

22<sup>nd</sup> January 2024

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**ABOUT HERAEUS** 

MARKET SPOTLIGHT

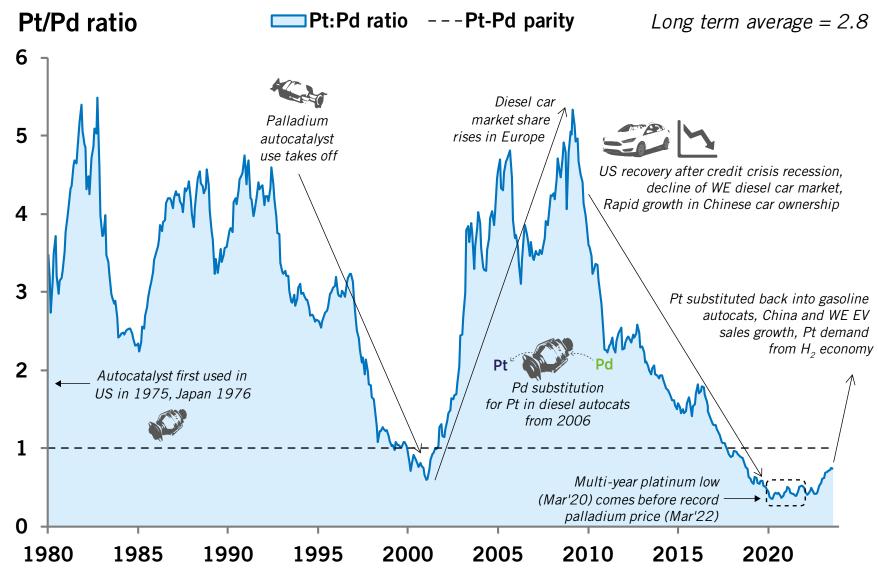
## Palladium's premium to platinum may disappear this year

Platinum-palladium price parity is looking increasingly likely during 2024. There have been relatively well-defined cycles in the ratio of platinum and palladium prices since the early 1980s, driven by demand trends in autocatalysts. The current cycle has been longer than the rest, which have typically lasted around 10 years, as the ratio peaked in 2008. Palladium has been trading at a premium to platinum since October 2017 as demand grew rapidly from the light-vehicle autocatalyst market.

The pandemic coincided with a potential turning point in the PGM demand cycle. Palladium is very exposed to changes in the automotive market because autocatalyst use represents over 80% of palladium demand. EV sales really began to accelerate in Western Europe and China in 2020. Meanwhile, the palladium price premium resulted in the development of gasoline autocatalysts that substituted in some platinum at the expense of some palladium, boosting platinum autocatalyst demand. The US, Western Europe and Chinese markets accounted for 69% of palladium autocatalyst demand in 2015-2019. Therefore, in volume terms, they have the most scope to see palladium demand decline.

The palladium market is trending towards a structural surplus over the next few years, in contrast to platinum which looks set to remain in deficit. This is driven partly by changes in automotive demand and also by increasing recycling from autocatalysts. BEVs are taking market share from ICE vehicles but with the market as a whole growing, palladium automotive demand may decline quite gradually. However, secondary supply of palladium is set to grow substantially in the medium term. Increasing numbers of predominantly gasoline light vehicles are set to reach the end of their lives and those vehicles will have greater palladium loadings on their autocatalysts as a result of the tightening of emissions legislation.

The platinum price could trade at a growing premium to palladium in coming years. Platinum has a much broader spread of end-uses, with autocatalysts representing 48% of total platinum demand. The rise of BEVs therefore impacts palladium more than platinum, and palladium does not appear to have a replacement for the lost automotive demand. Platinum demand is supported by its diverse industrial uses, and the hydrogen economy has the potential to lift platinum demand in the longer term. Additionally, recycled platinum will not increase to the same extent as palladium, as less platinum has historically been used in autocatalysts.



Source: SFA (Oxford), Bloomberg

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# PRECIOUS METALS REVIEW

Gold

79								
	Quid ISOLANOS		CLOSE	WEEKLY CHANGE	HIGH	DATE	LOW	DATE
		\$/oz	2,025	-1.13%	2,059	15/01/2024	2,002	17/01/2024
		€/oz	1,860	-0.48%	1,880	16/01/2024	1,842	18/01/2024

#### A stronger dollar kept precious metal prices pinned last week.

Expectations of a cut to US interest rates in March have receded again after the Federal Reserve Board Governor, Christopher Waller, said last week that the central bank should not rush towards interest rate cuts until the bank is sure that lower inflation will remain. The prospect of higher for yet-longer interest rates has boosted the dollar most since 2 January, and gold fell by more than 1% week-on-week as the negative correlation between the two assets asserted itself. According to market rates, the odds of the first cut are still weighted towards the 20 March meeting of the Fed , though the probability has fallen to 50% as of Friday, from 70% on 11 January. Rate cuts are likely sooner or later, at which point gold is expected to benefit.

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## PRECIOUS METALS REVIEW

### Silver



#### US retail investment demand is resilient but below historical levels.

With year-end sales now available, data from the US Mint shows that cumulative silver coin sales reached 24.8 moz in 2023. This represents a robust improvement year-on-year from 16 moz in 2022, though is still nearly 16% lower than the 10-year average. The resilience of the US market stands out globally. Worldwide, physical investment in silver is estimated to have fallen by 21% year-on-year in 2023 to 263 moz (source: The Silver Institute). Sales of silver bullion from the Perth Mint, which has been popular with German retail investors, contracted by 36% year-on-year to 14.9 moz, likely impacted by the VAT hike on coins in Germany. Additionally, higher silver prices have led to a softening of the Indian market. India's silver imports were down 59% year-on-year, signalling that consumer demand is considerably lower in the higherpriced environment. Inflationary pressure and central bank actions will influence physical retail demand in 2024, which, with ongoing geopolitical uncertainty, could see some safe-haven buying and a return to investment demand growth.

Silver made a new low for 2024 last week, and has broken below an ascending trend line, meaning it could move lower. Support could be found at \$22.20/oz as the silver price has rarely traded below this level in the last nine months.

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## PRECIOUS METALS REVIEW

## **Platinum**

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Pt Platinum 195.084		CLOSE	WEEKLY CHANGE	HIGH	DATE	LOW	DATE	
	\$/oz	897	-2.19%	921	15/01/2024	879	17/01/2024	
	€/oz	824	-1.56%	843	19/01/2024	811	17/01/2024	

Northam Platinum is still ramping up platinum production. Northam has reported a 10.6% year-on-year increase in production in H2'23 to 435 koz of 6E PGMs equivalent refined metal from its own operations. The growth is due to the continued ramp-up of the Booysendal and Eland mines, along with more mechanised mining, thus improving efficiency and costs. Booysendal produced 250 koz of 6E PGMs (approx. 120 koz of platinum), 15% higher year-on-year, as the South shaft continues to ramp up. Zondereinde mine production was flat year-on-year at ~80 koz of platinum. Finally, Eland mine saw a 51% jump in output year-on-year, though volumes are smaller than the other operations at 33 koz 6E PGMs. Northam's mines are expected to gradually expand production over the next few years, but South Africa's platinum production could dip if cost pressures result in production cuts elsewhere.

Platinum hovered around \$900/oz level last week, and began to rise on Thursday before giving back nearly all those gains by Friday afternoon and closing back below \$900/oz.

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## PRECIOUS METALS REVIEW

### **Palladium**

	Pd Palladium		CLOSE	WEEKLY CHANGE	HIGH	DATE	LOW	DATE
•	100.40	\$/oz	934	-4.58%	990	15/01/2024	906	17/01/2024
		€/oz	858	-4.07%	903	15/01/2024	834	17/01/2024

After 16 months of gains, EU car sales shrank in December. The EU registered 867,052 new passenger cars in December 2023. This makes a 3% decline year-on-year and the first contraction in more than a year. Part of this can be attributed to a high base effect, as sales in December 2022 were the highest that year. Additionally, the largest real impact on sales was the cessation of Germany's federal EV credit, as highlighted in a previous Precious Appraisal. The data now shows there was a 23% drop in car sales in Germany in December as BEV sales stalled, falling 48% year-on-year. On an annual basis, BEVs captured an additional 2.5 percentage points of total EU market share last year, reaching 14.6% (1.53 million units). By comparison, in China BEVs made up 23.9% of new passenger car sales last year (6.2 million units). The market share of BEVs in Europe is expected to continue to grow in 2024, though perhaps slower than expected with no German subsidies. Palladium autocatalyst demand is forecast to decline by 3% in Western Europe to just over 1.1 moz this year, partly as a result of a higher BEV market share that is unsupportive of the palladium price.

Palladium continued its slide last week, posting a new low of \$906/oz as its premium to platinum is slowly eroded further.

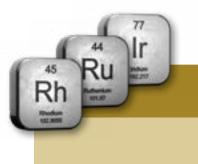
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## PRECIOUS METALS REVIEW

## Rhodium, Ruthenium, Iridium



	RHODIUM	RUTHENIUM	IRIDIUM
Reporting Week	\$5,200/oz	\$445/oz	\$5,500/oz
Previous Edition	\$5,050/oz	\$445/oz	\$5,500/oz

The rhodium price moved higher again last week, and reached the highest level since October last year. It is possible that rhodium has found some interest from automotive buyers at the beginning of this year as restocking among end-users picks up again. That said, rhodium demand in autocatalysts is forecast to contract slightly to under 1 moz this year – a casualty of the rise of BEVs in countries with strict emission control legislation, such as those in Europe.

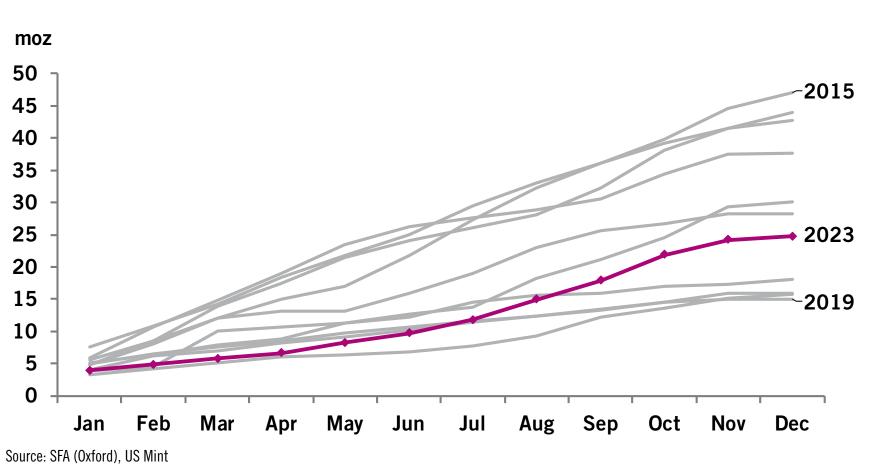
The other small PGMs saw no price movement in last week's trading.

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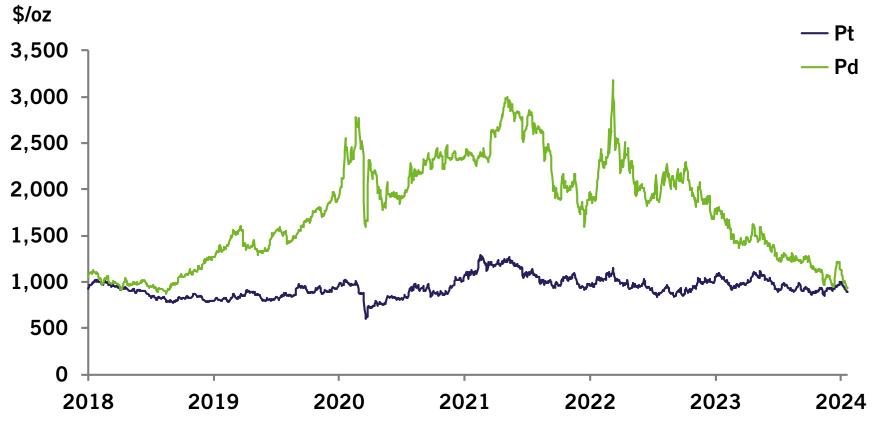
# TRENDS AND INVESTMENTS

## **Cumulative US Mint silver coin sales since 2013**



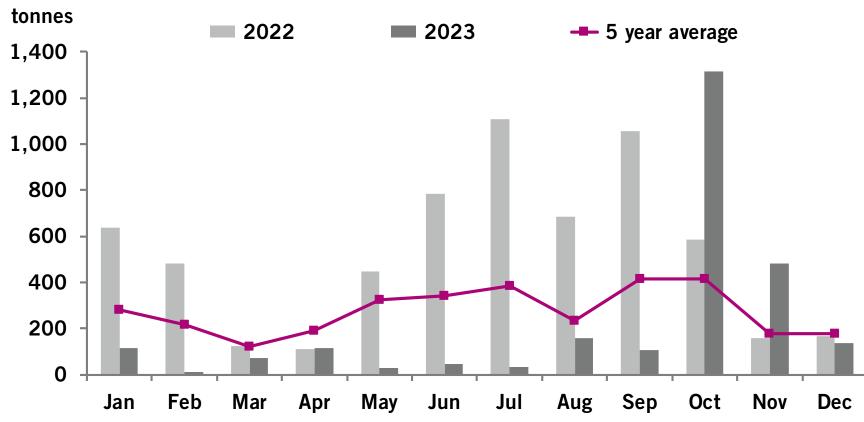
#### Source: SFA (Oxford), Indian Customs, Ministry of Commerce, Bloomberg

# Platinum price vs palladium price

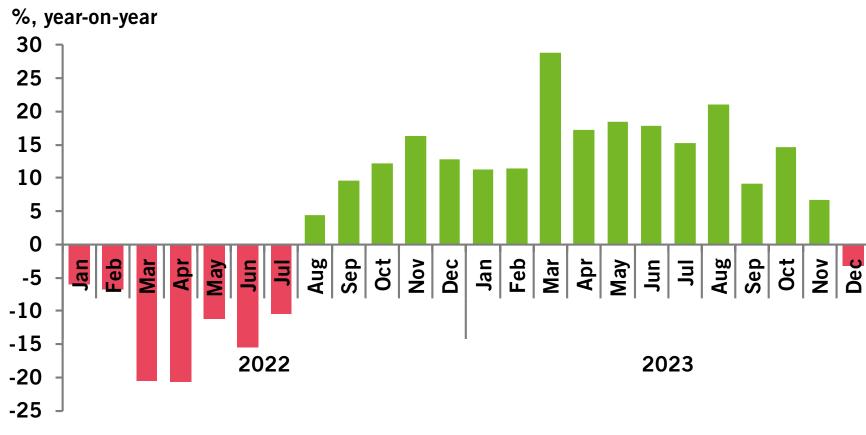


#### Source: SFA (Oxford), Bloomberg

# India silver imports



Change in EU new passenger vehicles sales



Source: SFA (Oxford), ACEA

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