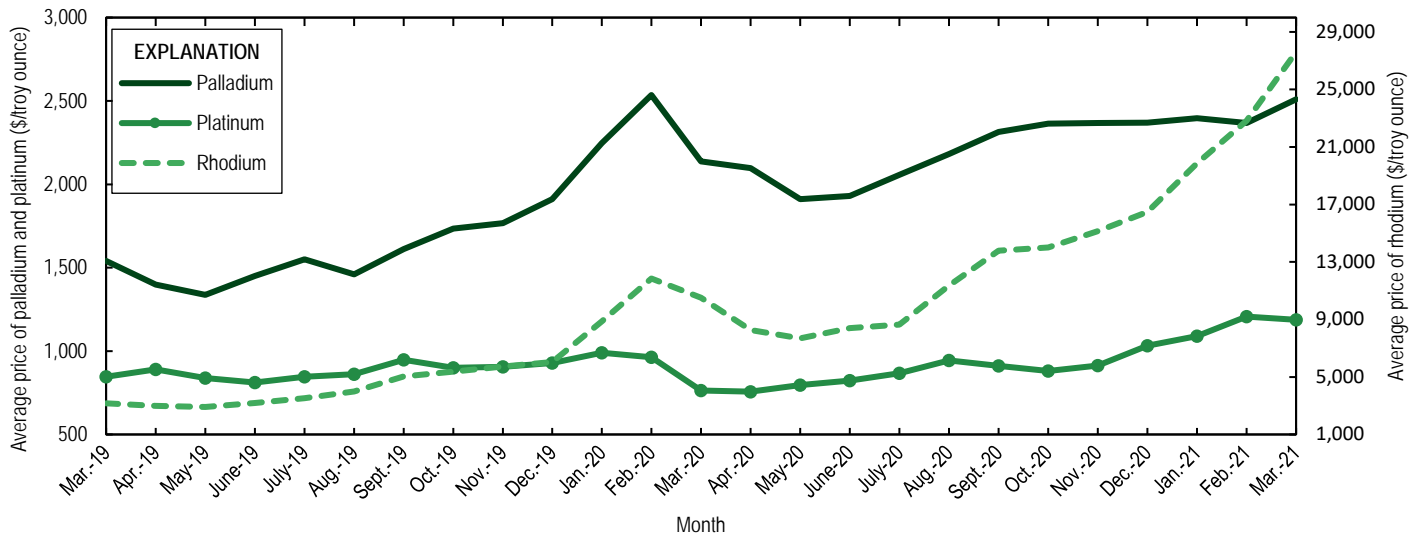


Figure 1. Engelhard unfabricated average monthly prices for palladium, platinum, and rhodium in dollars per troy ounce from March 2019 through March 2021. Source: S&P Global Platts Metals Week.

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

(Kilograms metal content, unless otherwise specified)

	2020	2021			
	January– December	January	February	March	January– March
Mine production:²					
Palladium	14,600	1,240 ^r	1,240 ^r	1,240	3,710
Platinum	4,200	363 ^r	363 ^r	363	1,090
Total	18,800	1,600^r	1,600^r	1,600	4,800
Imports for consumption:³					
Palladium	76,400	6,900	8,310	6,920	22,100
Platinum	64,800	3,070	7,910	5,850	16,800
Iridium	1,620	193	180	103	476
Osmium	1	--	--	--	--
Rhodium	20,700	1,840	1,590	1,510	4,930
Ruthenium	13,900	1,360	2,270	4,490	8,120
Waste and scrap ⁴	204,000	28,900	29,100	41,200	99,300
Total	381,000	42,300	49,400	60,100	152,000
Exports:³					
Palladium	49,600	3,310	2,980	3,040	9,320
Platinum	28,800	1,120	2,640	1,930	5,680
Iridium, osmium, ruthenium	1,440	261	177	130	568
Rhodium	1,470	121	123	87	331
Waste and scrap ⁴	33,200	3,190	1,310	7,990	12,500
Total	115,000	7,990	7,220	13,200	28,400
Price, average (dollars per troy ounce):⁵					
Palladium	2,205.27	2,396.58	2,368.26	2,508.83	2,430.08
Platinum	886.02	1,090.32	1,206.79	1,187.48	1,163.23
Iridium	1,633.51	3,510.53	4,384.21	5,676.09	4,599.18
Rhodium	11,205.06	19,860.53	22,823.68	27,597.83	23,700.82
Ruthenium	271.83	285.00	324.74	380.65	333.44

^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: S&P Global Platts Metals Week.

TABLE 2
PLATINUM-GROUP METALS PRICES¹

(Dollars per troy ounce)

	Palladium	Platinum	Iridium	Rhodium	Ruthenium
2020:					
Low:					
Price	1,585.00	610.00	1,490.00	6,000.00	255.00
Date	Mar. 17	Mar. 19	Jan.–Feb. ²	Mar. ²	Jan.–Apr. ²
High:					
Price	2,790.00	1,085.00	2,600.00	17,150.00	280.00
Date	Feb. 19	Dec. 31	Dec. 30 and 31	Dec. 31	May–Dec. ²
Price, average	2,205.27	886.02	1,633.51	11,205.06	271.83
2021:					
January:					
Low:					
Price	2,332.00	1,009.00	3,000.00	17,650.00	280.00
Date	Jan. 27	Jan. 26	Jan. ²	Jan. 4	Jan. ²
High:					
Price	2,469.00	1,133.00	4,000.00	22,150.00	300.00
Date	Jan. 4	Jan. 21	Jan. ²	Jan. 19	Jan. ²
Price, average	2,396.58	1,090.32	3,510.53	19,860.53	285.00
February:					
Low:					
Price	2,283.00	1,088.00	4,000.00	20,250.00	300.00
Date	Feb. 2 and 4	Feb. 4	Feb. 1 and 2	Feb. 1	Feb. 1 and 2
High:					
Price	2,490.00	1,298.00	4,800.00	27,250.00	340.00
Date	Feb. 25	Feb. 19	Feb. 26	Feb. 26	Feb. ²
Price, average	2,368.26	1,206.79	4,384.21	22,823.68	324.74
March:					
Low:					
Price	2,321.00	1,127.00	4,800.00	24,500.00	340.00
Date	Mar. 10	Mar. 5	Mar. 1	Mar. 12 and 15	Mar. 1
High:					
Price	2,710.00	1,225.00	6,250.00	30,000.00	415.00
Date	Mar. 18	Mar. 15 and 16	Mar. 31	Mar. 22	Mar. 31
Price, average	2,508.83	1,187.48	5,676.09	27,597.83	380.65
January–March:					
Low:					
Price	2,283.00	1,009.00	3,000.00	17,650.00	280.00
Date	Feb. 2 and 4	Jan. 26	Jan. ²	Jan. 4	Jan. ²
High:					
Price	2,710.00	1,298.00	6,250.00	30,000.00	415.00
Date	Mar. 18	Feb. 19	Mar. 31	Mar. 22	Mar. 31
Price, average	2,430.08	1,163.23	4,599.18	23,700.82	333.44

¹Quotes from Engelhard.

²Occurred multiple days in month(s) listed.

Source: S&P Global 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)
2020:										
January–December	162	\$4,780	30,900	\$874,000	5,370	\$255,000	25,900	\$853,000	2,510	\$75,300
2021:										
January	15	544	1,700	56,300	262	9,770	870	24,700	221	7,830
February	77	3,140	5,340	198,000	803	39,300	1,360	68,500	334	8,650
March:										
Argentina	--	--	--	--	9	470	--	--	--	--
Armenia	--	--	--	--	--	--	--	--	1	32
Australia	--	--	--	--	--	--	--	--	(2)	15
Austria	--	--	--	--	--	--	56	4,470	--	--
Belgium	--	--	344	13,200	--	--	--	--	--	--
Canada	22	868	--	--	--	--	52	2,060	58	2,360
Colombia	--	--	--	--	70	2,580	--	--	--	--
Costa Rica	--	--	--	--	--	--	81	2,980	--	--
Czechia	--	--	--	--	--	--	3	298	--	--
France	--	--	26	883	--	--	16	555	--	--
Germany	--	--	151	5,950	98	4,230	133	5,640	7	282
Hong Kong	(2)	14	--	--	--	--	--	--	--	--
Ireland	--	--	--	--	(2)	11	--	--	--	--
Italy	--	--	367	14,100	--	--	(2)	4	--	--
Japan	--	--	4	154	100	3,870	35	1,360	--	--
Mexico	3	91	--	--	--	--	--	--	--	--
Russia	--	--	500	20,100	--	--	--	--	--	--
Singapore	--	--	--	--	73	14,100	14	506	--	--
South Africa	--	--	1,120	41,100	15	1,340	--	--	2	32
Switzerland	65	2,540	--	--	721	27,000	1,170	46,600	6	155
Taiwan	--	--	--	--	--	--	247	2,690	--	--
United Kingdom	--	--	5	213	(2)	3	271	13,100	3	135
Total	90	3,510	2,520	95,700	1,090	53,600	2,080	80,200	77	3,020
January–March	183	7,190	9,560	350,000	2,150	103,000	4,310	173,000	632	19,500

-- 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)
2020:												
January–December	76,400	\$4,490,000	1,620	\$70,100	1	\$17	20,700	\$4,590,000	13,900	\$117,000	204,000	\$1,500,000
2021:												
January	6,900	450,000	193	8,550	--	--	1,840	732,000	1,360	10,100	28,900	131,000
February	8,310	633,000	180	19,700	--	--	1,590	812,000	2,270	20,600	29,100	144,000
March: ⁴												
Australia	--	--	--	--	--	--	--	--	--	--	23	899
Belgium	309	23,300	--	--	--	--	85	62,600	--	--	--	--
Brazil	--	--	--	--	--	--	--	--	--	--	488	7,580
Canada	452	40,900	--	--	--	--	25	371	--	--	317	40,000
France	--	--	--	--	--	--	--	--	--	--	35	1,310
Germany	30	2,010	--	--	--	--	365	296,000	737	10,000	9,360	21,700
Italy	327	26,000	--	--	--	--	114	88,300	2,550	24,000	173	5,620
Japan	1	108	25	3,420	--	--	--	--	--	--	624	20,100
Korea, Republic of	171	13,500	--	--	--	--	93	77,000	--	--	(5)	3
Malaysia	--	--	--	--	--	--	--	--	--	--	79	2,740
Mexico	--	--	--	--	--	--	--	--	--	--	1,250	40,700
Nigeria	--	--	--	--	--	--	--	--	--	--	137	4,460
Russia	3,200	242,000	--	--	--	--	109	84,400	--	--	--	--
Saudi Arabia	--	--	--	--	--	--	--	--	--	--	751	28,000
Singapore	--	--	--	--	--	--	--	--	--	--	21	1,090
South Africa	1,790	129,000	78	8,490	--	--	598	418,000	1,050	9,970	395	17,800
Switzerland	636	49,400	--	--	--	--	--	--	--	--	--	--
Taiwan	--	--	--	--	--	--	--	--	--	--	17	1,300
Thailand	--	--	--	--	--	--	--	--	--	--	110	4,230
United Kingdom	3	308	--	--	--	--	103	80,100	144	1,590	27,400	25,800
Other	--	--	--	--	--	--	14	12,000	--	--	67	2,330
Total	6,920	527,000	103	11,900	--	--	1,510	1,120,000	4,490	45,600	41,200	226,000
January–March	22,100	1,610,000	476	40,200	--	--	4,930	2,660,000	8,120	76,300	99,300	500,000

-- 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-group metal 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)
2020:										
January–December	49,600	\$2,970,000	28,800	\$930,000	1,440	\$24,900	1,470	\$428,000	33,200	\$1,400,000
2021:										
January	3,310	255,000	1,120	43,000	261	4,520	121	73,700	3,190	129,000
February	2,980	235,000	2,640	100,000	177	4,010	123	78,600	1,310	197,000
March: ⁵										
Australia	2	181	12	276	14	502	--	--	(6)	9
Brazil	155	11,700	--	--	--	--	--	--	--	--
Canada	471	38,700	218	9,560	--	--	(6)	28	(6)	12
China	6	474	25	544	11	117	--	--	--	--
Costa Rica	3	260	52	992	6	116	--	--	--	--
France	7	582	21	571	1	42	--	--	--	--
Germany	1,110	85,400	250	9,350	3	27	6	6,300	4,490	311,000
Hong Kong	5	393	7	179	--	--	--	--	--	--
India	26	2,100	12	459	12	110	(6)	3	--	--
Ireland	1	118	34	1,100	1	4	--	--	--	--
Israel	17	1,340	1	20	--	--	--	--	--	--
Italy	355	29,100	2	46	5	225	(6)	34	--	--
Japan	418	44,900	372	12,000	22	2,460	32	4,180	1,010	35,400
Korea, Republic of	9	702	416	56,100	--	--	(6)	33	(6)	10
Mexico	6	520	382	14,500	2	36	--	--	--	--
Norway	(6)	3	34	2,560	--	--	1	966	--	--
South Africa	--	--	--	--	--	--	42	34,200	250	8,430
Switzerland	191	14,700	2	36	--	--	--	--	87	2,720
Taiwan	120	9,960	10	416	43	152	--	--	--	--
United Kingdom	135	10,400	63	2,870	8	104	5	4,320	2,150	134,000
Other	8	649	15	441	2	24	(6)	10	6	244
Total	3,040	252,000	1,930	112,000	130	3,920	87	50,100	7,990	492,000
January–March	9,320	742,000	5,680	255,000	568	12,400	331	202,000	12,500	817,000

-- 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.