

## London Platinum Week’s key themes risk deepening deficits, supporting the compelling investment case

London platinum week was dominated by two themes, downside risks to recycling supply, and higher-for-longer automotive PGM demand stemming from ICE containing vehicles (mainly hybrids), compensating for slowing battery electric vehicle (BEV) growth. Both topics are ones we have highlighted previously, and both have the potential to deepen the ongoing market deficits forecast through 2028. There was equally interesting insight from what was not widely discussed, namely mine supply and hydrogen, both now considered to be longer-term in their impact.

**1) Mixed recycling supply messages:** Platinum supply from recycled autocatalysts declined by a 9% CAGR from 2020 to 2023 (Fig 1). The decline in autocatalyst scrap is due to longer vehicle lives, some hoarding, and regulatory restrictions ([link](#)). But the week’s debate centred around an unclear short-term outlook where recyclers noted a negligible easing of headwinds, whereas commentators (including WPIC) forecast a mild recovery (+63 koz) of spent autocatalyst volumes for 2024. Contextualising the divergent views is recognising that recycled autocatalysts account for 14% to 22% of annual supply and are capable of shifting market balances materially. **2) Higher-for-longer automotive PGM demand ([link](#)):** The material slowdown in BEV sales growth and high hybrid growth (Fig. 3), led debate on the rate of PGM automotive demand erosion. A modest 3% y/y (Fig. 4) decline in 3E automotive demand for 2024 is insufficient to disrupt market deficits in each metal (Fig. 2). With resilient ICE/hybrid demand, each 1% increase in light vehicle market share deepens deficits by 25 koz and 100 koz of annual platinum and palladium demand respectively, thereby supporting longer market deficits (particularly in palladium).

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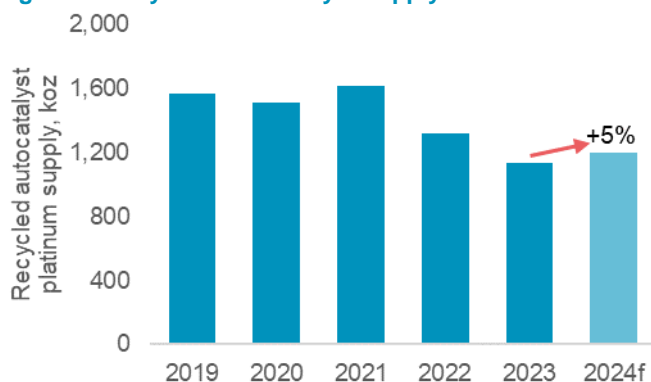
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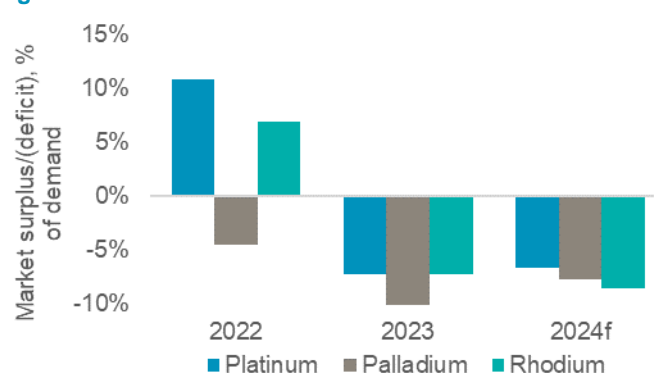
17 May 2024

**Figure 1: Recycled autocatalyst supply has trended lower**



Source: Metals Focus, WPIC Research

**Figure 2: Each 3E PGM is forecast to be in deficit for 2024**



Source: Aggregated averages of Metals Focus, SFA (Oxford), Johnson Matthey

It is worth noting that prices appear to have responded positively (Fig. 6) to greater industry awareness of heightened secondary supply risks and higher-for-longer PGM automotive demand. These factors support prices being biased to the upside, while other factors which were less topical during London platinum week (mine supply and hydrogen) have longer dated future market deficit consequences.

**3) Miners cutting costs, not supply:** PGM prices appear to have troughed, which allows SA’s PGM miners time to execute restructuring without needing to cut deeper. While 2024 supply is unlikely to markedly reduce further, historical correlations suggest lower development spend may lead to lower medium-term production (Fig. 7). Thus, PGM supply risks appear weighted to the downside over the medium-term ([link](#)).

**4) Hydrogen pushed back:** Regulatory complexity has weighed on the enthusiasm for hydrogen. However, demand is still growing rapidly, albeit off a small base, and hydrogen applications are a medium/long-term story posed to be 11% of annual platinum demand by 2030f ([link](#)).

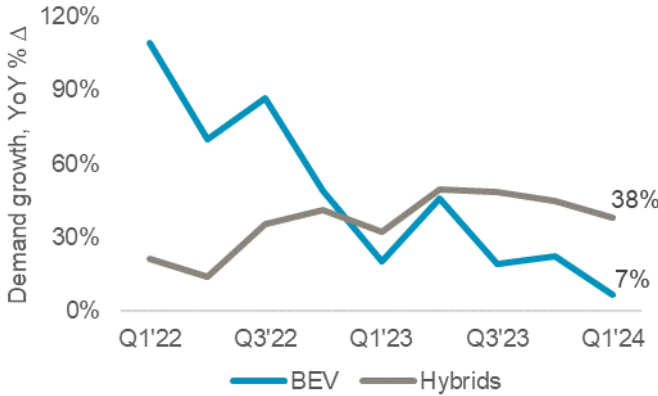
**Recycling headwinds and resilient automotive PGM demand could exacerbate expected market deficits.**

**Platinum prices have recovered from a weak start to 2024 as appreciation grows of the underlying market deficits.**

**Platinum's attraction as an investment asset arises from:**

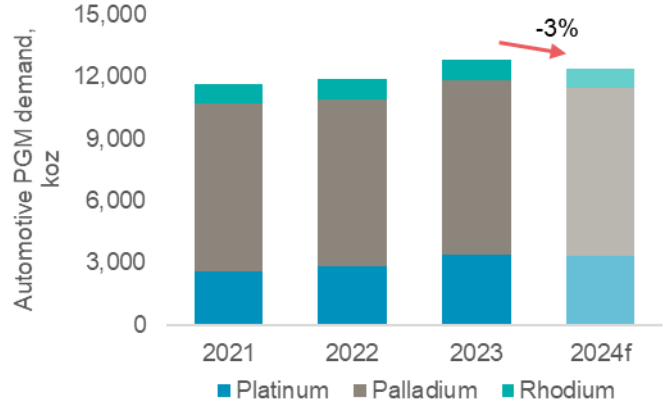
- WPIC research indicates the platinum market is in a period of sustained deficits from 2023.
- Platinum supply remains challenged, hampered by production challenges in South Africa and with recycling supplies.
- Higher-for-longer ICE vehicle production will support automotive demand for platinum.
- Growing off a small base, hydrogen will be a major source of platinum demand in the future.
- The platinum price remains historically undervalued and significantly below gold.

**Figure 3: BEV demand growth has systematically slowed, highlighting unwinding subsidies and challenges in converting the next cohort of buyers from ICE to BEV**



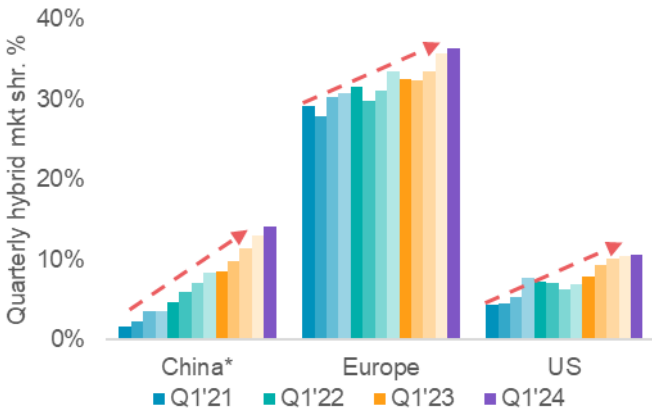
Source: Bloomberg, WPIC Research, Cumulative China, Europe, and US markets

**Figure 4: Automotive 3E PGM demand will remain resilient, ICE and hybrid vehicle demand is likely to have a long tail**



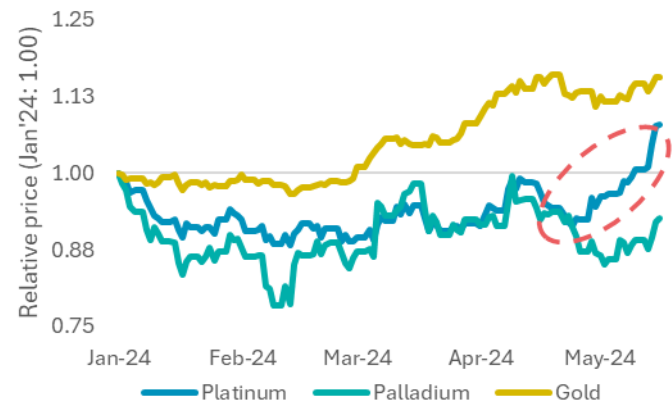
Source: Aggregated averages of Metals Focus, SFA (Oxford), Johnson Matthey

**Figure 5: The rate of light-duty hybrid market share gains is stable, suggesting PGM automotive demand will have a long-tail into the 2030's**



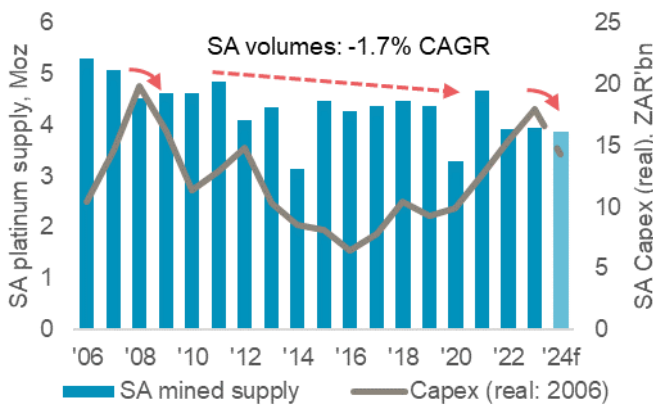
Source: CAAM, ACEA, Bloomberg, WPIC research, \*China data is PHEV only

**Figure 6: Platinum prices have rallied through May'24 on better fundamentals supporting a narrowing of YTD underperformance with gold**



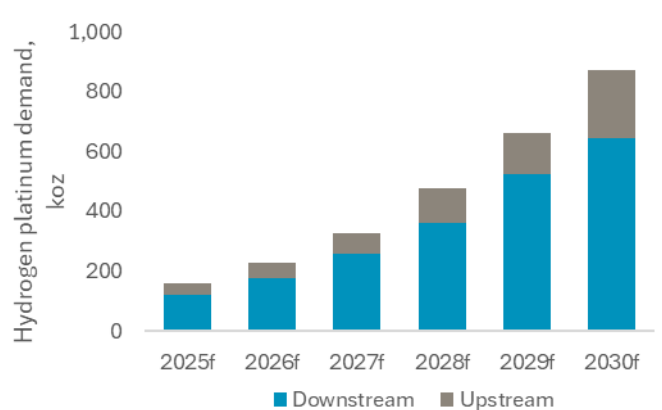
Source: Bloomberg, WPIC research

**Figure 7: South Africa's mined platinum output has trended lower following declining capital expenditure during the 2010's**



Source: Bloomberg, Johnson Matthey, SFA (Oxford), Metals Focus, WPIC research

**Figure 8: Hydrogen linked platinum demand growth will be driven by the convergence of HD-FCEV total cost of ownership with diesel fleets, but later in the decade**



Source: WPIC research

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