

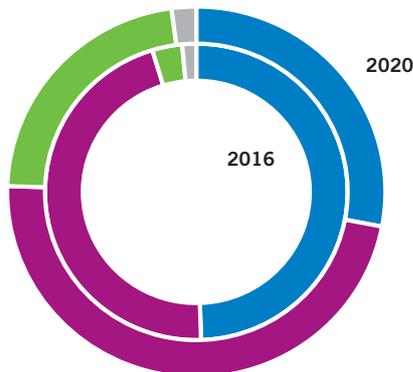


## MARKET SPOTLIGHT

### The fuel light is on in Europe's diesel market

The diesel share of new car sales in Europe dipped below 20% in August. Germany accounted for a significant part of the decline on a volume basis, with almost 30,000 fewer diesel cars sold compared to August 2020. This saw the share of diesel ICE vehicles in Germany slip to 17.7%, or 23.3% with the inclusion of diesel hybrids (source: LMC Automotive). In the first eight months of the year, around 200,000 fewer diesel cars were registered in Germany than in the same period last year, as strong incentives continue to boost uptake of electric vehicles.

New cars by fuel type: Europe



■ Diesel ■ Petrol ■ Electrified vehicles ■ Alternative fuels

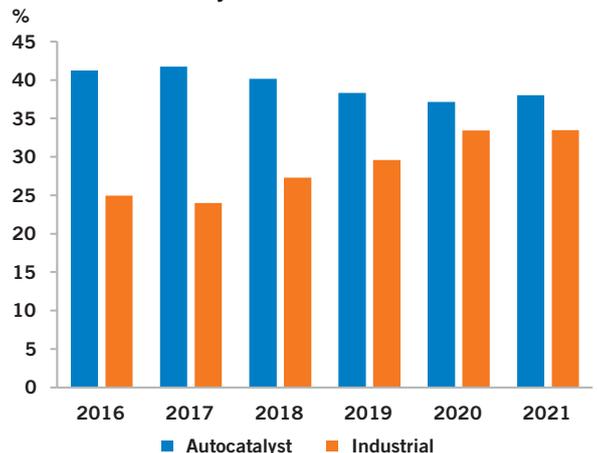
Source: ACEA

**Autocatalyst platinum demand from Europe has been in structural decline after peaking at 1.5 moz in 2016.** Since that point, the diesel share of new passenger cars has retreated from 49.5% to just 28% last year. By comparison, the share of EVs (hybrids + BEVs) has risen from 3.6% in 2016 to 22.4% in 2020, and gasoline has grown from a 45.8% share to 47.5% over the same period (source: ACEA). None of the 'big 5' (Germany, France, Italy, Spain, UK) has yet seen BEV sales outperform diesel, but the gap is closing. Last month, the UK recorded only 1,000 fewer BEV sales than diesel (source: LMC Automotive).

**Of all the major regional markets, Western Europe is expected to see the greatest diversity of powertrains** by the end of the decade, reflecting the multiple approaches of meeting emissions standards and the diversity of vehicles required to do so. The region is forecast to have a higher share of BEVs than other markets, as car sizes tend to be smaller and BEV ranges are more feasible, compared to the US, for example.

**Despite diesel's demise in Europe, the outlook for overall platinum demand is now increasingly positive.** With a diversified demand base, platinum is less affected by EV growth than palladium or rhodium, which are both at a greater risk from long-term structural changes in powertrain trends. Industrial applications, including chemical, hydrogen, glass and petroleum, are all forecast to reach record levels of demand this year, with continued growth thereafter. In addition, platinum use in gasoline autocatalysts is increasing, as it is replacing some of the more expensive palladium, and commercial vehicles are expected to remain predominantly diesel with rising sales of HDVs also supporting automotive platinum demand.

Platinum demand by market share



Source: SFA (Oxford)



# PRECIOUS METALS REVIEW

## 79 Au Gold

	Close	Weekly change	High	Date	Low	Date
\$/oz	1,762	0.52%	1,764	01/10/2021	1,722	29/09/2021
€/oz	1,519	1.54%	1,522	01/10/2021	1,480	28/09/2021

**Holiday cheer for gold?** Chinese jewellers are anticipating a sales boost for gold during the Golden Week holiday this month (1-7 October). It also coincides with the traditional peak in weddings which typically lifts jewellery demand in China, the world's largest consumer gold market (612.9 tonnes last year). Wholesale physical demand is likely to have picked up over the past few weeks as retailers stock up. While the significance of Golden Week for jewellery sales has been waning in recent years, with consumers increasingly preferring experiential purchasing, it is still

considered a period of strong growth for the industry. Without any major gold-related purchasing occasions or festivals in November, Chinese retail sales are expected to dip next month, while wholesale demand is set to be lower during October. The gold price held up remarkably well last week considering that bond yields and the dollar both rose. Central banks are in no hurry to raise interest rates and gold could offer some insurance against policy missteps.

## 47 Ag Silver

	Close	Weekly change	High	Date	Low	Date
\$/oz	22.55	0.34%	22.85	27/09/2021	21.42	29/09/2021
€/oz	19.45	1.35%	19.53	27/09/2021	18.45	29/09/2021

**Physical silver ETFs have been given regulatory approval in India.** India is the largest market for both silver jewellery and silverware, representing around 30% of demand for global silver jewellery and over 50% for silverware. Physical gold ETFs have been available in India since 2007 and the amount of gold held in them has grown steadily over the years to reach 34 tonnes currently (approximately 1% of the global total). With many Indians preferring to use jewellery as a form of investment, gold ETFs in India are small compared to

the overall level of consumer demand. It is possible that this will be the case for silver ETFs when they become available, though some initial investment interest is quite likely. The silver price in rupees hit a record level earlier this year, surpassing the 2011 high. However, the price has fallen by 23% since then so it could be seen as offering a better opportunity now. In dollar terms, the silver price dipped below \$22/oz last week but then rapidly rebounded, as has occurred the last two times that level was breached.

## 78 Pt Platinum

	Close	Weekly change	High	Date	Low	Date
\$/oz	979	-0.23%	998	27/09/2021	947	29/09/2021
€/oz	844	0.76%	853	27/09/2021	814	29/09/2021

**Despite current price volatility, Northam Platinum is planning for the future of platinum supply.** The #3 shaft, which provides access to the Western extension of the Zondereinde mine, is expected to be fully operational by FY'24. The addition of the Western extension will allow Northam to increase annual production from Zondereinde to 250 koz 4E by 2024 and has extended its remaining life of mine to over 30 years. This is at a time when ore reserve depletion is forecast to impact many other mature PGM mines. Zondereinde's high grade already provides a superior revenue per tonne compared to other mines in South Africa. A third shaft will allow Northam to continue mining high-grade, platinum-rich Merensky ore for longer, with relatively low capital expenditure.

Northam's platinum production climbed by 32.2% year-on-year during FY'21, reaching 417,139 oz. The Group's mines are all now operating at full capacity after several months of restrictions owing to the pandemic. Operational guidance for FY'22 is 750-780 koz 4E. There is a subsequent year-on-year increase over the medium term as new production comes online, with a target of 980-1,000 koz 4E by FY'26. On a longer-term view, platinum priced under \$1,000/oz may be good value, but currently it seems fair, considering that the market is expected to have a large industrial surplus this year and investor interest has waned.



# PRECIOUS METALS REVIEW

## <sup>46</sup>Pd Palladium

	Close	Weekly change	High	Date	Low	Date
\$/oz	1,926	-2.29%	1,995	27/09/2021	1,846	29/09/2021
€/oz	1,660	-1.32%	1,705	27/09/2021	1,592	29/09/2021

**No good fortune in China's car market this year.** Total light-vehicle (passenger + light commercial) production in China slipped 16.2% year-on-year to 1.66 million units in August (source: LMC Automotive), owing to ongoing supply chain disruption associated with the semiconductor chip shortage. Total light-vehicle sales were also down 14.8% year-on-year last month, as the lack of vehicle inventory caused consumers to hold back on purchases. Given the ongoing (and worsening) semiconductor chip shortage, the typically strong Q4 selling season for cars is not likely to materialise this year. Consequently, China's full-year light-vehicle forecast

has now been revised down by around 2 million units for 2021 (source: LMC Automotive). Until recently, domestic automakers with their plentiful stocks appeared to be weathering the chip storm well, but that is no longer the case. Global autocatalyst palladium demand has been hit hard by the light-vehicle production cuts this year, and it is now forecast to slip to around 7.6 moz in 2021, just 3% higher than the pandemic-induced low of 2020 and well-below 2019 levels (8.4 moz). With the outlook for the automotive sector deteriorating, the palladium price has fallen sharply over recent weeks and is likely to remain subdued.

## <sup>45</sup>Rh <sup>44</sup>Ru <sup>77</sup>Ir Rhodium, Ruthenium, Iridium

	Rhodium	Ruthenium	Iridium
Reporting week	\$14,800/oz	\$710/oz	\$5,200/oz
Previous week	\$15,750/oz	\$710/oz	\$5,300/oz

**Northam aligns future output with the hydrogen economy.** Refined iridium and ruthenium production from Northam's own operations grew by 79.8% and 56.9% respectively during FY'21, to 2,252 oz (Ir) and 24,356 oz (Ru). Over the medium term, an increase in UG2 output is expected to boost small PGM supply further, which aligns with future demand for iridium and ruthenium in the hydrogen economy. The Booyendal South mine

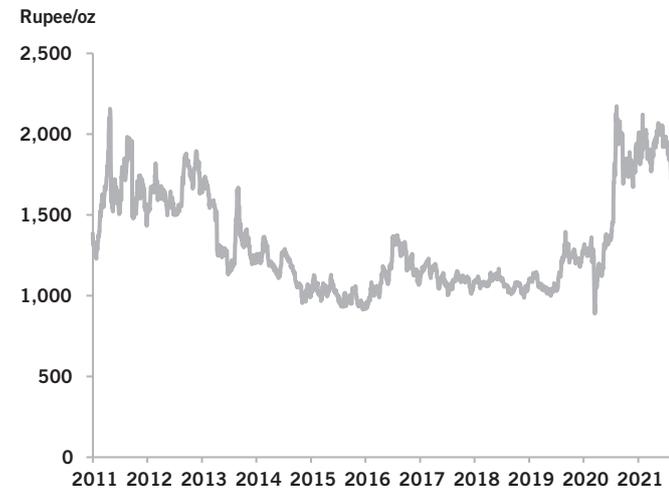
is estimated to double its overall PGM production from 2023. The majority of this is a result of the development of three UG2 modules (and one Merensky module). The UG2 orebody has a higher content of iridium, ruthenium and rhodium relative to other orebodies in South Africa.

The rhodium and iridium prices slipped back last week, while the ruthenium price held steady.



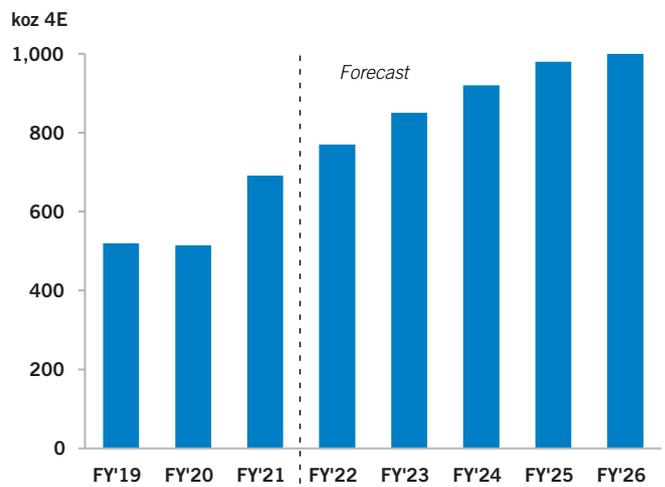
# TRENDS AND INVESTMENTS

## Silver price



Source: SFA (Oxford), Bloomberg

## Northam refined production

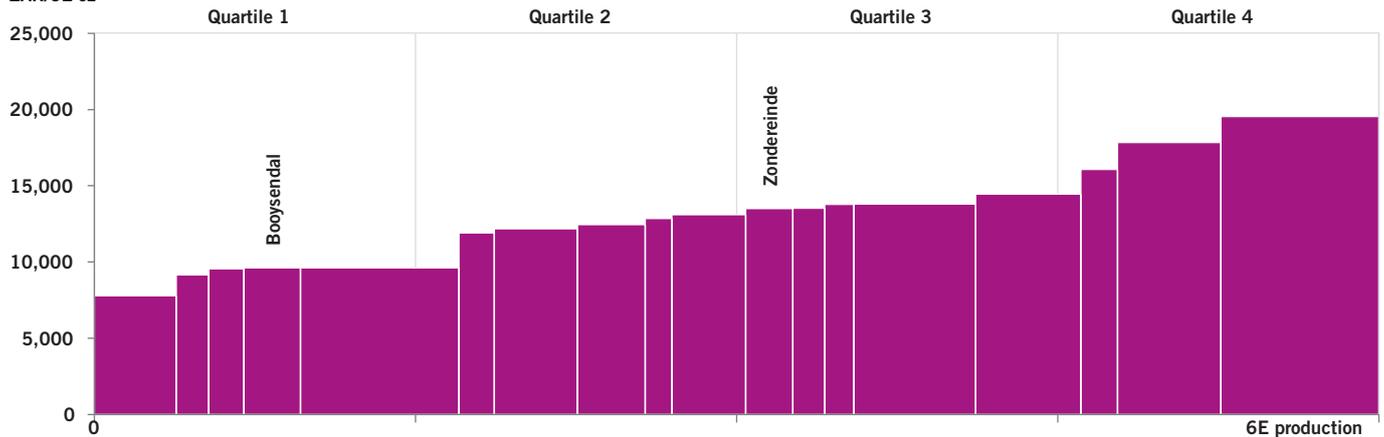


Source: Northam Platinum

## Northam's position on the cost curve

Net total cash costs per 6E oz, CY2021F

ZAR/6E oz



Source: SFA (Oxford)

## Heraeus Precious Metals

Europe, Middle East, Africa & other regions

Phone: +49 6181 35 2750

edelmetallhandel@heraeus.com

South East Asia

Phone: +852 2773 1733

tradinghk@heraeus.com

[www.herae.us/trading-market-report](http://www.herae.us/trading-market-report)

Heraeus Precious Metals imprint can be found [here](#)

United States of America

Phone: +1 212 752 2180

tradingny@heraeus.com

China

Phone: +86 21 3357 5658

tradingsh@heraeus.com

The **HERAEUS PRECIOUS APPRAISAL** produced in collaboration with:

**SFA (Oxford) Ltd**

United Kingdom

Phone: +44 1865 784366

[www.sfa-oxford.com](http://www.sfa-oxford.com)



The Oxford Science Park, Oxford,  
United Kingdom, OX4 4GA

## DISCLAIMER

This document is being supplied to the recipient only, on the basis that the recipient is reasonably believed to be a professional market participant in the precious metals market. It is directed exclusively at entrepreneurs and especially not intended for the use of consumers. The material contained in this document has no regard to the specific investment objectives, financial situation or particular need of any specific recipient or organisation. It is not provided as part of a contractual relationship. It is not and should not be construed as an offer to sell or the solicitation of an offer to purchase or subscribe for any investment or as advice on the merits of making any investment. This report has been compiled using information obtained from sources that Heraeus and SFA (Oxford) Ltd ("SFA") believe to be reliable but which they have not independently verified. Further, the analysis and opinions set out in this document, including any forward-looking statements, constitute a judgment as of the date of the document and are subject to change without notice. There is no assurance that any forward-looking statements will materialize. Therefore,

neither SFA nor Heraeus warrants the accuracy and completeness of the data and analysis contained in this document. Heraeus and SFA assume no liability for any losses or damages of whatsoever kind, resulting from whatever cause, through the use of or reliance on any information contained in this document. However, in so far as a liability claim exists under German law, Heraeus and SFA shall have unlimited liability for willful or grossly negligent breach of duty. Unless expressly permitted by law, no part of this document may be reproduced or distributed in any manner without written permission of Heraeus. Heraeus specifically prohibits the redistribution of this document, via the internet or otherwise, to non-professional or private investors and neither Heraeus nor SFA accepts any liability whatsoever for the actions of third parties in reliance on this document. Prices quoted are interbank (offer) prices for gold, silver, platinum and palladium. Rhodium, ruthenium and iridium quotes reflect the Heraeus offer price at the time of writing.