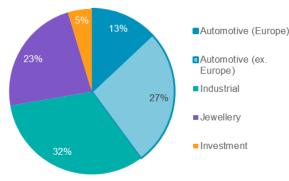
PLATINUM PERSPECTIVES

Punitive tariffs against Chinese automakers could slow European BEV adoption and boost platinum demand

The potential for punitive tariffs to be applied to Chinese automakers in reaction to alleged state subsidies that allow them to undercut European rivals, could slow the pace of electrification in the European car market. We estimate that from 2025f, each 1% change in European BEV adoption equates to ~11 koz of automotive platinum demand annually. Europe's BEV adoption lagging China's rate by three-years instead of two-years would result in cumulative additional platinum demand of 220 koz between 2025f to 2027f.

Europe is the leading geographic market of automotive platinum demand. Demand of 1,070 koz in 2023f constitutes 13% of total platinum demand. Our base-case anticipates European automotive platinum demand to peak in 2023f. We expect Europe to mirror China's BEV adoption curve at a roughly two-year lag (below righthand chart), which, alongside lower diesel sales, leads to lower platinum demand. Brussels's initiation of an anti-subsidy probe (link) into Chinese electric vehicles raises two considerations that could slow Europe's BEV adoption curve. Firstly, it is alleged that state support for loss-making Chinese automakers allows them to undercut European automakers on price. Accordingly, Chinese automakers BEV capabilities are unlikely replicable by the Europeans on fair economic principles. Secondly, a hurdle to mass-market BEV adoption is the ~55% electrification price premium of like-for-like models with an ICE or BEV option (Fig. 6, overleaf). If low-cost Chinese imports are unable to enter the bloc without the imposition of anti-dumping tariffs, Europe's BEV adoption may take longer to replicate that of China's.

Automotive will constitute 40% of 2023 platinum demand



The drivetrain evolution is increasing BEV adoption 60% %

Two-year lag

between EU and

China

mkt share, 50%

BEV light-vehicle

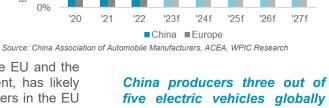
40%

30%

20%

10%

0%



five electric vehicles globally and has ambitions to increase exports as its domestic market growth slows.

Tariffs would increase BEV costs, and a 1% slowdown adoption in adoption supports an incremental 11 koz of European platinum demand.

Source: Metals Focus, WPIC Research

China's automotive industry's aggressive expansion into the EU and the associated threat to European automakers and employment, has likely triggered this probe. The market share of Chinese automakers in the EU is estimated to have tripled between 2021 and 2023 to 2.8%. Whilst small in aggregate, Chinese automakers represented a meaningful 8% of Europe's BEV sales, per automotive data analyst Inovev. China's swift EU incursion could offset its cooling domestic market (Fig. 3) while further entrenching China as the global market leader for BEV production (Fig. 5). Thus, the timing of regulatory probes is interesting, and speculatively suggestive of EU auto industry lobbying. Europe's automotive sector accounts for 7% of the bloc's GDP and employs 13 million people.

Auto lobbying has already seen the EU exempt e-fuel compliant vehicle sales from the 2035 ICE ban and is likely to delay implementation of Euro 7 emission legislation. If an anti-subsidy probe deems it necessary to apply tariffs on Chinese electric vehicles, could further lobbying efforts target a deferral to the EU's 2035 ban on ICE vehicle sales? Deferring Europe's 2035 ban on ICE vehicle sales would invariably slow BEV adoption and support automotive platinum demand well into the next decade.



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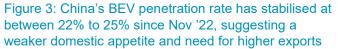
Platinum's attraction as an investment asset arises from:

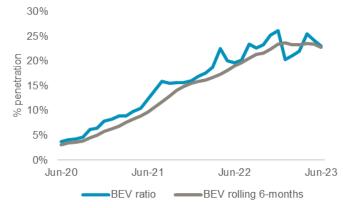
- WPIC research indicates the platinum market entering a period of consecutive deficits from 2023.
- Platinum can be considered a proxy for investing in the growing hydrogen economy given its use in electrolysers and fuel cells.
- Platinum supply remains challenged, hampered by electricity shortages in South Africa and sanctions against Russia
- Automotive platinum demand growth should continue due principally to substitution in gasoline vehicles.
- The platinum price remains historically undervalued and significantly below both gold and palladium.

Figure 1: Europe is the largest constituent of automotive platinum demand due to its relatively high share of diesel drivetrains



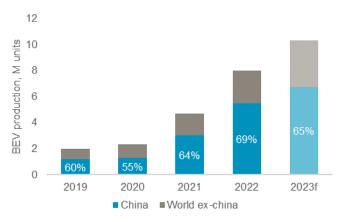
Source: SFA (Oxford) 2013 - 2018, Metals 2019 - 2023f, WPIC Research





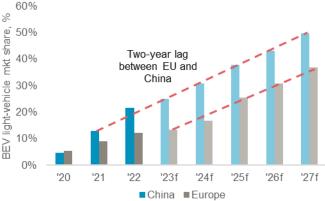
Source: China Association of Automobile Manufacturers, WPIC Research

Figure 5: China dominates global BEV production, accounting for approximately three of five vehicles produced



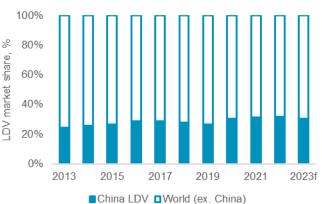
Source: China Association of Automobile Manufacturers, ACEA, WPIC Research





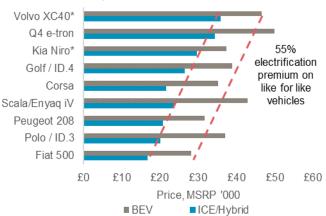
Source: China Association of Automobile Manufacturers. ACEA. WPIC Research





Source: OICA, WPIC research

Figure 6: Electric vehicle prices continue to run well ahead of the ICE equivalent vehicles, which may inhibit mass market adoption



Source: Autotrader, WPIC research, *Mild hybrid ICE

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