

Mineral Industry Surveys

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PLATINUM-GROUP METALS IN OCTOBER 2009

According to Platts Metals Week (2009a-e), the average October prices of platinum, palladium, and rhodium increased by 3%, 10%, and 8%, respectively, compared with the average prices in September. The average monthly prices of ruthenium and iridium remained unchanged over the same time period. The prices of platinum and palladium rose from the beginning to the middle of the month, and then fell in response to a rising dollar. The price drops were followed by a move upward for both metals at the end of the month. The price of rhodium rose continuously from the beginning to the end of the month owing to purchasing by investors. Platinum, palladium, and rhodium reached their highest prices of the year to date in October. In addition, platinum and palladium reached their highest prices since September 2008, and rhodium reached its highest price since October 2008.

Duluth Metals Ltd. (Toronto, Ontario, Canada) increased the resource estimates for its Nokomis deposit in the Duluth Complex of Minnesota. On the basis of new data obtained from drilling during 2008 and 2009, the deposit contains an indicated resource of 312,000 kilograms (kg) of platinum and palladium, an increase of about 10% from previous estimates, plus an additional inferred resource of 162,000 kg of platinum and palladium. The platinum-group metals (PGMs) would be a byproduct of nickel, copper, and cobalt mining in the deposit. Approximately 60% of the Nokomis deposit has been explored thus far, and Duluth Metals planned additional exploration (Duluth Metals Ltd., 2009).

Platina Resources Ltd. (Varsity Lakes, Queensland, Australia) completed a positive scoping study as well as metallurgical testing of its gold and PGMs project in the Skaergaard intrusion, Greenland. The study focused on the Gold Zone within the deposit, and Platina intended to move forward with a drilling program to be completed in 2010, followed by a detailed prefeasibility study expected to be completed by December 2011 (Platina Resources Ltd., 2009).

Japan Oil, Gas and Metals National Corp. (Kanagawa, Japan) (JOGMEC), a Government agency, entered into an agreement with Platinum Group Metals Ltd. (Vancouver, British Columbia, Canada) to explore for PGMs in the Bushveld Complex of South Africa. JOGMEC also signed a contract with Discovery Metals Ltd. (Brisbane, Queensland, Australia) to explore for PGMs and nickel in Botswana. Japan's prime

minister pledged to cut the nation's greenhouse gas emissions by 25 % by 2020 from 1990 levels. PGMs are used in catalytic converters to decrease harmful emissions, and JOGMEC signed these exploration agreements to obtain a percentage of the possible output from the exploration areas (Hur and Song, 2009).

Lonmin Plc (London, United Kingdom) produced 5,190 kg of platinum in the quarter ending September 30, a 27% drop compared with that of the same quarter of 2008. Power problems at its Number One furnace contributed to the drop in production. Full-year production by Lonmin was 20,400 kg of platinum, 9,230 kg of palladium, 2,970 kg of rhodium, 4,560 kg of ruthenium, and 744 kg of iridium. Production of platinum, palladium, ruthenium, and iridium decreased by 6%, 10%, 8%, and 24%, respectively, compared with that of the previous full year. Production of rhodium increased by 5% year-on-year (Lonmin plc, 2009).

One-ounce American Eagle Platinum coins, produced by the U.S. Mint, were scheduled to go on sale before the end of 2009 (Johnson Matthey plc, 2009).

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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 Jun. 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:					
September:					
Low/date	1,213.00/2	285.00/2	1,650.00 ²	420.00 ²	95.00 ²
High/date	1,343.00/18	306.00/18	1,650.00 ²	420.00 ²	95.00 ²
Average	1,294.71	295.86	1,650.00	420.00	95.00
October:					
Low/date	1,270.00/2	294.00/2	1,650.00 ²	420.00 ²	95.00 ²
High/date	1,375.00/20 and 23	342.00/20	1,950.00 ²	420.00 ²	95.00 ²
Average	1,335.86	324.45	1,788.64	420.00	95.00
Year-to-date:					
Low/date	920.00 Jan. 15	182.00 Jan. ²	1,050.00 Jan. ²	420.00 Jan.–Oct. ²	75.00 Feb. ²
High/date	1,375.00 Oct. 20 and 23	342.00 Oct. 20	1,950.00 Oct. ²	430.00 Jan. ²	100.00 Jan. 2
Average	1,164.02	245.67	1,434.21	420.48	90.34

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	212	\$7,210	45,700	\$2,330,000	4,040	\$177,000	7,180	\$282,000	92,200	\$593,000	734	\$22,400
2009:												
July	(2)	3	2,590	98,100	218	6,680	412	10,500	8,510	44,400	80	3,100
August	1	30	4,740	181,000	679	26,100	404	11,300	24,900	25,100	125	5,190
September:												
Argentina	--	--	--	--	--	--	--	--	163	6,490	--	--
Belgium	--	--	377	15,500	--	--	--	--	60	3,950	--	--
Bolivia	--	--	--	--	--	--	--	--	2,580 ³	122	--	--
Brazil	--	--	--	--	--	--	--	--	31	617	--	--
Canada	1	27	--	--	--	--	41 ³	1,170	17 ³	1,510	1	61
China	--	--	--	--	--	--	1	69	759 ³	1,060	1	19
Colombia	--	--	--	--	151	4,670	--	--	22 ³	268	--	--
Germany	--	--	110	4,570	70	2,330	225 ³	3,110	445 ³	12,800	--	--
India	--	--	23	884	--	--	--	--	--	--	--	--
Israel	--	--	--	--	13	331	--	--	--	--	--	--
Italy	--	--	244	10,000	--	--	14	547	59	3,030	--	--
Japan	--	--	--	--	(2)	7	(2)	13	4,970 ³	2,410	--	--
Korea, Republic of	--	--	--	--	--	--	--	--	55	1,220	--	--
Mexico	--	--	--	--	--	--	1	12	13,800 ³	3,860	--	--
Norway	--	--	593	25,300	--	--	--	--	--	--	--	--
Philippines	--	--	--	--	--	--	--	--	5	234	--	--
Russia	--	--	50	1,880	--	--	--	--	--	--	--	--
South Africa	--	--	1,250	50,100	--	--	20	708	--	--	--	--
Switzerland	--	--	(2)	20	31	1,270	16	630	--	--	--	--
United Kingdom	--	--	565	23,300	--	--	6	207	102	1,400	--	--
Venezuela	--	--	--	--	--	--	--	--	1,520 ³	50	--	--
Other	--	--	--	--	--	--	1	11	28 ³	145	--	--
Total	1	27	3,220	132,000	264	8,610	325	6,470	24,600	39,200	2	80
Year to date	11	279	25,600	940,000	2,830	93,100	4,430	119,000	93,700	247,000	498	20,000

-- 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	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:												
July	2,910	24,100	230	2,010	72	918	--	--	2,490	6,680	708	32,700
August	3,060	25,800	1,550	13,900	202	2,990	--	--	1,290	3,460	974	46,700
September:												
Belgium	15	94	--	--	--	--	--	--	--	--	33	1,530
Canada	--	--	4	38	--	--	--	--	--	--	--	--
Germany	139	1,180	12 ³	71	9	108	--	--	318	833	48	2,490
Italy	15	220	(4)	4	--	--	--	--	--	--	9	657
Japan	80	491	12 ³	23	--	--	--	--	61	206	--	--
Netherlands	--	--	1 ³	22	--	--	--	--	--	--	--	--
Norway	626	5,650	--	--	--	--	--	--	--	--	7	325
Russia	3,660	34,700	--	--	--	--	--	--	--	--	28	1,320
South Africa	1,230	10,800	30	274	63	791	--	--	940	2,400	688	34,800
Switzerland	62	577	125 ³	1,370	--	--	--	--	--	--	--	--
United Kingdom	2,180	21,100	3	66	35	470	--	--	306	919	40	2,110
Total	8,000	74,700	187	1,860	106	1,370	--	--	1,630	4,360	853	43,300
Year to date	34,200	263,000	6,250	48,500	1,030	14,200	68	551	16,200	40,000	7,670	312,000

-- 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 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	15,600	\$570,000	54,700	\$1,190,000	26,400	\$197,000	6,450	\$80,600	1,980	\$302,000
2009:										
July	777	24,100	2,460	32,100	1,780	13,900	337	3,350	223	9,540
August	826	28,300	1,670	23,400	2,260	15,700	450	2,870	57	3,850
September:										
Australia	2	46	--	--	45	477	1	5	--	--
Austria	6	101	--	--	(4)	3	--	--	--	--
Belgium	4 ⁵	35	22	1,040	--	--	--	--	--	--
Brazil	10	365	--	--	--	--	--	--	--	--
Canada	32	1,200	2	64	446	3,840	1	20	(4)	6
China	5	204	--	--	63	991	41	472	14	1,200
Colombia	(4)	8	--	--	4	65	--	--	--	--
Czech Republic	--	--	--	--	38	130	--	--	--	--
Denmark	149	6,310	--	--	7	116	--	--	--	--
France	1	20	1 ⁵	4	12	128	1	9	--	--
Germany	166	5,540	442	8,330	738	6,440	29	263	--	--
Hong Kong	8	394	--	--	79	924	--	--	--	--
India	30	1,270	--	--	6	51	--	--	1	247
Ireland	8	292	--	--	10	66	1	6	--	--
Israel	3	46	--	--	354	1,020	--	--	--	--
Italy	424	17,600	--	--	170	1,780	--	--	3	165
Japan	1,120	46,800	35	1,080	82 ⁵	604	--	--	29	1,560
Korea, Republic of	3	82	--	--	32	212	--	--	--	--
Mexico	2	81	--	--	2	43	(4)	9	(4)	8
Netherlands	(4)	88	--	--	36 ⁵	89	--	--	--	--
New Zealand	(4)	28	--	--	5	77	--	--	--	--
Norway	1	13	--	--	5	107	--	--	--	--
Philippines	(4)	38	--	--	(4)	5	--	--	--	--
Romania	(4)	7	--	--	1	14	--	--	--	--
Singapore	--	--	--	--	7	31	9	220	--	--
South Africa	--	--	525 ⁵	1,880	3	17	--	--	--	--
Sweden	2	79	--	--	(4)	12	--	--	--	--
Switzerland	21 ⁵	560	--	--	18	224	--	--	6	330
Taiwan	6	258	--	--	78	493	(4)	11	--	--
Thailand	2	115	--	--	6	79	--	--	--	--
Turkey	(4)	24	--	--	1	6	--	--	--	--
United Arab Emirates	(4)	7	--	--	5	61	--	--	--	--
United Kingdom	75	1,820	920	22,900	208	1,470	1	22	199 ⁵	3,290
Other	1	34	--	--	31 ⁵	215	--	--	--	--
Total	2,080	83,500	1,950	35,300	2,490	19,800	84	1,040	253	6,800
Year to date	13,400	442,000	23,100	358,000	21,900	158,000	1,690	20,900	965	38,100

-- 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.

⁵All or part of these data have been referred to the U.S. Census Bureau for verification.

Source: U.S. Census Bureau.