

Mineral Industry Surveys

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PLATINUM-GROUP METALS IN MARCH 2009

According to Platts Metals Week, the average March price of platinum increased by 5% compared with the average price in February. The average prices of palladium and rhodium decreased slightly, and the price of iridium was unchanged over the same time period. The average March price of ruthenium increased slightly, the first increase in 11 months. Prices of platinum and rhodium were near parity for the first time in more than 5 years. At its highest in June 2008, the rhodium price was nearly five times greater than that of platinum. The rhodium price dropped precipitously as a result of lack of buying interest owing to the decrease in automobile production over the previous few months.

Platinum Australia Ltd. (West Perth, Western Australia, Australia) shipped the first concentrates from its open-cut Smokey Hills Mine in South Africa to the Impala Platinum Ltd. (Johannesburg, South Africa) smelter. Development of the Smokey Hills underground mine continued to progress on schedule, and construction of the second of six planned adits was begun. Ramp-up to full production was underway (Platinum Australia Ltd., 2009). Platinum Australia delayed finalization of the bankable feasibility study of its Kalahari Platinum project located in the Stella Layered Intrusion within the Kraaipan Greenstones Belt in South Africa. The delay was made to enable consideration of development options aimed at reducing capital and operating costs (Mining Weekly, 2009). Sylvania Resources Ltd. (West Perth) successfully commissioned its third platinum-group metals (PGM) recovery plant near Steelpoort in the eastern Bushveld, South Africa. The Lannex tailings dump plant is

expected to produce 778 kilograms per year of PGMs (Johnson Matthey Plc, 2009).

Canada's Bank of Nova Scotia offered a new investment vehicle in the form of a 1-ounce platinum bar. The initial production of 2,000 bars sold out in a matter of hours. The bank planned to offer 1-ounce palladium bars in the spring of 2009 (Shecter, 2009).

Researchers at Brown University succeeded in producing palladium nanoparticles that hold promise for use in fuel cell catalysts, an application previously possible only with more-expensive platinum. The palladium nanoparticles have increased surface area available for the catalytic reaction and remain intact four times longer than commercially available platinum particles (Baird, 2009).

References Cited

- Baird, Susan, 2009, Brown study may mean cheaper fuel cells: Providence Business News, March 25, 2 p. (Accessed April 3, 2009, at http://www.pbn.com/detail/41178.html?sub_id=41178&.)
- Johnson Matthey Plc, 2009, Sylvania Resources Limited commissions Lannex pgm recovery plant: London, United Kingdom, Johnson Matthey Plc news release, March 24, 1 p.
- Mining Weekly, 2009, Platinum Australia says Kalahari project's bankable study delayed: Creamer Media's Mining Weekly, March 10, 1 p. (Accessed March 18, 2009, at <http://www.miningweekly.com/print-version/platinum-australia-says-kalahari-project-bankable-study-delayed-2009-03-10>.)
- Platinum Australia Ltd., 2009, Smokey Hills update: West Perth, Australia, Platinum Australia Ltd. news release, March 18, 2 p.
- Shecter, Barbara, 2009, Canadian banks roll out new investment products to retail investors: Financial Post, March 10, 1 p. (Accessed March 16, 2009, at <http://www.nationalpost.com/story.html?id=1374724>.)

TABLE 1
PLATINUM-GROUP METALS PRICES¹

(Dollars per troy ounce)

	Platinum	Palladium	Rhodium	Iridium	Ruthenium
2008:					
Low/date	760.00 Oct. 27	167.00 Dec. 5	1,000.00 Nov. ²	400.00 Dec. 2	120.00 Dec. ²
High/date	2,275.00 Mar. 4	585.00 Mar. 4	10,100.00 June 18	460.00 Aug. ²	440.00 Feb. and Mar. ²
Average	1,578.26	355.12	6,533.57	448.34	324.60
2009:					
February:					
Low/date	965.00/4	195.00 ²	1,150.00 ²	420.00 ²	75.00 ²
High/date	1,091.00/20	219.00 ²	1,200.00 ²	420.00 ²	85.00 ²
Average	1,037.26	207.63	1,178.95	420.00	78.42
March					
Low/date	1,044.00/18	193.00/3	1,150.00 ²	420.00 ²	80.00 ²
High/date	1,160.00/26	223.00/26	1,200.00 ²	420.00 ²	80.00 ²
Average	1,084.59	203.73	1,175.00	420.00	80.00
Year-to-date:					
Low/date	920.00 Jan. 15	182.00 Jan. ²	1,050.00 Jan. ²	420.00 Jan.—Mar. ²	75.00 Feb. ²
High/date	1,160.00 Mar. 26	223.00 Mar. 26	1,300 Jan. 7	430.00 Jan. ²	100.00 Jan. 2
Average	1,024.36	200.47	1,167.75	421.59	82.49

¹Quotes from Engelhard Industries.

²Occurred multiple days in month(s) listed.

Source: Platts Metals Week.

TABLE 2
U.S. IMPORTS FOR CONSUMPTION OF PLATINUM METAL, BY COUNTRY¹

(Kilograms metal content, unless otherwise specified)

Period and country	Platinum grain and nuggets		Platinum sponge		Other unwrought platinum		Platinum, other		Platinum waste and scrap		Platinum coins	
	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)
2008:												
December	2	\$60	1,850	\$50,200	728	\$18,900	455	\$9,140	4,760	\$5,910	1	\$59
Year	212	7,210	45,700	2,330,000	4,040	177,000	7,180	282,000	92,200	593,000	734	22,400
2009:												
January	1	23	3,480	106,000	302	8,460	713	18,100	2,550	38,500	2	48
February:												
Australia	--	--	--	--	--	--	--	--	(2)	5	(2)	4
Belgium	--	--	179	5,140	--	--	--	--	--	--	--	--
Canada	1	17	--	--	(2)	11	8	270	40	1,410	3	42
Chile	--	--	--	--	--	--	--	--	4,900 ³	143	--	--
China	--	--	--	--	--	--	--	--	6	80	--	--
Colombia	--	--	--	--	91	2,370	--	--	18	309	--	--
France	--	--	--	--	--	--	--	--	9	232	--	--
Germany	--	--	6	155	18	550	157 ³	2,070	39	869	--	--
Hong Kong	--	--	--	--	--	--	--	--	22	748	--	--
Indonesia	--	--	--	--	--	--	--	--	(2)	10	--	--
Ireland	--	--	--	--	--	--	3	23	--	--	--	--
Israel	--	--	--	--	7	191	--	--	--	--	--	--
Italy	--	--	99	3,240	--	--	53	1,660	--	--	--	--
Jamaica	--	--	--	--	--	--	--	--	(2)	50	--	--
Japan	--	--	--	--	(2)	13	3	20	37 ³	24,900	--	--
Korea, Republic of	--	--	--	--	--	--	(2)	5	14	300	--	--
Mexico	--	--	--	--	5	141	5	113	1,230	549	--	--
Netherlands	--	--	--	--	(2)	4	(2)	14	--	--	--	--
Norway	--	--	31	993	--	--	--	--	--	--	--	--
Philippines	--	--	--	--	--	--	--	--	3	121	--	--
Russia	--	--	50	1,530	20	618	--	--	--	--	--	--
Saudi Arabia	--	--	--	--	--	--	--	--	15	198	--	--
Singapore	--	--	--	--	--	--	--	--	6	159	--	--
South Africa	1	22	388	12,000	--	--	3	17	--	--	--	--
Switzerland	--	--	--	--	32	1,020	169	5,480	--	--	--	--
United Kingdom	--	--	168	5,590	(2)	9	3	149	--	--	15	508
Total	2	39	922	28,700	174	4,930	403	9,820	6,340	30,100	19	554
Year to date	3	62	4,410	135,000	476	13,400	1,120	27,900	8,900	68,500	21	602

-- Zero.

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

²Less than ½ unit.

³All or part of these data have been referred to the U.S. Census Bureau for verification.

Source: U.S. Census Bureau.

TABLE 3
U.S. IMPORTS FOR CONSUMPTION OF PLATINUM-GROUP METALS, BY COUNTRY¹

(Kilograms metal content, unless otherwise specified)

Period and country	Unwrought palladium		Palladium, other		Iridium ²		Osmium ²		Ruthenium ²		Rhodium ²	
	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)
2008:												
December	4,660	\$28,700	1,030	\$6,200	40	\$558	--	--	5,490	\$32,100	754	\$31,800
Year	114,000	1,270,000	6,810	85,500	2,550	36,600	11	\$101	49,800	426,000	12,600	2,470,000
2009:												
January	3,560	19,900	846	5,560	68	963	--	--	1,300	4,100	741	26,700
February:												
Belgium	40	409	--	--	--	--	--	--	--	--	278	10,400
Canada	140	1,730	--	--	--	--	--	--	--	--	--	--
Germany	16	352	7	53	15	132	--	--	752	1,670	1	9
Italy	54	1,170	1	7	1	13	--	--	--	--	314	8,460
Japan	125	411	10 ³	71	--	--	--	--	--	--	4	143
Norway	156	1,050	--	--	--	--	--	--	--	--	6	213
Russia	403	2,500	560	3,710	--	--	--	--	23	49	63	2,310
South Africa	1,150	6,740	16	90	85	1,110	--	--	864	1,610	402	14,000
Switzerland	--	--	447	3,070	--	--	--	--	--	--	--	--
United Kingdom	1,170	7,280	(4)	7	10	45	--	--	47	132	19	728
Total	3,250	21,600	1,040	7,010	111	1,300	--	--	1,690	3,460	1,090	36,200
Year to date	6,820	41,600	1,890	12,600	178	2,260	--	--	2,990	7,560	1,830	62,900

-- Zero.

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

²Unwrought and other forms.

³All or part of these data have been referred to the U.S. Census Bureau for verification.

⁴Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 4
U.S. EXPORTS OF PLATINUM-GROUP METALS, BY COUNTRY¹

(Kilograms of metal content, unless otherwise specified)

Period and country	Platinum ²		Platinum waste and scrap		Palladium ²		Iridium, osmium, and ruthenium ^{2,3}		Rhodium ²	
	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)
2008:										
December	1,980	\$50,400	3,890	\$37,000	962	\$7,360	330	\$3,410	44	\$2,130
Year	15,600	570,000	54,700	1,190,000	26,400	197,000	6,450	80,600	1,980	302,000
2009:										
January	1,070	30,700	3,030	43,700	4,730	29,200	188	2,290	23	1,350
February:										
Australia	1	51	1	51	68	520	--	--	--	--
Austria	6	100	--	--	--	--	18	381	--	--
Belgium	1	19	12	396	1	13	--	--	--	--
Canada	43	1,320	54	1,630	110	963	1	20	(5)	5
China	25	391	--	--	209	1,430	--	--	18	659
Colombia	2	31	--	--	1	9	--	--	--	--
Costa Rica	--	--	--	--	--	--	3	16	--	--
Czech Republic	--	--	--	--	45 ⁴	44	--	--	--	--
Denmark	(5)	8	--	--	2	47	--	--	--	--
France	6	218	--	--	48	183	6	29	--	--
Germany	974	25,000	527	6,680	186	1,350	1	4	--	--
Hong Kong	5	443	1	4	39	546	--	--	--	--
Iceland	--	--	--	--	2	11	--	--	--	--
India	(5)	21	--	--	(5)	3	--	--	--	--
Ireland	15	522	--	--	10	33	1	3	(5)	6
Israel	4	39	--	--	40	113	--	--	--	--
Italy	(5)	49	--	--	150	1,400	1	27	6	240
Japan	55	1,640	85	2,100	133	928	8	67	19	689
Korea, Republic of	4	102	--	--	51	292	--	--	--	--
Mexico	6	201	--	--	41 ⁴	86	2	57	(5)	5
Netherlands	(5)	78	--	--	10	40	--	--	--	--
New Zealand	(5)	10	--	--	6	90	--	--	--	--
Norway	10	161	--	--	3	30	--	--	--	--
Philippines	(5)	35	--	--	(5)	4	--	--	--	--
Romania	(5)	13	--	--	(5)	4	--	--	--	--
Saudi Arabia	(5)	5	--	--	2	9	--	--	--	--
Singapore	(5)	9	--	--	4	20	36	875	--	--
South Africa	1	35	--	--	6	17	--	--	--	--
Spain	2	19	--	--	21	109	--	--	--	--
Sweden	2	60	--	--	--	--	--	--	--	--
Switzerland	1,490	48,300	140	1,790	4	46	(5)	8	--	--
Taiwan	2	34	--	--	8	56	--	--	--	--
Thailand	(5)	130	--	--	13	155	--	--	--	--
United Arab Emirates	--	--	--	--	(5)	10	--	--	--	--
United Kingdom	92	2,360	1,070	20,700	231	1,750	1	30	(5)	6
Other	1	29	2	28	2	32	16	85	--	5
Total	2,750	81,500	1,890	33,400	1,450	10,300	94	1,600	43	1,610
Year to date	3,820	112,000	4,920	77,100	6,170	39,500	283	3,890	66	2,970

-- Zero.

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

²Unwrought and other forms.

³Gross weight.

⁴All or part of these data have been referred to the U.S. Census Bureau for verification.

⁵Less than ½ unit.

Source: U.S. Census Bureau.