

Mineral Industry Surveys

For information, contact:

Patricia J. Loferski, PGM Commodity Specialist U.S. Geological Survey 989 National Center Reston, VA 20192

Telephone: (703) 648-7708, Fax: (703) 648-7757

E-mail: ploferski@usgs.gov

Pamela A. Wiser (Data) Telephone: (703) 648-7956 Fax: (703) 648-7975 E-mail: pwiser@usgs.gov

Internet: http://minerals.usgs.gov/minerals

PLATINUM-GROUP METALS IN MARCH 2011

Engelhard's average March prices of platinum and rhodium decreased by 3% and that of palladium decreased by 7% compared with the average February prices. The average monthly price of iridium increased by 11% from that of February, and the price of ruthenium remained unchanged during the same period. Platinum, palladium, and rhodium prices decreased sharply during the first half of the month before increasing toward the end of the month. The price decreases were in response to continuing political unrest in the Middle East and to a severe earthquake and tsunami in Japan on March 11. Rising oil prices and expected reduced automobile demand also had negative impact on the prices of platinum, palladium, and rhodium because those metals are mainly used in automobile catalytic converters. The iridium price decreased toward the end of the month as a result of reduced buying interest, following a nearly unbroken upward trend that began in January 2010.

Duluth Metals Ltd. (Toronto, Ontario, Canada) and Franconia Minerals Corp. (Spokane Valley, WA) completed their previously announced plan, by which Duluth acquired all of the shares of Franconia that it did not already own. Franconia's assets were rolled into Twin Metals Minnesota LLC (St. Paul, MN), which is a Duluth (60%) and Antofagasta plc (Santiago, Chile) (40%) joint venture. The transaction consolidated the land holdings of Twin Metals in the Duluth Complex, and included the Spruce Road, Nokomis, Maturi, and Birch Lake copper-nickel-platinum-group metals (PGM) deposits (Duluth Metals Ltd., 2011).

Anglo Platinum Ltd. (Johannesburg, South Africa) shipped the first platinum concentrate from its Unki Mine in Zimbabwe. The shipment marked the opening of the mine following development work that began in 2003. Anglo Platinum planned to increase production to 137 kilograms per month of platinum and to reach 4,670 kilograms per year (kg/yr) in the near future. No specific timeframe was given. Anglo Platinum planned to change the name of its company to Anglo American Platinum Ltd., with trading under the new name starting on April 20 (Johnson Matthey plc 2011a, b).

Wesizwe Platinum Ltd. (Johannesburg) planned to implement a financing transaction among Wesizwe, Jinchuan Group Ltd.

(Jinchang, Gansu Province, China), China Africa Development Fund (Beijing, China), and Micawber 809 (Pty) Ltd. (Johannesburg), the latter of which was formed to boost black participation in Wesizwe. The transaction provided funding to start construction of the Frischgewaagd-Ledig PGM project. The Jinchuan Group and the China Africa Development Fund would take a 45% stake in Wesizwe, and Micawber would take a 6% stake. Mine construction was expected to take 5 to 6 years. Early production was expected in 2017, and full-scale production of about 11,000 kg/yr of PGM was anticipated in 2020 (Wesizwe Platinum Ltd., 2011).

The Zimbabwe Government moved forward with plans to require foreign-owned companies worth more than \$1 to sell 51% stakes in the company to locals. Mining companies were required to draw up plans by May 9 on how they will transfer ownership, and the process must be completed by September 25. The Zimbabwe Government had been threatening for more than 5 years to take over foreign-owned mining companies. Shares in the major companies involved in mining platinum in Zimbabwe fell on the Johannesburg Stock Exchange in response to the news (Platts Metals Week, 2011).

Colossus Minerals Inc. (Toronto) purchased a ball mill and related equipment in preparation for planned PGM production at its Serra Pelada deposit in Para State, Brazil. Colossus finalized plans to extract an initial 2,500-metric-ton (t) bulk sample from the upper portion of the central mineralized zone to characterize the mineralization. The company anticipated that two additional 2,500-t bulk samples would be extracted in 2012 from the middle and lower portions of the central mineralized zone. The company planned to begin phase 1 production in 2012 (Colossus Minerals Inc., 2011).

References Cited

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$\label{eq:table1} \textbf{TABLE 1}$ PLATINUM-GROUP METALS PRICES 1

(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:					
February:					
Low/date	1,778.00/24	774.00/24	$2,425.00^2$	865.00/1 and 2	180.00^2
High/date	1,863.00/9	851.00/18	2,500.00 ²	1,075.00 ²	180.00 ²
Average	1,828.68	823.47	2,475.00	960.53	180.00
March:					
Low/date	1,702.00/17	706.00/15	$2,375.00^2$	$1,050.00^2$	180.00^2
High/date	1,860.00/2	824.00/2	2,425.00 ²	1,075.00 ²	180.00 ²
Average	1,773.26	766.48	2,396.74	1,064.13	180.00
Year-to-date:					
Low/date	1,702.00 Mar. 17	706.00 Mar. 15	2,375.00 Mar. ²	780.00 Jan. 3 and 4	180.00 JanMar. ²
High/date	1,863.00 Feb. 9	851.00 Feb. 18	2,500.00 Jan. 31 and Feb.	² 1,075.00 FebMar. ²	180.00 JanMar. ²
Average	1,797.52	795.81	2,436.45	946.87	180.00

¹Quotes from Engelhard.

Source: Platts Metals Week.

²Occurred multiple days in month(s) listed.

 $\label{eq:table 2} \textbf{Lable 2}$ U.S. IMPORTS FOR CONSUMPTION OF PLATINUM METAL, BY COUNTRY 1

(Kilograms metal content, unless otherwise specified)

	Pla	tinum			Ot	ther			Pla	tinum		
	grain a	grain and nuggets		Platinum sponge		unwrought platinum		Platinum, other		waste and scrap		um coins
		Value		Value		Value		Value		Value		Value
Period and country	Quantity	(thousands)	Quantity	(thousands)	Quantity	(thousands)	Quantity	(thousands)	Quantity	(thousands)	Quantity	(thousands)
2010:												
December	65	\$2,990	1,840	\$98,400	170	\$7,770	254	\$10,100	13,000	\$60,200	10	\$782
Year	644	16,700	31,700	1,590,000	3,790	151,000	4,650	183,000	111,000	565,000	46	2,760
2011:	=											
January	74	3,900	2,860	157,000	2,590	11,800	253	9,230	12,200	44,800		
February:	-											
Argentina					3	208						
Australia							(2)	11			62	3,680
Belgium			60	3,530								
Bolivia									977	99		
Brazil			16	777			(2)	6	30	982		
Brunei									85	4,910		
Canada	(2)	4					25	1,110	181	6,340		
Colombia					109	5,150			12	175		
France									59	1,580		
Germany	(2)	3	203	10,600	2,540 3	5,340	269	9,350	305	15,700		
Italy			222	13,300								
Japan			8	462	18	583	1	16	311	14,200		
Jordan									5	315		
Korea, Republic of					1	16			29	1,330		
Malaysia									947	1,430		
Mexico					23	1,350						
Norway			78	4,370								
Philippines									7	184		
Singapore									234	11,100		
South Africa	-		2,610	89,400								
Switzerland			(2)	35		==	(2)	7				
United Kingdom	13	594	268	15,900	1	18	8	323	88	4,420	15	394
Other	-			==	1	22	1	56	17	150		
Total	13	601	3,470	138,000	2,700	12,700	303	10,900	3,290	62,900	78	4,080
Year to date	87	4,500	6,320	296,000	5,290	24,500	557	20,100	15,500	108,000	78	4,080

⁻⁻ Zero.

Source: U.S. Census Bureau.

 $^{^{\}rm I}{\rm Data}$ are rounded to no more than three significant digits; may not add to totals shown.

²Less than ½ unit.

 $^{^3\}mbox{All}$ or part of these data have been referred to the U.S. Census Bureau for verification.

 $\label{eq:table 3} \textbf{U.S. IMPORTS FOR CONSUMPTION OF PLATINUM-GROUP METALS, BY COUNTRY}^{I}$

(Kilograms metal content, unless otherwise specified)

	Unwroug	Unwrought palladium		Palladium, other		Iridium ²		Osmium ²		Ruthenium ²		Rhodium ²	
		Value		Value		Value		Value		Value		Value	
Period and country	Quantity	(thousands)	Quantity	(thousands)	Quantity	(thousands)	Quantity	(thousands)	Quantity	(thousands)	Quantity	(thousands)	
2010:													
December	4,230	\$91,100	899	\$21,500	448	\$7,160			1,240	\$6,840	723	\$51,800	
Year	64,400	990,000	6,310	122,000	3,530	65,900	76	\$612	14,100	82,500	12,800	914,000	
2011:	_												
January	4,920	118,000	908	25,200	261	5,610			1,110	5,320	1,150	79,200	
February:	= !												
Belgium	460	11,900							156	880	98	7,570	
Canada			77	2,340									
Germany	814	21,400	621	380	35	229					111	8,000	
Hong Kong	20	526											
Italy	341	7,930	15	385	8	231					52	4,300	
Japan	367	5,540	(3)	9	5	124					10	812	
Norway	157	4,040									3	240	
Russia	819	21,900	391	10,300							98	7,610	
South Africa	1,300	33,300	162	4,370	372	9,000			1,140	6,440	761	56,500	
Switzerland	465	12,500	7	243									
United Kingdom	342	9,090	23	640	1	46			90	521	1	69	
Other	3	56	9	140									
Total	5,080	128,000	1,310	18,900	421	9,630			1,390	7,840	1,130	85,100	
Year to date	10,000	246,000	2,210	44,000	682	15,200			2,500	13,200	2,290	164,000	

⁻⁻ Zero

Source: U.S. Census Bureau.

 $^{^{\}rm I}{\rm Data}$ are rounded to no more than three significant digits; may not add to totals shown.

 $^{^2 \}mbox{Unwrought}$ and other forms.

³Less than ½ unit.

 $\label{eq:table 4} \textbf{U.s.} \ \textbf{EXPORTS} \ \textbf{OF} \ \textbf{PLATINUM-GROUP} \ \textbf{METALS}, \ \textbf{BY} \ \textbf{COUNTRY}^1$

(Kilograms of metal content, unless otherwise specified)

	Platinum ²		Platinum waste and scrap		Pal	ladium ²		n, osmium, thenium ^{2, 3}	Rhodium ²	
	-	Value	-	Value		Value		Value		Value
Period and country	Quantity	(thousands)	Quantity	(thousands)	Quantity	(thousands)	Quantity	(thousands)	Quantity	(thousands)
2010:		,						,		,
December	924	\$41,000	4,740	\$178,000	3,510	\$39,100	84	\$567	215	\$15,900
Year	16,900	775,000	38,200	1,100,000	38,100	419,000	3,720	36,800	2,320	136,000
2011:	= '									
January	892	42,200	3,880	137,000	2,840	25,100	41	618	63	4,430
February:	_			·		·				
Australia	(4)	98			114	847	1	8		
Austria	3	39			3	57				
Belgium	2	53	404	2,440	1	4			76	4,140
Brazil	10	528		-,						
Canada	18	544	4	124	289	5,600	5	93	(4)	12
China	- 2	100	41	2,170	181	2,160	147	934	11	1,290
Colombia	- ²	30		2,170	3	2,100				1,270
Czech Republic	- 1				102	134				
Denmark	- 				7	129				
Dominican Republic	4	31			(4)	5				
France	- 2	41			39	394	1	4		
Germany	- 573	32,800	21,500	7,630	335	4,780			50	3,960
Hong Kong	- 575 6	276	21,300	7,030	47	839				3,700
India	- 26	1,550			8	109	1	10		
Ireland	- 26 16	516			14	28	2	13		
Israel	_ 3	64			299	1,670				
Italy	-	35			111	1,660				
•	- (4)	1,270	162	5,580	59	1,380		10	17	1,970
Japan	_ 66		163		378	497	(4)			
Korea, Republic of	_ 21	1,130 9					(4)	6		
Liechtenstein	- ⁽⁴⁾ 33				(4)	5		72		
Mexico	_	1,150			14	98	2	72		
Netherlands	- (4)	37	2	7	2	56				
New Zealand	- (4)	7			24	152				
Norway	_ 2	60			2	52				
Philippines	_ 1	65			1	40				
Romania	(4)	4			2	22				
Saudi Arabia					5	104				
Singapore	_ (4)	7			68	249	14	329		
South Africa	_ (4)	18	11	900						
Spain	_				33	203				
Sweden	_ 2	80			1	4				
Switzerland	_ 32	1,770	237	6,000	610	15,000				
Taiwan	_ 6	220			143	2,150	24	133		
Thailand	(4)	9			3	59				
Turkey	_ 2	117			1	5				
United Kingdom	36	1,720	1,960	87,200	165	2,040	64	1,670		
Other	(4)	49			4	40				
Total	870	44,500	24,300	112,000	3,070	40,600	260	3,280	154	11,400
Year to date	1,760	86,600	28,200	249,000	5,900	65,700	301	3,900	218	15,800

⁻⁻ Zero.

Source: U.S. Census Bureau.

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.