

Mineral Industry Surveys

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PLATINUM-GROUP METALS IN DECEMBER 2008

According to Platts Metals Week, the average December price of platinum rose slightly, and the average December prices of palladium and rhodium dropped by 16% and 13%, respectively, as compared with the average prices in November. The average price of ruthenium plummeted by 30% and that of iridium fell slightly during the same time period. During the month, platinum prices rose from the beginning to the end of the month, palladium and rhodium prices were volatile, and ruthenium prices moved steadily downward as the result of weak buying interest from the electronics industry. Platinum and gold reached parity for the first time in more than 10 years.

The drop in metal prices resulted in several companies announcing cutbacks in their mining operations. MMC Norilsk Nickel (Moscow, Russia) cut its expected 2008 palladium output by 2,600 kilograms (kg) to 86,000 kg and its expected 2008 platinum output by 2,640 kg to 19,400 kg (MMC Norilsk Nickel, 2008). Anglo Platinum Ltd. (Johannesburg, South Africa) planned to cut capital spending in 2009 by roughly 40% relative to that of 2008, and to maintain 2009 production at the 2008 level of 74,600 kg of refined platinum (Anglo Platinum Ltd., 2008). Lonmin Plc (London, United Kingdom) put the Akanani and Limpopo Mines on care-and-maintenance and ceased operations at the opencast mine at Marikana (Lonmin Plc, 2008, p. 6). Impala Platinum Ltd. (Johannesburg, South Africa) put its proposed acquisition of Mvelaphanda Resources Ltd. (Sandton, South Africa) and Northam Platinum Ltd. (Johannesburg, South Africa) on hold (Morrison, 2008). Zimplats Holdings Ltd. (Harare, Zimbabwe) discontinued opencast mining at its Ngezi Mine in Zimbabwe, but planned to raise additional funding in order to complete the Ngezi Phase I Expansion Project during 2009 (Zimplats Holdings Ltd, 2008).

Aquarius Platinum Ltd. (Bedford, South Africa) suspended mining operations for at least 6 months at its Everest Mine as a result of geotechnical issues. The suspension resulted in the layoff of 1,950 people; the majority of the Everest Mine workforce (Aquarius Platinum Ltd. 2008). Ridge Mining plc (London, United Kingdom) announced that the commissioning of its processing plant at the Blue Ridge Mine would take place in late January 2009, following investigation of a minor accident that occurred during plant construction. The underground mine

development was progressing as planned, and a stockpile of more than 200,000 metric tons of ore was ready for processing at the plant (Ridge Mining plc, 2008). Marathon PGM Corp. (Toronto, Ontario, Canada) completed a definitive feasibility study on its Marathon Project in Marathon, Ontario. The Marathon deposit was planned as an open pit, with mining starting in 2012 and a mine life of 10 years. Expected production was 90,000 metric tons per year of a single concentrate containing copper, platinum-group metals, gold, and silver, that was to be shipped to a third-party smelter (Marathon PGM Corp., 2008).

New investment tools in the form of exchange traded funds (ETFs) were launched on the Australian Securities Exchange. The four new ETFs are platinum, palladium, silver, and a precious-metals basket consisting of platinum, palladium, silver, and gold (ETF Securities Ltd., 2008).

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TABLE 1
PLATINUM-GROUP METALS PRICES¹

(Dollars per troy ounce)

	Platinum	Palladium	Rhodium	Iridium	Ruthenium
2007:					
Low/date	1,122.00 Jan. 8	322.00 Aug. 22	5,550.00 Jan. ²	400.00 Jan. and Feb. ²	375.00 Jul. ²
High/date	1,547.00 Dec. 27	385.00 Apr. 20	6,850.00 Dec. ²	450.00 Feb.—Dec. ²	870.00 Feb. ²
Average	1,308.40	357.34	6,203.09	444.43	573.74
2008:					
October:					
Low/date	760.00/27	170.00 ²	1,600.00 ²	440.00 ²	230.00 ²
High/date	1,036.00/14	209.00/2	3,775.00/1	450.00 ²	290.00 ²
Average	917.13	193.30	2,456.52	446.96	260.65
November:					
Low/date	820.00 ²	203.00 ²	1,000.00 ²	440.00 ²	200.00 ²
High/date	880.00/10	235.00/6	1,625.00 ²	440.00 ²	230.00 ²
Average	841.22	212.61	1,398.61	440.00	219.44
December:					
Low/date	798.00 ²	167.00/5	1,050.00/1	400.00/2	120.00 ²
High/date	912.00/31	187.00/29	1,375.00/4	440.00 ²	200.00 ²
Average	844.43	177.86	1,221.19	433.10	154.29
Year-to-date:					
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

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	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
		(thousands)		(thousands)		(thousands)		(thousands)		(thousands)		(thousands)
2007	621	\$20,100	65,900	\$2,620,000	3,940	\$145,000	10,200	\$330,000	206,000	\$504,000	58	\$964
2008:												
September	13	629	3,600	123,000	391	15,600	571	18,000	2,650	44,100	(2)	25
October	(2)	16	4,140	147,000	422	14,500	443	11,700	1,970	18,900	5	177
November:												
Belgium	--	--	128	4,160	--	--	--	--	--	--	--	--
Brazil	--	--	--	--	--	--	--	--	62	2,360	--	--
Canada	(2)	18	--	--	1	35	14	401	62	1,910	--	--
Chile	--	--	--	--	--	--	--	--	4,900 ³	342	--	--
China	--	--	--	--	--	--	1	51	--	--	--	--
Colombia	--	--	--	--	90 ³	1,900	--	--	3	96	--	--
Germany	--	--	5	139	36	1,350	183 ³	2,790	32	1,160	--	--
Hong Kong	--	--	--	--	--	--	1	15	--	--	--	--
Ireland	--	--	--	--	--	--	1 ³	13	--	--	--	--
Israel	--	--	--	--	14	359	--	--	9	395	--	--
Italy	--	--	54	1,500	--	--	24	648	--	--	--	--
Japan	--	--	--	--	1	57	3	82	2,610 ³	32,500	--	--
Korea, Republic of	--	--	--	--	--	--	--	--	14	500	--	--
Mexico	--	--	--	--	3	76	12 ³	166	--	--	--	--
Norway	--	--	47	1,170	--	--	--	--	--	--	--	--
Philippines	--	--	--	--	--	--	--	--	2	75	--	--
Russia	--	--	50	1,480	30	901	--	--	--	--	--	--
South Africa	1	15	1,820 ³	30,600	--	--	(2)	10	--	--	--	--
Switzerland	--	--	9	250	--	--	142	3,670	--	--	--	--
Turkey	--	--	--	--	--	--	--	--	2 ³	30	--	--
United Kingdom	17	813	259	6,960	1	22	51	1,750	2	315	--	--
Total	18	846	2,370	46,300	176	4,700	431	9,600	7,700	39,600	--	--
Year to date	210	7,150	43,900	2,280,000	3,310	158,000	6,730	273,000	87,400	587,000	733	22,300

-- 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)
2007	101,000	\$1,120,000	11,600	\$129,000	3,410	\$41,900	23	\$192	48,700	\$655,000	16,600	\$2,650,000
2008:												
September	7,610	68,900	462	5,340	80	1,270	--	--	3,890	30,700	908	168,000
October	4,290	32,800	756	7,290	149	2,180	--	--	2,390	19,300	721	84,500
November:												
Belgium	7	38	--	--	--	--	--	--	--	--	62 ³	7,980
Canada	100	1,260	95 ³	1,200	--	--	--	--	--	--	--	--
Germany	51	373	(4) ³	3	33	486	--	--	1,660	9,400	77	3,470
Hong Kong	--	--	21	146	--	--	--	--	--	--	2 ³	42
Italy	105	774	2	42	--	--	--	--	--	--	5 ³	233
Japan	250 ³	736	(4) ³	14	--	--	--	--	79 ³	459	--	--
Netherlands	--	--	--	--	6 ³	16	--	--	--	--	--	--
Norway	78	420	--	--	--	--	--	--	--	--	17	745
Russia	27,400	228,000	--	--	--	--	--	--	3,660	23,000	103	7,420
South Africa	2,080	10,000	197	1,190	240	3,390	--	--	355	2,730	734	44,200
Switzerland	--	--	323 ³	2,190	--	--	--	--	--	--	--	--
United Kingdom	1,640	11,300	90 ³	511	13	133	--	--	39	274	25	952
Total	31,700	253,000	729	5,300	292	4,020	--	--	5,800	35,800	1,030	65,000
Year to date	109,000	1,240,000	5,780	79,300	2,510	36,000	11	101	44,300	394,000	11,800	2,440,000

-- 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 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)
2007	28,900	\$763,000	54,400	\$924,000	41,800	\$298,000	8,190	\$145,000	2,210	\$401,000
2008:										
September	1,050	40,600	2,230	66,300	1,980	13,100	225	2,280	76	5,060
October	1,040	26,100	4,390	72,600	1,960	10,900	265	2,700	27	4,620
November:										
Australia	1 ⁴	62	--	--	33	382	1	12	--	--
Austria	4	89	--	--	--	--	13	390	--	--
Belgium	(5)	13	14	397	2	12	1	3	--	--
Canada	25	793	61	1,840	122	1,010	--	--	(5) ⁴	43
China	51	856	--	--	4 ⁴	34	--	--	--	--
Cote d'Ivoire	--	--	--	--	--	--	--	--	4 ⁴	518
France	6	176	--	--	18	106	--	--	--	--
Germany	187 ⁴	3,870	2,000 ⁴	17,100	172	1,190	82	529	(5) ⁴	4
Hong Kong	2 ⁴	338	--	--	34 ⁴	401	--	--	--	--
Ireland	8	278	--	--	2	10	2	9	--	--
Israel	1	16	--	--	68 ⁴	142	3	68	--	--
Italy	184	4,920	--	--	228 ⁴	2,010	--	--	30	1,380
Japan	280	7,150	275	9,320	85 ⁴	355	55	371	6 ⁴	628
Korea, Republic of	8	150	--	--	19 ⁴	147	--	--	--	--
Mexico	11	376	--	--	165 ⁴	230	10	289	(5) ⁴	17
Singapore	(5) ⁴	15	--	--	8 ⁴	47	280	1,990	--	--
Spain	2	17	--	--	34 ⁴	114	--	--	--	--
Switzerland	1,500	38,900	--	--	19	271	(5)	5	--	--
Taiwan	5 ⁴	150	--	--	336 ⁴	870	155 ⁴	1,160	5 ⁴	460
United Kingdom	101 ⁴	1,820	1,620	30,800	104 ⁴	922	2	37	--	--
Other	8 ⁴	392	1	36	57 ⁴	538	3	45	(5) ⁴	8
Total	2,390	60,400	3,980	59,500	1,510	8,790	608	4,900	46	3,060
Year to date	13,600	520,000	50,800	1,150,000	25,500	190,000	6,120	77,100	1,940	300,000

-- 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.