

Resurgent EU automaker push to sell more diesel cars is a boost for platinum demand growth

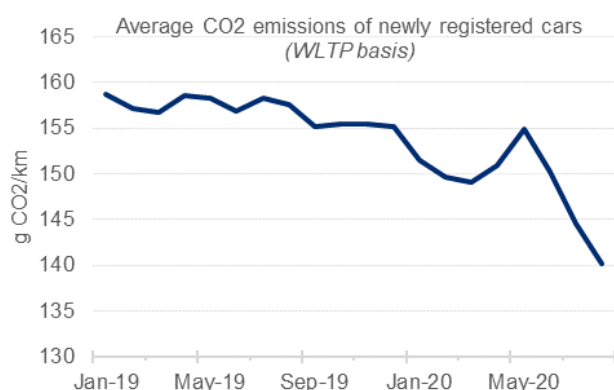
In January 2021, the European Commission will measure average fleet CO₂ emissions of each European automaker against the 95 g/km level for 2020, first published in 2009, and must publish and levy heavy fines for excess emissions. Fleet CO₂ emissions declined steadily from 2009 but Dieselgate in 2015 reversed that trend as consumers chose to buy higher CO₂ emitting gasoline cars. This was compounded more recently by the sharp increase in large-engine SUV share (38% in 2019) and slow growth in Battery Electric Vehicle (BEV) share (2% in 2019).

If the 2019 'excess emissions' of Europe's top 13* automakers, of 26 g/km**, remains unchanged in 2020, automaker fines of c.€27bn will be payable in 2021 even after adjusting for the lower COVID-19 impacted 2020 sales volumes. OEMs will be liable for fines annually while their fleet emissions remain above the EU mandated level.

Avoiding or reducing these heavy annual CO₂ fines, is a very strong incentive for automakers to sell more diesel cars, most particularly mild-hybrid diesels. The incentive increases further for the period 2025 to 2030 as CO₂/km targets fall 15% and 37.5% respectively compared to current levels. Increasing sales of mild-hybrid (MHEV) gasoline and diesel models (including plug-in or PHEV) is a very cost-effective way for automakers to avoid imminent fines and reduce future annual fines.

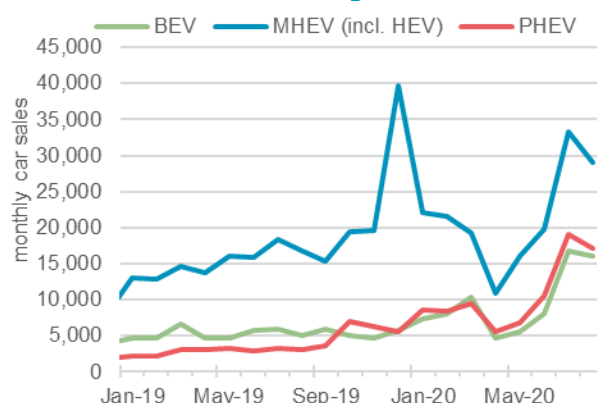
Automakers and regulators appear to agree, taking bold steps to further accelerate MHEV (including diesel) sales, the highest selling segment in the UK this year. Exactly 5 years after Dieselgate, the AECC confirms† that diesel MHEVs are central to automaker CO₂ reduction strategies and are compatible with renewable fuels. Importantly on 16 September 2020, the EU Parliament ended the use of diesel RDE conformity factors by 2022 – essential to unravel diesel's negative perceptions and support diesel sales growth. Public criticism (and automaker production) of PHEVs (CO₂ < 50 g/km) should decline as super credits (double-counted in fleet) fall from 2 in 2020 to 1.33 in 2022.

German average CO₂ fleet emissions fell sharply in 2020 from rapid MHEV (incl. PHEV) sales growth



Source: KBA, WPIC Research. Note: WLTP = World harmonized light-duty vehicles test procedure

Mild-hybrid vehicles (including diesel) dominate German 'EV' sales, accounting for 77% in 2020 YTD



Source: KBA, WPIC Research

In 2020, rapid growth in mild-hybrid diesel sales has helped stabilise the EU diesel market share at 30%, stemming a 5-year decline, with the current actual sales trajectory pointing to more growth. Higher loadings on new RDE-compliant diesel-hybrid cars, means a 1% increase in market share will add well over 20,000 koz in annual platinum demand calculated using Johnson Matthey estimates published before RDE.

In 2019, 87% of diesel cars sold in Europe met the new Euro 6 RDE 80 mg NO_x/km on-road limit.

*13 largest automakers, by sales volume, **reduced for heavier vehicles and a higher share of low-emissions vehicles; fines on 95% of fleet in 2020.

*** Association for Emissions Control by Catalyst (Members: Johnson Matthey, BASF, Umicore, Solvay, Vitesco), Improving Air Quality and Climate Through Modern Diesel Vehicles

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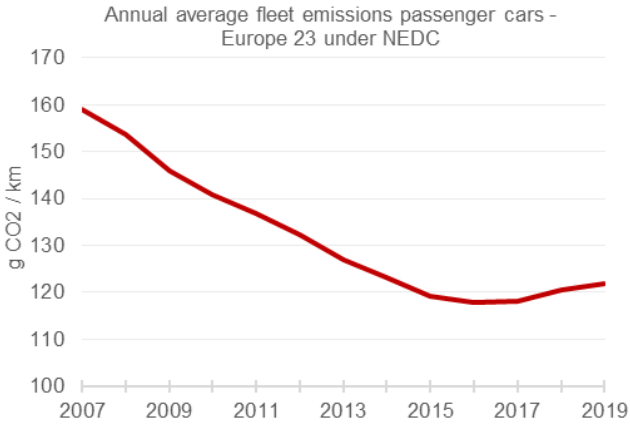
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Platinum's attraction as an investment asset arises from:

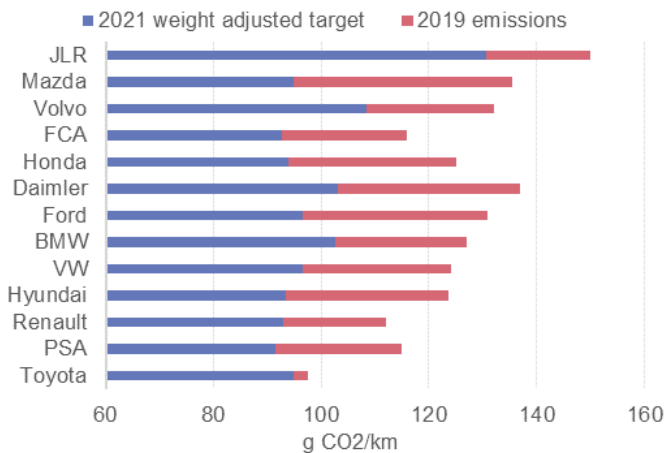
- Supply is relatively constrained with limited investment in new platinum group metal (PGM) mines
- Platinum price is near all-time lows relative to gold and at record lows relative to palladium
- Total PGM demand growth should continue due to increasingly restrictive emissions rules
- Market balance and price mismatches between palladium and platinum argues for substitution
- Investment demand has surged as institutions begin to factor low price and positive fundamental outlook

Figure 1: Average fleet CO₂ in 23 European countries rising since 2015, with 2019 levels at 122 g/km



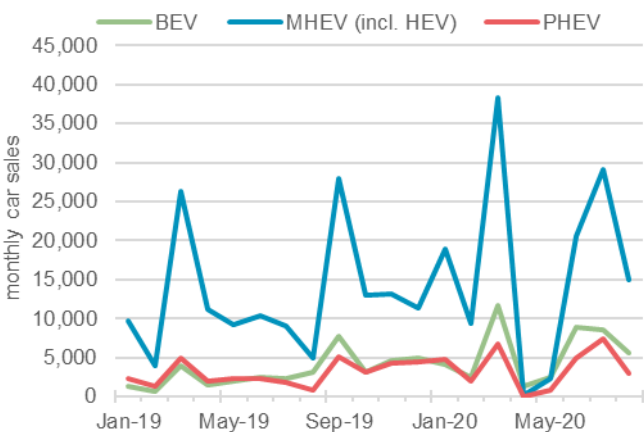
Source: JATO, WPIC Research. Note: NEDC = New European Driving Cycle

Figure 3: 13 major OEMs average fleet CO₂ in 2019 was 26 g/km above weighted targets = €27bn fine in 2021



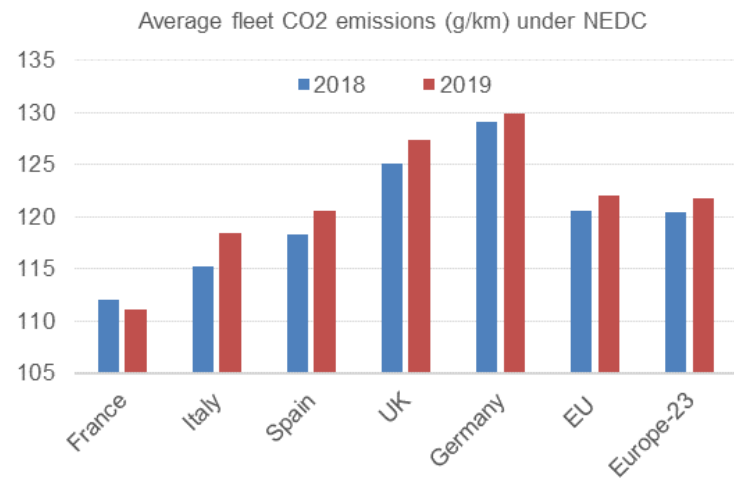
Source: PA Consulting, JATO, ACEA, WPIC Research

Figure 5: In the UK auto market, hybrids have accounted for 78% of 'electric' passenger cars sold in 2020



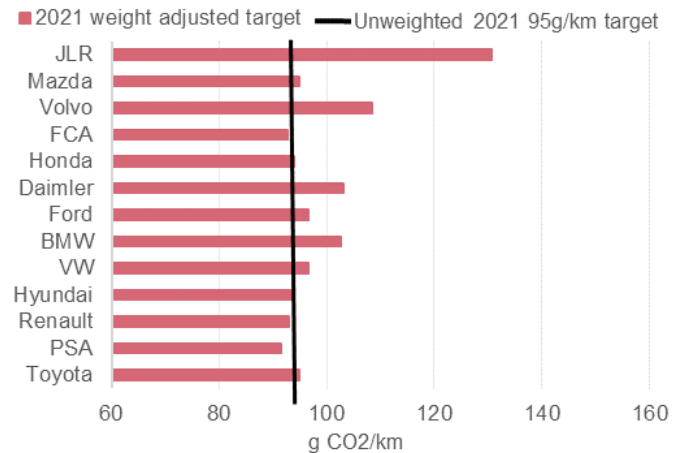
Source: SMMT, WPIC Research

Figure 2: On a fleet basis, Germany and UK auto CO₂ emission are furthest from the 2021 targets



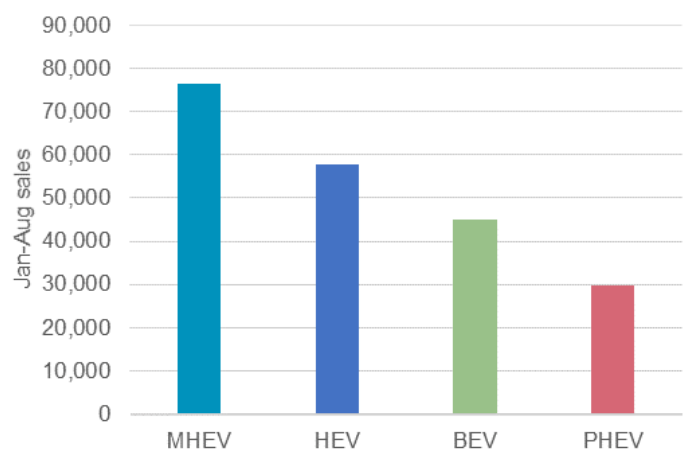
Source: JATO, WPIC Research

Figure 4: CO₂ fleet emissions targets vary across OEMs, adjusted according to typical weight of vehicles sold



Source: PA Consulting, WPIC Research. Note: For every 100 kg of additional vehicle weight, the emission of 3.33 g/km more of CO₂ is allowed. Super credits allow double-counting in fleet.

Figure 6: MHEV, including diesel, have been the dominant category of EV in the UK auto market in 2020



Source: SMMT, WPIC Research

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