

Mineral Industry Surveys

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PLATINUM-GROUP METALS IN SEPTEMBER 2011

Engelhard's average September prices of platinum, palladium, and rhodium decreased by 4%, 7%, and 3%, respectively, compared with average August prices. September marked the seventh consecutive decrease in monthly average price for rhodium. The average monthly price of ruthenium decreased by 5% and that of iridium increased slightly during the same period. The iridium price increase was the result of strong industrial demand. Platinum, palladium, and rhodium prices trended downward throughout the month and dropped precipitously in late September owing to concerns about the state of the world economy, which led to a selloff of investments. The daily price of platinum started the month at \$1,853 per troy ounce and ended the month at \$1,517 per troy ounce, a decrease of 18%. Platinum and gold daily prices were near parity throughout the month, with gold prices consistently higher than those for platinum by month's end.

Wallbridge Mining Co. Ltd. (Lively, Ontario, Canada) commissioned a feasibility study and an updated resource estimate for its Broken Hammer copper-platinum-palladium property near Sudbury, Ontario. A 30,500-metric-ton bulk sample excavated in early 2011 was processed by Xstrata plc's (Zug, Switzerland) Strathcona mill, and results were expected later in the fall. A feasibility study and resource estimate were expected by the end of 2012. Wallbridge was also conducting exploration in several other areas around Sudbury, some with partner Impala Platinum Holdings Ltd. (Johannesburg, South Africa) (Wallbridge Mining Co. Ltd., 2011).

Impala met with Zimbabwe Government officials and has until November 15 to submit plans to comply with the Government requirement to turn over 51% ownership of its platinum-group metals (PGMs) mine in Zimbabwe to black Zimbabweans as part of an indigenization plan. A plan submitted previously by Impala was rejected by the Zimbabwe Government (Banya, 2011).

Sylvania Platinum Ltd. (Subaico, Western Australia, Australia) submitted a mining rights application for its Volspruit PGMs project in the northern limb of the Bushveld Complex, South Africa. The project was planned as two open pit mines and a concentrator. The mines were expected to have a combined production of 300,000 metric tons per month of ore. Sylvania also proposed to build a smelter and refinery at Volspruit in a joint venture with Jubilee Platinum plc (Johannesburg, South Africa). A decision on the project was expected in 2012 (Johnson Matthey plc, 2011a).

Toyota Motor Corp. (Toyota, Aichi, Japan) planned to introduce a Highlander fuel-cell hybrid vehicle by 2015. The fuel cells contained platinum as the catalyst and used hydrogen as the fuel. The vehicles would cost around \$50,000, significantly lower than just a few years ago, when the price for fuel-cell-powered vehicles would have been about \$1 million. Costs were lowered in manufacturing as well as in materials, including by decreasing the amount of platinum used in each fuel cell. More than 100 of the vehicles were being tested in the United States prior to the launch (Johnson Matthey plc, 2011b).

References Cited

- Banya, Nelson, 2011, Zimbabwe, Zimplats to submit revised mining ownership plan by Nov. 15: Reuters, September 13, 1 p. (Accessed October 24, 2011 at <http://www.mineweb.co.za/mineweb/view/mineweb/en/page35?oid=135361&sn=Detail&pid=35>.)
- Johnson Matthey plc, 2011a, Sylvania Platinum submits Volspruit platinum license application: London, United Kingdom, Johnson Matthey plc news release, September 30, 1 p.
- Johnson Matthey plc, 2011b, Toyota's fuel cell hybrid vehicle 'ready by 2015': London, United Kingdom, Johnson Matthey plc news release, September 1, 1 p.
- Wallbridge Mining Co. Ltd., 2011, Wallbridge advances pipeline of copper, nickel, platinum, and palladium projects in Sudbury: Lively, Ontario, Canada, Wallbridge Mining Co. Ltd. news release, September 21, 1 p.

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:					
August:					
Low/date	1,715.00/5	726.00/8	1,850.00 ²	1,060.00 ²	175.00 ²
High/date	1,892.00/22 and 23	847.00/1	1,975.00 ²	1,060.00 ²	180.00 ²
Average	1,810.52	766.57	1,881.52	1,060.00	175.65
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
January–September:					
Low/date	1,517.00 Sep. 30	618.00 Sep. 30	1,675.00 Sep. 29 and 30	780.00 Jan. 3 and 4	160.00 Sep. 29 and 30
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. ²	180.00 Jan.–Aug. ²
Average	1,786.98	772.73	2,169.69	1,019.49	178.14

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:												
June	179	9,830	3,450	197,000	407	18,300	348	15,700	3,370	70,200	--	--
July	17	962	2,200	118,000	369	18,800	344	15,100	7,460	67,600	--	--
August:												
Australia	--	--	--	--	--	--	--	--	--	--	103	6,060
Belgium	--	--	47	2,670	--	--	--	--	--	--	--	--
Bolivia	--	--	--	--	--	--	--	--	2,930	152	--	--
Canada	(2)	5	--	--	3	28	21	1,280	80	3,190	--	--
Chile	--	--	--	--	--	--	--	--	4	199	--	--
China	--	--	--	--	--	--	--	--	355	8,810	--	--
Colombia	4	194	--	--	80	3,730	--	--	24	787	--	--
France	--	--	--	--	--	--	--	--	26	1,270	--	--
Germany	--	--	151	8,700	289	13,600	223	9,230	324	18,700	--	--
Indonesia	--	--	--	--	--	--	--	--	6	359	--	--
Israel	--	--	--	--	--	--	--	--	10	540	--	--
Italy	--	--	122	7,120	--	--	--	--	--	--	--	--
Japan	--	--	--	--	34	1,010	2	33	240	9,890	--	--
Jordan	--	--	--	--	--	--	--	--	5	157	--	--
Korea, Republic of	--	--	--	--	--	--	--	--	133	6,340	--	--
Malaysia	--	--	--	--	--	--	--	--	29	757	--	--
Mexico	--	--	--	--	5	254	--	--	14	647	--	--
Morocco	--	--	--	--	--	--	--	--	6	180	--	--
Netherlands	--	--	--	--	(2)	6	4	85	--	--	--	--
Norway	--	--	167	9,450	--	--	--	--	--	--	--	--
Philippines	--	--	--	--	--	--	--	--	4	135	--	--
Russia	--	--	178	4,860	--	--	--	--	--	--	--	--
Singapore	--	--	--	--	20	1,160	--	--	432	17,300	--	--
South Africa	60	3,240	2,000	112,000	--	--	--	--	--	--	--	--
Taiwan	--	--	--	--	--	--	--	--	180	5,190	--	--
United Kingdom	--	--	411	24,300	1	63	10	484	178	8,400	--	--
Other	--	--	--	--	--	--	1	101	2	59	--	--
Total	64	3,440	3,080	170,000	432	19,900	262	11,200	4,980	83,100	103	6,060
January–August	761	41,800	24,000	1,290,000	5,430	135,000	3,030	135,000	51,900	492,000	604	35,400

-- 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:												
June	6,960	173,000	942	24,200	113	2,560	--	--	1,510	8,150	936	65,400
July	5,190	127,000	682	18,100	314	3,200	20	100	946	5,240	1,070	67,900
August:												
Austria	--	--	62	1,750	--	--	--	--	--	--	--	--
Belgium	18	455	--	--	--	--	--	--	--	--	35	2,310
Canada	108	3,510	155	4,820	--	--	--	--	--	--	--	--
Germany	141	2,560	46	417	6	88	--	--	220	1,350	95	5,630
Italy	160	4,320	3	87	--	--	--	--	--	--	7	460
Japan	357	5,580	6	153	3	100	--	--	12	62	3	145
Norway	269	6,660	--	--	--	--	--	--	--	--	7	385
Russia	12,700 ³	104,000	405	9,820	--	--	--	--	50	257	78	4,670
South Africa	2,310	56,500	16	385	126	2,130	--	--	664	3,460	951	59,200
Switzerland	(4)	2	8	287	--	--	--	--	--	--	--	--
United Kingdom	250	6,590	14	426	3	17	--	--	37	208	334	19,900
Other	--	--	1	56	--	--	8	61	--	--	--	--
Total	16,400	190,000	716	18,200	138	2,330	8	61	983	5,340	1,510	92,700
January–August	58,500	1,210,000	7,630	177,000	1,570	32,300	48	261	9,860	53,200	9,230	638,000

-- 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)
2010	16,900	\$775,000	38,200	\$1,100,000	38,100	\$419,000	3,720	\$36,800	2,320	\$136,000
2011:										
June	615	30,400	10,300	128,000	2,170	24,200	36	1,080	147	11,100
July	790	38,500	3,670	121,000	1,930	22,800	11	214	332	11,200
August:										
Australia	1	126	--	--	62	627	1	4	--	--
Austria	2	87	--	--	17	156	--	--	--	--
Canada	16	638	5	148	238	4,640	--	--	(4)	7
China	6	200	27	1,540	752	18,400	--	--	40	3,000
Colombia	(4)	16	--	--	15	153	--	--	--	--
Denmark	--	--	--	--	30	270	--	--	--	--
France	2	31	1	30	50	399	--	--	--	--
Germany	541	22,900	2,730	20,100	357	4,990	1	11	--	--
Hong Kong	5	254	1	19	146	2,310	--	--	--	--
India	44	2,500	--	--	93	1,390	--	--	(4)	83
Ireland	30	954	--	--	(4)	6	1	6	--	--
Israel	1	37	--	--	251	1,450	--	--	--	--
Italy	(4)	9	10	267	141	2,270	--	--	--	--
Japan	35	1,250	167	5,960	121	2,960	9	113	4	390
Korea, Republic of	18	973	--	--	39	802	62	427	--	--
Laos	3	170	--	--	--	--	--	--	--	--
Mexico	39	1,760	--	--	16	103	2	59	(4)	20
New Zealand	(4)	18	--	--	52	212	--	--	--	--
Singapore	--	--	3	251	13	146	3	14	--	--
South Africa	--	--	1,020	2,930	1	26	--	--	--	--
Switzerland	922	53,100	2,270	79,300	6	83	--	--	--	--
Taiwan	2	90	--	--	50	1,010	1	3	--	--
Thailand	(4)	126	--	--	14	289	--	--	(4)	8
United Arab Emirates	37	1,470	--	--	1	5	--	--	--	--
United Kingdom	49	2,340	1,620	62,900	591	2,600	8	199	--	--
Other	9	275	2	81	28	236	--	--	--	--
Total	1,760	89,300	7,850	174,000	3,090	45,500	88	838	45	3,510
January–August	7,120	348,000	95,700	1,050,000	24,600	333,000	703	9,890	1,170	59,900

-- 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.