

Mineral Industry Surveys

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PLATINUM-GROUP METALS IN MARCH 2010

The average March Platts Metals Week prices of platinum and palladium increased by 5% and 8%, respectively, compared with the average prices in February. The average price of rhodium increased slightly, and that of iridium and ruthenium increased by 11% and 3%, respectively, during the same time period. Platinum and palladium prices reached their highest points in 20 months and 24 months, respectively, as a result of rising fabrication demand as well as increased investment in exchange-traded funds. Rhodium prices began the month at \$2,585 per troy ounce, decreased toward the end of the month, then increased again, reaching \$2,600 per troy ounce at the end of the month as a result of investment demand. Iridium prices continued the upswing that started at the beginning of February 2010, and increased by 11% from the beginning to the end of the month, starting at \$465 per troy ounce and ending the month at \$515 per troy ounce. The iridium price increase was likely the result of relatively low supply (Heraeus, 2010).

Duluth Metals, Ltd. (Toronto, Ontario, Canada) set up a new drilling contract to explore its properties further on the Nokomis Deposit in the Duluth Complex of Minnesota. Exploratory and development drilling, mine planning, metallurgical testing, prefeasibility and feasibility studies, as well as continued environmental data collection and analysis were planned as the focus for the next 24 months (Duluth Metals, Ltd., 2010).

Lonmin Plc (London, United Kingdom) signed two contracts with Xstrata-Merafe Chrome Venture and ChromTech for the construction of two chromium recovery plants at its Marikana platinum-group metals (PGM) operations. The chromium recovery plants would treat the tailings from the high-chromium UG2 ore and would provide Lonmin with chromium byproduct revenues. Under the terms of the contracts, Xstrata-Merafe Chrome Venture and ChromTech would purchase the chromite concentrate produced. The chromium recovery plants were expected to be in full production by the second half of Lonmin's 2011 financial year. Lonmin also considered building plants to remove PGMs from the UG2 tailings following the removal of the chromium (Lonmin Plc, 2010b). Lonmin's Number One furnace was shut down following a matte runout and was expected to be down for repairs for about 30 to 40 days. To lower the impact on production, two Pyromet furnaces were

started and a third was scheduled to be started in April. The Pyromet furnaces have about 40% of the capacity of the Number One furnace. Lonmin expected no effects on half-year production and planned to evaluate the impact, if any, on full-year production projections after the repair is completed (Lonmin Plc, 2010a).

Colossus Minerals, Inc. (Toronto) received a Preliminary Environmental License for its Serra Pelada Project in Para State, Brazil. Serra Pelada was a high-grade gold-PGM deposit that was the focus of a precious metals rush between 1980 and 1986. Approval of the license constituted a decision by the Government that the Serra Pelada project, which included a mine and associated processing facilities and infrastructure, was environmentally feasible and was a step toward the project reaching commercial production. Exploration, including diamond drilling, was ongoing (Colossus Minerals, Inc., 2010).

The South African state-run utility company, Eskom, received approval from the country's regulatory body to increase tariffs on electricity prices by about 25% during the next 3 years. Several groups protested the price increase as being excessive and pointed out that the mining industry would be hurt by the increased operating costs. South Africa supplies about 77% and 37% of the world's platinum and palladium, respectively. Eskom supplied 95% of South Africa's power needs and planned to use the increased funds to build new capacity because old powerplants have broken down, and bringing mothballed power stations back into operation takes about 18 months. Eskom power shortages in January 2008 resulted in a 5-day shutdown of PGM mines in the country, which caused a jump in PGM prices owing to supply fears (Platts Metals Week, 2010).

References Cited

- Colossus Minerals Inc., 2010, Preliminary environmental license approved for Serra Pelada: Toronto, Ontario, Canada, Colossus Minerals Inc. news release, March 9, 1 p.
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- Heraeus, 2010, Precious metals weekly: New York, NY, Heraeus news release, March 19, 4 p.

Lonmin Plc, 2010a, Number one furnace shut down: London, United Kingdom,
Lonmin Plc news release, March 30, 1 p.
Lonmin Plc, 2010b, UG2 tailings re-treatment contracts for chrome removal:
London, United Kingdom, Lonmin Plc news release, March 2, 1 p.

Platts Metals Week, 2010, SA power price rise may threaten high-cost mines:
Platts Metals Week, v. 81, no. 10, March 8, p. 1, 14-15.

TABLE 1
PLATINUM-GROUP METALS PRICES¹

(Dollars per troy ounce)

	Platinum	Palladium	Rhodium	Iridium	Ruthenium
2009:					
Low/date	920.00 Jan. 15	182.00 Jan. ²	1,050.00 Jan. ²	420.00 Jan.–Dec. ²	75.00 Feb. ²
High/date	1,510.00 Dec. 2	407.00 Dec. 31	2,790.00 Nov. 25	430.00 Jan. ²	160.00 Dec. ²
Average	1,207.55	265.65	1,591.32	420.40	97.28
2010:					
February:					
Low/date	1,482.00/8	397.00/5	2,375.00/5 and 8	425.00/1 and 2	175.00/1 and 2
High/date	1,583.00/3	446.00/3	2,575.00 ²	465.00 ²	190.00 ²
Average	1,525.53	429.16	2,510.00	449.74	184.74
March:					
Low/date	1,553.00/1	441.00/1	2,425.00 ²	465.00/1	190.00 ²
High/date	1,648.00/31	483.00/31	2,600.00/31	515.00 ²	190.00 ²
Average	1,602.65	464.48	2,528.04	498.91	190.00
Year-to-date:					
Low/date	1,482.00 Feb. 8	397.00 Feb. 5	2,375.00 Feb. 5 and 8	420.00 Jan. ²	170.00 Jan. ²
High/date	1,648.00 Mar. 31	483.00 Mar. 31	2,775.00 Jan. ²	515.00 Mar. ²	190.00 Feb.-Mar. ²
Average	1,565.11	443.60	2,571.85	457.05	182.33

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)
2009:												
December	2	\$91	2,180	\$99,500	309	\$12,500	417	\$14,900	10,700	\$27,100	1	\$52
Year	16	474	37,100 ^r	1,420,000	3,770 ^r	129,000 ^r	5,910	174,000	136,000	334,000	512	20,500
2010:												
January	4	220	2,240	99,000	388	17,500	685	28,500	1,570	44,000	(2)	7
February:												
Argentina	--	--	--	--	--	--	--	--	88	3,980	--	--
Australia	--	--	--	--	--	--	62	3,140	--	--	--	--
Belgium	--	--	1	35	--	--	11	653	--	--	--	--
Canada	(2)	19	--	--	--	--	24	1,240	14	1,790	(2)	17
China	--	--	--	--	--	--	--	--	237	3,410	--	--
Colombia	--	--	--	--	76	2,800	--	--	9	218	--	--
France	--	--	--	--	19	839	8	170	24	973	--	--
Germany	--	--	188	7,970	116	4,060	251	6,090	24	616	--	--
Israel	--	--	--	--	8	205	--	--	9	265	--	--
Italy	--	--	253	14,100	--	--	(2)	6	--	--	--	--
Japan	--	--	--	--	2	55	1	10	5,020	5,130	--	--
Mexico	--	--	--	--	2	101	--	--	12,100	252	--	--
Norway	--	--	212	10,300	--	--	--	--	--	--	--	--
Philippines	--	--	--	--	--	--	--	--	3	70	(2)	12
South Africa	--	--	453	21,800	--	--	49	2,490	--	--	--	--
Switzerland	--	--	93	4,850	93	4,850	32	1,540	--	--	--	--
United Kingdom	14	605	239	11,900	1	27	15	826	22	1,440	--	--
Other	--	--	--	--	--	--	2	24	178	3,360	--	--
Total	14	624	1,440	70,900	317	12,900	455	16,200	17,700	21,500	(2)	29
Year to date	19	844	3,680	170,000	704	30,400	1,140	44,700	19,300	65,500	1	36

^rRevised. -- 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 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)
2009:												
December	5,570	\$62,100	495	\$7,220	345	\$4,730	--	--	1,460	\$5,350	1,680	\$118,000
Year	62,300	568,000	7,350	62,300	1,520	20,800	68	\$551	21,200	55,700	11,200	530,000
2010:												
January	3,810	46,300	357	5,840	291	3,930	8	56	792	3,700	945	69,100
February:												
Belgium	--	--	--	--	--	--	--	--	--	--	70	5,560
Canada	106	2,110	16	231	--	--	--	--	--	--	--	--
Germany	112	1,070	11	186	3	37	--	--	--	--	110	7,310
Israel	--	--	6	11	--	--	--	--	--	--	--	--
Italy	54	833	4	57	--	--	--	--	--	--	10	509
Japan	60	372	2	71	--	--	--	--	55	301	--	--
Netherlands	--	--	(3)	2	--	--	--	--	--	--	--	--
Norway	761	10,200	--	--	--	--	--	--	--	--	16	1,210
Russia	996	12,800	--	--	--	--	--	--	--	--	715	14,800
South Africa	779	10,300	16	187	66	844	--	--	591	3,040	738	43,700
Switzerland	--	--	106	1,600	--	--	--	--	--	--	--	--
United Kingdom	1,770	23,000	86	1,210	3	53	--	--	390	1,740	95	6,020
Total	4,640	60,700	247	3,550	72	934	--	--	1,040	5,080	1,750	79,000
Year to date	8,450	107,000	605	9,400	364	4,870	8	56	1,830	8,780	2,700	148,000

-- Zero.

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

²Unwrought and other forms.

³Less 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)
2009:										
December	489	\$15,900	2,510	\$52,600	2,270	\$19,700	831	\$6,350	113	\$3,280
Year	15,600	522,000	31,600	523,000	30,300	229,000	4,020	34,400	1,220	48,400
2010:										
January	1,070	49,800	2,790	49,900	2,330	18,900	401	3,630	148	5,940
February:										
Australia	1	64	--	--	56	893	(4)	3	--	--
Belgium	2	52	--	--	10	134	--	--	--	--
Canada	30	1,270	2	166	435	4,150	--	--	(4)	4
China	20	876	--	--	89	751	80	876	51	3,160
Colombia	(4)	14	--	--	6	93	--	--	--	--
France	1	36	--	--	28	242	--	--	--	--
Germany	467	21,100	278	713	171	1,950	293	1,880	34	2,500
Hong Kong	7	231	--	--	84	1,260	15	235	--	--
India	34	1,470	--	--	4	47	1	23	--	--
Ireland	14	482	--	--	2	28	3	16	--	--
Israel	5	138	--	--	425	1,360	--	--	--	--
Italy	183	8,950	--	--	266	3,440	1	8	--	--
Japan	139	2,980	51	1,900	161	1,080	102	1,470	74	2,430
Korea, Republic of	3	76	--	--	31	319	--	--	--	--
Mexico	22	753	--	--	50	80	--	--	(4)	8
Netherlands	(4)	19	--	--	2	10	--	--	--	--
New Zealand	(4)	14	--	--	7	131	--	--	--	--
Norway	(4)	13	--	--	6	97	--	--	--	--
Poland	1	18	--	--	1	4	--	--	--	--
Romania	(4)	8	--	--	2	17	--	--	--	--
Singapore	(4)	3	--	--	26	103	--	--	--	--
South Africa	--	--	590	1,430	29	26	--	--	--	--
Sweden	1	55	--	--	(4)	4	--	--	--	--
Switzerland	11	359	--	--	21	151	--	--	--	--
Taiwan	6	317	--	--	105	602	175	1,050	--	--
Thailand	7	131	--	--	3	66	--	--	--	--
Turkey	(4)	19	--	--	1	3	--	--	--	--
United Arab Emirates	1	21	--	--	(4)	12	--	--	--	--
United Kingdom	46	1,820	1,680	56,700	138	1,820	4	60	--	--
Other	4	167	--	--	93	184	--	--	--	--
Total	1,010	41,400	2,600	60,900	2,250	19,000	674	5,620	159	8,100
Year to date	2,080	91,200	5,380	111,000	4,580	37,900	1,080	9,250	307	14,000

-- Zero.

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

²Unwrought and other forms.

³Gross weight.

⁴Less than ½ unit.

Source: U.S. Census Bureau.