

## “PGM Market Report May 2016”

Johnson Matthey’s industry standard publication analysing supply and demand trends in the platinum group metal (pgm) markets, the “PGM Market Report” was published on 16th May 2016 by the company’s Precious Metals Management team. Its May release each year marks the start of Platinum Week in London, UK, celebrating the anniversary of the inauguration of the London Platinum Quotation (the forerunner of the present London Metal Exchange (LME) auction) in 1973 (1). The “PGM Market Report May 2016” provides detailed data, analysis and commentary on the pgm markets, and includes estimates of supply by country and demand by application for platinum, palladium and rhodium, and demand figures for ruthenium and iridium, detailed by application.

### Platinum

Primary supplies of platinum rose by 19% to 6.08 million oz in 2015, the highest level in four years. This was led by sales from South African producers, but partly offset by lower supplies from other countries and a steep fall in recoveries from scrapped cars and old jewellery. Demand trends were broadly positive with expectations of weakness in the Chinese jewellery market proving overstated and net selling of platinum by exchange traded fund (ETF) investors in Europe, the USA and South Africa outweighed by a surge of physical investment demand in Japan. Consumption of platinum

in autocatalysts was strong, while industrial offtake was stable, leaving total demand for platinum up 4%, and the 2015 market as a whole in a significant deficit of 659,000 oz. Fundamental deficits since 2012 in the supply-demand balance have as yet failed to have any noticeable impact on market liquidity, confirming the existence of substantial market stocks prior to 2012.

The forecast for platinum supply and demand in 2016 expects a slight decline in shipments of newly mined metal, although when combined with recycled metal, total supply could rise marginally. On the demand side, 2016 should be the peak year for platinum use on Euro 6 diesel cars, lifting global consumption of platinum in autocatalysts by nearly 2% to 3.50 million oz. Industrial consumption is expected to be unusually strong, rising by nearly 10% driven by capacity expansions in the chemicals and glass sectors. When combined with continued Japanese investment buying, a fourth year of significant market deficit of 861,000 oz is expected in 2016.

### Palladium

The palladium market moved closer to balance in 2015, due to a strong recovery in South African supplies helping global primary supplies of palladium rise by 6%. Gross demand plunged by 13% during the year with investment demand moving abruptly into negative territory, almost entirely due to a dramatic reversal in



ETF purchasing: investors, who had acquired over 940,000 oz of palladium the previous year, sold around 660,000 oz of their holdings in 2015. This greatly offset overall improvements in automotive and industrial demand, and a steep fall in the recovery of palladium from scrapped catalytic converters. The total market deficit shrank from nearly 2 million oz in 2014 to under 500,000 oz in 2015.

This trend is expected to reverse in 2016, led by a reduction in profit-taking by ETF investors and growth in other demand sectors, widening the deficit in the palladium market to 843,000 oz. Combined primary and secondary supplies are forecast to rise marginally to 9.02 million oz, with a decrease in South African shipments being offset by a modest recovery in autocatalyst recycling. Excluding investment, demand for palladium in ‘consuming applications’ (autocatalyst, industrial and jewellery) will exceed 10 million oz for the first time: significant growth in sales to automakers in China is anticipated, while demand from the Chinese chemical industry is also set to reach record levels.

## Rhodium

The rhodium market moved back into surplus in 2015, totalling 33,000 oz, after two years of deficit. Gross demand fell slightly: small gains in autocatalyst consumption were offset by a fall in purchasing by glass makers and investors. Meanwhile, supplies rose strongly, as South African production returned to near-normal levels following the Association of Mineworkers and Construction Union (AMCU) strike in 2014. This outweighed a decline in the recycling of rhodium from scrapped vehicles, leaving combined primary and secondary shipments up 11%.

Gross demand for rhodium is predicted to rise by 6% in 2016, as auto demand is lifted by strong car sales and tighter legislation in China, and greater use of nitrogen oxides (NOx) traps in Europe. It should also be a good year for industrial demand: purchasing by glass makers is set to rise significantly, while consumption in the chemicals industry remains unusually firm. With mine supplies expected to fall, and any recovery in autocatalyst recycling volumes likely to be modest, combined primary and secondary shipments will rise by less than 1%, pushing the market back into an expected deficit of 16,000 oz.



### SUMMARY: PLATINUM

- Growth in auto and investment demand helped keep the platinum market in significant deficit in 2015.
- South African shipments reached a four-year high, with a strong recovery in mine production and further destocking by producers.
- Recycling fell by 17%, as low prices hit scrap volumes in the autocatalyst and jewellery sectors.
- Autocatalyst demand rose by 6%, as Euro 6b legislation was phased in and global diesel car output hit record highs.
- 2015 saw exceptional levels of physical investment in Japan, while Chinese jewellery demand proved more resilient than expected.

The platinum market suffered from negative sentiment and falling prices in 2015, but demand trends were broadly positive. Expectations of weakness in the Chinese jewellery market proved overstated, while net selling of platinum by ETF investors in Europe, the USA and South Africa was outweighed by a surge of physical investment demand in Japan. Consumption of platinum in autocatalysts was strong, while industrial offtake was stable, leaving total demand for platinum up 4%. On the supply side, a recovery in sales by South African producers was partly offset by a steep fall in recoveries from scrapped cars and old jewellery, leaving the market in significant deficit.

Primary supplies of platinum rose by 19% to 6.08 million oz in 2015, the highest level in four years. This gain was entirely due to higher shipments from South Africa, where platinum production recovered strongly from 2014's damaging strike; sales by producers in other regions were flat or down.

Stock movements once again played an important role in the supply story: South African producers released significant quantities of platinum from refined and in-process inventories, in order to maintain cash flow during a period of weak prices and unprecedented financial pressure. In contrast, some producers in other regions added modestly to stocks in 2015, either in response to low prices, or to provide a buffer against future operational disruption.

Shipments of platinum from South Africa rose by over 1 million oz to 4.57 million oz, the highest level since 2011. This was 274,000 oz higher than we forecast in our November 2015 report; most of this change is attributable to stock movements. We previously assumed that producers were unlikely to supplement their sales with shipments of platinum from inventory, following heavy depletion of reserves during the 2014 strike. However, the need to generate revenue led all three major producers to make further sales from stocks last year. We estimate that nearly 150,000 oz of platinum were refined from platinum inventories (including 130,000 oz following a stocktake at Anglo Platinum's refinery), while some 70,000 oz were stripped from pre-existing refined stocks.

Platinum Supply and Demand '000 oz			
	2014	2015	2016
<b>Supply</b>			
South Africa	3,537	4,569	4,268
Russia	700	610	670
Others	871	837	922
<b>Total Supply</b>	<b>5,108</b>	<b>6,016</b>	<b>5,860</b>
<b>Gross Demand</b>			
Autocatalyst	3,241	3,433	3,497
Jewellery	2,897	2,807	2,850
Industrial	1,755	1,749	1,919
Investment	277	461	330
<b>Total Gross Demand</b>	<b>8,170</b>	<b>8,440</b>	<b>8,596</b>
<b>Recycling</b>	-2,071	-1,725	-1,917
<b>Total Net Demand</b>	<b>6,099</b>	<b>6,715</b>	<b>6,700</b>
<b>Movements in Stocks</b>	-501	-619	811

During the past two years, around 650,000 oz of platinum have been supplied from inventories held by South African producers. This focus on revenue generation can be explained by the unprecedented financial stress under which the industry has been operating, due to a combination of strike losses, productivity issues, continuing mining cost inflation (brought down from its double-digit peak), and declines in the values of both pgm and base metals to multi-year lows.

Rand depreciation protected producers from the full impact of last year's collapse in dollar-denominated pgm prices, but platinum's rand price



## About the PGM Market Report

The “PGM Market Report” includes data tables showing the five-year history of supply and demand for each metal, and a forecast for the current year. The report is published twice yearly in May and November and the latest edition can be downloaded free of charge from: [www.platinum.matthey.com/services/market-research/pgm-market-reports](http://www.platinum.matthey.com/services/market-research/pgm-market-reports)

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## Reference

1. T. Kendall, *Platinum Metals Rev.*, 2004, **48**, (1), 13