

Mineral Industry Surveys

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PLATINUM-GROUP METALS IN OCTOBER 2011

Engelhard's average October prices for platinum, palladium, and rhodium decreased by 12%, 13%, and 11%, respectively, compared with average September prices. October marked the eighth consecutive decrease in monthly average price for rhodium. The average monthly price for ruthenium decreased by 12% and that for iridium increased slightly during the same period. Platinum and palladium prices decreased early in the month, with palladium price decreasing to its lowest point since October 2010. Platinum and palladium prices then trended upward throughout the rest of the month as a result of positive news regarding the European sovereign debt crisis. Throughout the month, platinum prices followed the same pattern, but were below those for gold. Ruthenium prices decreased throughout the month as a result of a lack of industrial demand and excess inventories (Blamey, 2011).

Stillwater Mining Co. (Billings, MT) produced 4,040 kilograms (kg) of platinum and palladium during the third quarter of 2011, which was a 6% increase relative to production in the third quarter of 2010. Production included 249 kg of platinum and 809 kg of palladium from the East Boulder Mine, and 684 kg of platinum and 2,300 kg of palladium from the Stillwater Mine. The increased production was mainly the result of higher ore grades. Stillwater expected to produce a total of 16,000 kg of platinum and palladium during 2011. Progress continued on the Blitz and Graham Creek development projects, both of which expand the existing mines. The Graham Creek project consisted of a 2,500-meter (m) expansion to the west of the East Boulder Mine. The expansion could be completed in the first half of 2013, followed by a multiyear drilling program to delineate the deposit. The Blitz project was planned to ultimately extend underground access to about 7,000 m east of the Stillwater Mine shaft, and was expected to take several years to complete. Stillwater continued to make progress on its Marathon platinum-group metals (PGM)-copper project in Ontario, Canada. The environmental assessment was expected to be completed and submitted to the review panel by March 2012, and detailed engineering began in November 2011 (Stillwater Mining Co., 2011).

Anglo American Platinum Ltd. (Amplats, Johannesburg, South Africa) reported equivalent refined platinum production

of 16,000 kg during the third quarter of 2011, which was a slight decrease compared with third quarter 2010 production. The decreased production was partly the result of safety-related stoppages. The ramp-up to full production at Amplats' Unki Mine in Zimbabwe was expected in 2012, which was a year ahead of schedule. No anticipated production quantities for Unki were given (Anglo American Platinum Ltd., 2011).

Impala Platinum Holdings Ltd. (Johannesburg) planned to comply with Zimbabwe Government indigenization laws by establishing a community share ownership trust in its Zimbabwean PGM mining company, Zimplats. Impala planned to sell 10% of its issued share capital to the trust at a fair, independently determined value. The trust was intended as a long-term investment opportunity for locals and a chance to invest in Zimplats' future expansions. Impala planned to expand Zimplats' mining operations in 2014, with annual platinum production expected to reach 11,200 kg, compared with about 5,490 kg of PGMs produced in 2010 (Johnson Matthey plc, 2011a).

Sales of palladium from Russian stockpiles may be halted after 2013. About 4.5 metric tons (t) were expected to be sold in each of 2012 and 2013. Palladium sales from Russian stockpiles were 31 t in 2010, which was the fourth leading source of supply of the metal, globally. The amount of palladium in Russian stockpiles was a state secret, although analysts have predicted that the stockpile would be gone within the next year or two (Johnson Matthey plc, 2011c).

OJSC MMC Norilsk Nickel planned to increase palladium production by 42% by 2025. Increased production would come from improvements in production efficiency at existing mines as well as development of new operations in Russia (Johnson Matthey plc, 2011b).

References Cited

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- Blamey, Andy, 2011, Rhodium, ruthenium drop on lower offers, excess inventories: *Platts Metals Week*, v. 82, no. 41, October 10, p. 1, 14.

Johnson Matthey plc, 2011a, Impala Platinum to turn over 7% of Zimbabwe unit: London, United Kingdom, Johnson Matthey plc news release, October 14, 1 p.

Johnson Matthey plc, 2011b, Norilsk Nickel to boost pgm production by 42%: London, United Kingdom, Johnson Matthey plc news release, October 28, 1 p.

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TABLE 1
PLATINUM-GROUP METALS PRICES¹

(Dollars per troy ounce)

	Platinum	Palladium	Rhodium	Iridium	Ruthenium
2010:					
Low/date	1,482.00 Feb. 8	397.00 Feb. 5	2,120.00 Aug. ²	420.00 Jan. ²	170.00 Jan. ²
High/date	1,790.00 Nov. 9	800.00 Dec. 30 and 31	2,975.00 Apr. 15 and 16	780.00 Dec. ²	245.00 Apr.–Jun. ²
Average	1,615.56	530.61	2,459.07	642.15	198.45
2011:					
September:					
Low/date	1,517.00/30	618.00/30	1,675.00/29 and 30	1,060.00/1 and 2	160.00/29 and 30
High/date	1,878.00/2	786.00/2	1,875.00 ²	1,085.00 ²	175.00/1
Average	1,745.43	710.14	1,817.62	1,073.33	167.62
October:					
Low/date	1,455.00/5	553.00/5	1,600.00 ²	1,085.00 ²	130.00/28 and 31
High/date	1,638.00/28	671.00/27	1,675.00/3	1,085.00 ²	160.00/3
Average	1,540.86	620.45	1,626.19	1,085.00	146.90
January–October:					
Low/date	1,455.00 Oct. 5	553.00 Oct. 5	1,600.00 Oct. ²	780.00 Jan. 3 and 4	130.00 Oct. 28 and 31
High/date	1,892.00 Aug. 22 and 23	851.00 Feb. 18	2,500.00 Jan. 31 and Feb. ²	1,085.00 Sep.–Oct. ²	180.00 Jan.–Aug. ²
Average	1,762.37	757.50	2,115.34	1,026.04	175.02

¹Quotes from Engelhard.

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)
2010	644	\$16,700	31,700	\$1,590,000	3,790	\$151,000	4,650	\$183,000	111,000	\$565,000	46	\$2,760
2011:												
July	17	962	2,200	118,000	369	18,800	344	15,100	7,460	67,600	--	--
August	64	3,440	3,080	170,000	432	19,900	262	11,200	4,980	83,100	103	6,060
September:												
Australia	--	--	--	--	(2)	4	--	--	22	1,080	37	1,890
Austria	--	--	--	--	--	--	4	156	--	--	--	--
Belgium	--	--	314	17,600	--	--	1	48	--	--	--	--
Brazil	--	--	--	--	--	--	--	--	63	2,720	--	--
Canada	2	71	--	--	--	--	41	2,570	1,950	3,990	--	--
Chile	--	--	--	--	--	--	--	--	2,580	4,960	--	--
Colombia	--	--	--	--	168	8,170	--	--	42	1,560	--	--
France	--	--	--	--	--	--	--	--	39	2,140	--	--
Germany	--	--	166	9,180	280	13,300	241	8,880	429	25,100	--	--
India	--	--	--	--	--	--	--	--	29	1,680	--	--
Italy	--	--	247	14,200	10	574	5	290	--	--	--	--
Japan	--	--	--	--	--	--	19	525	2,260	6,330	--	--
Korea, Republic of	--	--	--	--	--	--	--	--	26	1,260	--	--
Malaysia	--	--	--	--	--	--	--	--	47	1,760	--	--
Mexico	--	--	2	63	5	289	--	--	2	391	--	--
Morocco	--	--	--	--	--	--	--	--	7	200	--	--
Norway	--	--	79	4,560	--	--	--	--	--	--	--	--
Philippines	--	--	--	--	--	--	--	--	3	116	--	--
Russia	--	--	--	--	12	726	--	--	--	--	--	--
Singapore	--	--	--	--	79	4,720	16	924	31	2,110	--	--
South Africa	127	6,880	1,330	76,100	--	--	--	--	--	--	--	--
Switzerland	--	--	83	4,620	--	--	4	232	--	--	--	--
Taiwan	--	--	--	--	--	--	--	--	8	405	--	--
Thailand	--	--	--	--	--	--	--	--	20	1,160	--	--
United Kingdom	--	--	616	35,500	29	1,720	7	415	36	1,240	--	--
Other	--	--	--	--	(2)	6	3	73	12	192	--	--
Total	129	6,950	2,830	162,000	583	29,500	341	14,100	7,600	58,400	37	1,890
January–September	891	48,700	26,800	1,450,000	6,010	165,000	3,370	149,000	59,500	551,000	641	37,300

-- 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)
2010	64,400	\$990,000	6,310	\$122,000	3,530	\$65,900	76	\$612	14,100	\$82,500	12,800	\$914,000
2011:												
July	5,190	127,000	682	18,100	314	3,200	20	100	946	5,240	1,070	67,900
August	16,400	190,000	716	18,200	138	2,330	8	61	983	5,340	1,510	92,700
September:												
Austria	--	--	--	--	--	--	--	--	19	109	--	--
Belgium	--	--	40	931	--	--	--	--	--	--	65	3,960
Canada	--	--	306	8,500	--	--	--	--	--	--	--	--
Germany	39	675	219	699	44	1,610	--	--	316	2,030	56	3,460
Italy	178	4,190	2	80	1	5	--	--	--	--	11	632
Japan	75	657	42	149	--	--	--	--	(3)	3	--	--
Norway	489	11,700	--	--	--	--	--	--	--	--	25	1,430
Russia	6,380	153,000	414	10,100	--	--	--	--	--	--	78	4,460
South Africa	2,190	53,800	31	745	97	3,280	--	--	541	2,860	511	29,300
Switzerland	--	--	8	225	--	--	--	--	--	--	--	--
United Kingdom	60	1,450	254	6,350	7	225	--	--	190	1,050	205	11,800
Other	--	--	2	48	1	16	--	--	(3)	9	--	--
Total	9,410	225,000	1,320	27,900	149	5,130	--	--	1,070	6,060	952	55,100
January–September	67,900	1,440,000	8,950	205,000	1,720	37,400	48	261	10,900	59,300	10,200	693,000

-- 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 metal content, unless otherwise specified)

Period and country	Platinum				Palladium ²		Iridium, osmium, and ruthenium ^{2,3}		Rhodium ²	
	Platinum ²		waste and scrap		Value		Value		Value	
	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)
2010	16,900	\$775,000	38,200	\$1,100,000	38,100	\$419,000	3,720	\$36,800	2,320	\$136,000
2011:										
July	790	38,500	3,670	121,000	1,930	22,800	11	214	332	11,200
August	1,760	89,300	7,850	174,000	3,090	45,500	88	838	45	3,510
September:										
Australia	175	10,700	--	--	63	1,110	--	--	--	--
Austria	1	16	(4)	11	12	83	--	--	--	--
Belgium	1	28	326	1,170	1	7	--	--	(4)	3
Brazil	11	633	--	--	43	1,030	--	--	--	--
Canada	209	12,100	--	--	280	4,750	--	--	(4)	5
China	1	24	58	2,990	67	975	--	--	9	681
France	2	27	--	--	17	186	--	--	--	--
Germany	146	8,320	805	14,300	156	2,210	--	--	--	--
Hong Kong	7	462	--	--	181	2,050	--	--	57	3,160
India	28	1,640	--	--	7	61	--	--	--	--
Ireland	17	704	--	--	1	14	1	15	--	--
Israel	3	80	--	--	73	465	--	--	--	--
Italy	354	21,200	--	--	116	1,540	--	--	4	247
Japan	261	11,900	175	6,260	29	458	7	261	18	1,500
Korea, Republic of	4	156	--	--	135	175	92	618	--	--
Laos	2	115	--	--	--	--	--	--	--	--
Mexico	16	741	--	--	13	57	--	--	(4)	12
Netherlands	19	827	--	--	3	40	--	--	--	--
New Zealand	(4)	20	--	--	9	128	--	--	--	--
Singapore	--	--	--	--	9	92	27	245	--	--
South Africa	--	--	108	3,300	1	30	--	--	--	--
Switzerland	43	2,370	783	27,300	41	235	--	--	--	--
Taiwan	9	506	--	--	102	778	--	--	--	--
Thailand	(4)	142	--	--	34	363	--	--	--	--
United Arab Emirates	54	2,140	--	--	2	30	--	--	(4)	7
United Kingdom	39	1,870	1,610	64,800	412	2,300	2	69	--	--
Other	9	351	--	--	63	447	(4)	5	--	--
Total	1,410	77,000	3,870	120,000	1,870	19,600	130	1,210	89	5,610
January–September	8,530	425,000	99,500	1,170,000	26,500	353,000	832	11,100	1,260	65,500

-- 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.