

Mineral Industry Surveys

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PLATINUM-GROUP METALS IN JULY 2012

Engelhard's average July prices for platinum, rhodium, and iridium decreased slightly, and that for palladium decreased by 6% compared with average June prices. The average monthly ruthenium price remained unchanged during the same period. The platinum and palladium prices increased at the beginning of the month in response to interest rate cuts in China and the euro area, and then the prices decreased throughout the rest of the month in response to global economic concerns. The prices increased slightly at monthend in response to encouraging news from the euro area regarding sovereign debt. The rhodium price decreased throughout the month and reached its lowest point in 9 months in response to decreased purchasing in the Far East (Johnson Matthey plc, 2012). The iridium price decreased for the first time in 5 months in response to decreased buying. Platinum prices remained below those for gold for the 10th straight month and higher than those for rhodium for the 7th straight month.

Stillwater Mining Co. (Billings, MT), through its subsidiary, Stillwater Canada Inc., submitted an environmental impact statement for its Marathon platinum-group metals (PGM)-copper project in Ontario, Canada. Stillwater owns 75% of the Marathon project and the remaining 25% is owned by Mitsubishi Corp. (Tokyo, Japan). The Marathon project was expected to produce 6,200 kilograms (kg) of platinum and palladium annually. No timeframe estimate was given for startup of operations (Stillwater Mining Co., 2012).

Lonmin plc (London, United Kingdom) produced 5,780 kg of platinum in the second quarter of 2012 from operations in South Africa, which was 12% more than production in the same quarter of 2011. Total PGM production was 10,400 kg, an increase of 13% compared with that of 2011. The higher production was the result of an increase in tons milled, as well as improved ore grades and recoveries (Lonmin plc, 2012).

Anglo American Platinum Ltd. (Amplats) (Johannesburg, South Africa) produced 31,900 kg of refined platinum and 60,300 kg of refined PGMs in the first half of 2012 from operations in South Africa and Zimbabwe, which was a 13%

decrease for each quantity compared with production from the same period of 2011. The decrease was the result of operational difficulties during the restart of the converter plant after planned annual maintenance was completed at the plant. Amplats was performing an in-depth strategic review of its operations because of low metal prices, and decreased its production guidance for 2012 to between 75,000 and 78,000 kg of platinum from its original estimate of 81,000 kg of platinum (Anglo American Platinum Ltd., 2012, p. 1–2, 10–11).

OJSC MMC Norilsk Nickel (Moscow, Russia) produced 22,000 kg of palladium and 5,600 kg of platinum from its Polar and Kola divisions in Russia during the second quarter of 2012, a 15% increase in production for each compared with production during the same quarter of 2011. The increased production exceeded the company's planned production increase (OJSC MMC Norilsk Nickel, 2012).

References Cited

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TABLE 1
PLATINUM-GROUP METALS PRICES¹

(Dollars per troy ounce)

| | Platinum | Palladium | Rhodium | Iridium | Ruthenium |
|----------------------|-------------------------|-----------------------|--|---------------------------------|-------------------------------|
| 2011: | | | | | |
| Low/date | 1,356.00 Dec. 29 | 553.00 Oct. 5 | 1,400.00 Dec. ² | 780.00 Jan. 3 and 4 | 110.00 Dec. ² |
| 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.–Dec. ² | 180.00 Jan.–Aug. ² |
| Average | 1,724.51 | 738.51 | 2,024.35 | 1,035.87 | 165.85 |
| 2012: | | | | | |
| June: | | | | | |
| Low/date | 1,405.00/28 | 580.00/28 | 1,250.00 ² | 1,075.00 ² | 115.00 ² |
| High/date | 1,496.00/15 | 639.00/19 | 1,250.00 ² | 1,075.00 ² | 115.00 ² |
| Average | 1,450.05 | 617.95 | 1,250.00 | 1,075.00 | 115.00 |
| July: | | | | | |
| Low/date | 1,395.00/24 | 570.00/23 and 25 | 1,165.00/30 and 31 | 1,070.00 ² | 115.00 ² |
| High/date | 1,478.00/3 | 596.00/3 | 1,250.00 ² | 1,075.00 ² | 115.00 ² |
| Average | 1,425.86 | 582.95 | 1,225.48 | 1,071.19 | 115.00 |
| January–July: | | | | | |
| Low/date | 1,395.00 July 24 | 570.00 July 23 and 25 | 1,165.00 July 30 and 31 | 1,070.00 July ² | 110.00 Jan. ² |
| High/date | 1,731.00 Feb. 29 | 727.00 Feb. 29 | 1,540.00 Feb. 14 and 15 | 1,085.00 Jan.–Feb. ² | 130.00 Feb.–Mar. ² |
| Average | 1,539.40 | 649.64 | 1,370.67 | 1,076.46 | 117.90 |

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) |
| 2011 | 1,230 | \$65,700 | 35,800 | \$1,910,000 | 7,160 | \$211,000 | 4,660 | \$206,000 | 78,900 | \$832,000 | 1,200 | \$66,300 |
| 2012: | | | | | | | | | | | | |
| April | 18 | 878 | 2,410 | 127,000 | 420 | 19,600 | 316 | 10,700 | 4,990 | 55,500 | 38 | 2,150 |
| May | 2 | 56 | 4,450 | 210,000 | 236 | 10,200 | 302 | 11,200 | 14,500 | 81,800 | 47 | 2,310 |
| June: | | | | | | | | | | | | |
| Australia | -- | -- | -- | -- | -- | -- | 187 | 8,800 | 15 | 480 | 1 | 11 |
| Belgium | -- | -- | 215 | 10,000 | -- | -- | -- | -- | 37 | 2,580 | -- | -- |
| Brazil | -- | -- | -- | -- | 30 | 1,340 | -- | -- | 121 | 2,790 | -- | -- |
| Canada | 1 | 41 | -- | -- | -- | -- | 30 | 1,490 | 331 | 9,620 | 93 | 4,720 |
| China | -- | -- | -- | -- | -- | -- | -- | -- | 18 | 143 | -- | -- |
| Colombia | -- | -- | -- | -- | 144 | 5,570 | 7 | 276 | 34 | 613 | -- | -- |
| Czech Republic | -- | -- | -- | -- | 1 | 52 | 3 | 164 | -- | -- | -- | -- |
| Germany | -- | -- | 457 | 22,400 | 168 | 4,470 | 173 | 5,330 | 12,800 | 15,400 | -- | -- |
| Israel | -- | -- | -- | -- | -- | -- | -- | -- | 7 | 245 | -- | -- |
| Italy | -- | -- | 157 | 7,480 | -- | -- | 21 | 994 | 31 | 998 | -- | -- |
| Japan | -- | -- | (2) | 23 | 6 | 79 | 11 | 300 | 230 | 9,410 | -- | -- |
| Korea, Republic of | -- | -- | 94 | 4,910 | -- | -- | 1 | 28 | -- | -- | -- | -- |
| Malaysia | -- | -- | -- | -- | -- | -- | -- | -- | 52 | 1,470 | -- | -- |
| Mexico | -- | -- | -- | -- | -- | -- | -- | -- | 16,200 | 7,680 | -- | -- |
| New Zealand | -- | -- | -- | -- | -- | -- | -- | -- | 75 | 1,670 | -- | -- |
| Norway | -- | -- | 94 | 4,490 | -- | -- | -- | -- | -- | -- | -- | -- |
| Peru | -- | -- | -- | -- | -- | -- | -- | -- | 5 | 139 | -- | -- |
| Philippines | -- | -- | -- | -- | -- | -- | -- | -- | 18 | 485 | -- | -- |
| Qatar | -- | -- | -- | -- | -- | -- | -- | -- | 31 | 1,440 | -- | -- |
| Russia | 165 | 7,990 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Singapore | -- | -- | 37 | 1,790 | 30 | 1,760 | -- | -- | 54 | 2,390 | -- | -- |
| South Africa | 100 | 4,660 | 2,410 | 114,000 | -- | -- | -- | -- | -- | -- | -- | -- |
| Switzerland | -- | -- | (2) | 40 | -- | -- | 62 | 2,900 | -- | -- | -- | -- |
| United Kingdom | (2) | -- | 183 | 8,760 | 1 | 52 | 17 | 797 | 210 | 11,100 | 1 | 34 |
| Other | -- | -- | -- | -- | -- | -- | (2) | 7 | 7 | 132 | -- | -- |
| Total | 265 | 12,700 | 3,650 | 174,000 | 380 | 13,300 | 512 | 21,100 | 30,300 | 68,800 | 95 | 4,760 |
| January-June | 768 | 37,000 | 18,100 | 895,000 | 2,010 | 85,900 | 2,430 | 96,700 | 59,600 | 458,000 | 476 | 24,400 |

-- 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) |
| 2011 | 87,000 | \$1,890,000 | 11,900 | \$268,000 | 2,790 | \$59,000 | 48 | \$261 | 13,300 | \$69,700 | 13,100 | \$844,000 |
| 2012: | | | | | | | | | | | | |
| April | 4,870 | 108,000 | 740 | 15,900 | 50 | 1,770 | -- | -- | 520 | 2,040 | 1,110 | 51,100 |
| May | 3,260 | 66,800 | 1,160 | 23,500 | 130 | 4,430 | -- | -- | 1,030 | 3,760 | 836 | 36,700 |
| June: | | | | | | | | | | | | |
| Belgium | 7 | 136 | 36 | 720 | -- | -- | -- | -- | -- | -- | 44 | 1,860 |
| Canada | -- | -- | 304 | 7,580 | -- | -- | -- | -- | -- | -- | -- | -- |
| Germany | 39 | 770 | 40 | 780 | (3) | 16 | -- | -- | 65 | 254 | 113 | 4,770 |
| Italy | 122 | 2,480 | 22 | 458 | 3 | 23 | -- | -- | -- | -- | 16 | 740 |
| Japan | 188 | 2,930 | 3 | 72 | -- | -- | -- | -- | -- | -- | -- | -- |
| Korea, Republic of | 150 | 3,700 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Norway | 314 | 6,120 | 1 | 24 | -- | -- | -- | -- | -- | -- | 5 | 188 |
| Russia | 768 | 15,500 | 374 | 7,520 | -- | -- | -- | -- | -- | -- | 58 | 2,280 |
| South Africa | 1,530 | 30,500 | 22 | 419 | 12 | 403 | 20 | 100 | 181 | 610 | 922 | 38,900 |
| Switzerland | -- | -- | 3 | 107 | -- | -- | -- | -- | -- | -- | -- | -- |
| United Kingdom | 1,560 | 31,200 | 25 | 493 | 3 | 102 | -- | -- | 218 | 869 | 152 | 6,370 |
| Other | 1 | 25 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Total | 4,680 | 93,300 | 830 | 18,200 | 18 | 545 | 20 | 100 | 463 | 1,730 | 1,310 | 55,100 |
| January-June | 30,200 | 649,000 | 5,740 | 126,000 | 684 | 22,300 | 20 | 100 | 6,180 | 21,900 | 6,760 | 305,000 |

-- 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 ² | | Platinum waste and scrap | | Palladium ² | | Iridium, osmium, and ruthenium ^{2,3} | | Rhodium ² | |
|----------------------|-----------------------|-------------|-----------------------------|-------------|------------------------|-------------|--|-------------|----------------------|-------------|
| | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value |
| | | (thousands) | | (thousands) | | (thousands) | | (thousands) | | (thousands) |
| 2011 | 11,300 | \$552,000 | 118,000 | \$1,440,000 | 32,000 | \$416,000 | 1,150 | \$18,000 | 1,370 | \$71,700 |
| 2012: | | | | | | | | | | |
| April | 435 | 19,200 | 2,660 | 73,400 | 2,640 | 27,600 | 109 | 1,100 | 22 | 1,220 |
| May | 418 | 17,300 | 2,720 | 60,800 | 3,840 | 50,500 | 335 | 2,900 | 141 | 6,300 |
| June: | | | | | | | | | | |
| Australia | 6 | 285 | -- | -- | 28 | 594 | -- | -- | -- | -- |
| Austria | 1 | 48 | 1 | 18 | 4 | 24 | -- | -- | -- | -- |
| Belgium | 3 | 51 | 11 | 899 | 4 | 24 | -- | -- | -- | -- |
| Brazil | -- | -- | -- | -- | 18 | 379 | -- | -- | -- | -- |
| Canada | 16 | 619 | -- | -- | 346 | 4,490 | (4) | 5 | (4) | 4 |
| China | 6 | 189 | 21 | 1,040 | 101 | 2,020 | (4) | 3 | 11 | 605 |
| Colombia | (4) | 5 | -- | -- | 5 | 101 | -- | -- | -- | -- |
| Costa Rica | 1 | 37 | -- | -- | 2 | 15 | 3 | 52 | -- | -- |
| France | 5 | 91 | -- | -- | 25 | 229 | -- | -- | -- | -- |
| Georgia | -- | -- | 3 | 115 | -- | -- | -- | -- | -- | -- |
| Germany | 291 | 13,600 | 271 | 5,030 | 712 | 13,300 | -- | -- | -- | -- |
| Hong Kong | 5 | 204 | -- | -- | 99 | 1,340 | 5 | 115 | 2 | 237 |
| India | 22 | 996 | -- | -- | 158 | 848 | -- | -- | -- | -- |
| Ireland | 17 | 669 | -- | -- | 18 | 140 | 1 | 3 | -- | -- |
| Israel | 3 | 68 | -- | -- | 245 | 1,270 | -- | -- | -- | -- |
| Italy | 3 | 188 | 9 | 261 | 81 | 1,380 | -- | -- | 10 | 400 |
| Japan | 153 | 5,510 | 126 | 4,360 | 96 | 2,320 | 3 | 55 | -- | -- |
| Korea, Republic of | 95 | 4,390 | -- | -- | 472 | 9,250 | 7 | 190 | -- | -- |
| Laos | 3 | 158 | -- | -- | -- | -- | -- | -- | -- | -- |
| Malaysia | 1 | 47 | -- | -- | 1 | 10 | -- | -- | -- | -- |
| Mexico | 90 | 3,160 | -- | -- | 35 | 268 | -- | -- | (4) | 8 |
| Netherlands | (4) | 20 | -- | -- | 2 | 19 | -- | -- | -- | -- |
| New Zealand | (4) | 9 | -- | -- | 3 | 97 | -- | -- | -- | -- |
| Norway | 5 | 84 | -- | -- | 1 | 24 | -- | -- | -- | -- |
| Philippines | (4) | 3 | -- | -- | -- | -- | -- | -- | -- | -- |
| Poland | (4) | 10 | -- | -- | 2 | 4 | -- | -- | -- | -- |
| Singapore | 3 | 126 | -- | -- | 6 | 71 | 40 | 427 | -- | -- |
| South Africa | -- | -- | 48 | 1,430 | 2 | 23 | -- | -- | -- | -- |
| Sweden | 1 | 35 | -- | -- | (4) | 4 | -- | -- | -- | -- |
| Switzerland | (4) | 12 | 966 | 16,600 | 14 | 405 | (4) | 9 | -- | -- |
| Taiwan | 7 | 276 | -- | -- | 109 | 1,840 | 21 | 98 | -- | -- |
| Thailand | 4 | 252 | -- | -- | 18 | 725 | -- | -- | -- | -- |
| United Arab Emirates | 3 | 100 | -- | -- | 2 | 45 | -- | -- | -- | -- |
| United Kingdom | 48 | 1,600 | 1,680 | 49,300 | 144 | 2,560 | 22 | 526 | -- | -- |
| Other | 2 | 48 | -- | -- | 29 | 134 | -- | -- | -- | -- |
| Total | 795 | 32,800 | 3,140 | 79,000 | 2,780 | 43,900 | 102 | 1,480 | 22 | 1,250 |
| January-June | 4,320 | 193,000 | 23,300 | 425,000 | 18,900 | 255,000 | 827 | 8,850 | 392 | 19,100 |

-- 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.

Source: U.S. Census Bureau.