Despite declining supply, the platinum market is forecast to be in a fundamental surplus until the late 2020s. Europe’s platinum market, in particular, has struggled over the past few years due to the shrinking market share of diesel cars, which was compounded by a collapse in vehicle buying this year owing to the effects of COVID-19, leading to the build-up of excessive stocks at OEMs. However, there is significant upside ahead driven by the production of ‘green’ hydrogen in Europe, as well as China and Japan.

The European Commission has announced details of a hydrogen strategy as part of its economic recovery plan Next Generation EU, highlighting hydrogen as an investment priority to boost economic growth. The European Clean Hydrogen Alliance promotes clean hydrogen production to help decarbonise the economy, particularly in industrial processes such as oil refining and steel production where reducing carbon emissions is crucial and has so far proved difficult to achieve. Clean or ‘green’ hydrogen refers to hydrogen produced through the electrolysis of water, powered by electricity from renewable sources.

The EU aims to install 40 GW of ‘green’ hydrogen capacity by 2030, including 6 GW of electrolysers producing 1 mt of hydrogen within the next four years. Approximately 1 GW of electrolysers is installed in the region today. Platinum and iridium are intrinsic to the production of green hydrogen for the decarbonisation of industry; of several competing technologies, proton exchange membrane electrolysis (PEM EL) is best suited for the mass production of green hydrogen and uses platinum and iridium-coated electrodes.

The hydrogen industry is gaining momentum from unprecedented political and economic support. Shares in some electrolyser, hydrogen and fuel cell companies are up more than 50% this year. Investors have become more bullish over the past year as several large companies have announced investments or joint ventures with hydrogen players. There are now major opportunities for players throughout the PGM sector to capitalise on the strong legislative backing of the hydrogen economy, providing a long-term positive demand signal for platinum.

### MARKET SPOTLIGHT

**Hydrogen - breathing new life into the platinum market**

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### Hydrogen, electrolyser and fuel cell companies

<table>
<thead>
<tr>
<th>Company</th>
<th>Share prices indexed to 100, 1 Jan 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>McPhy Energy</td>
<td>1,500</td>
</tr>
<tr>
<td>Nel Hydrogen</td>
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<tr>
<td>Ballard Power Systems</td>
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<tr>
<td>ITM Power</td>
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</tr>
</tbody>
</table>

Source: SFA (Oxford), European Commission, Etzheimbergh

### European electrolyser capacity additions vs. global fuel cell Pt demand

- **Electrolyser capacity**
- **Pt demand (rhs)**
- **Pt demand in the near-term driven by industrial fuel cell applications**
- **Rapid expansion in electrolyser capacity provides significant upside for Pt from 2025 onwards**

Source: SFA (Oxford), European Commission, Etzheimberger
Gold

China has the edge over India. Gold jewellery sales in China are likely to be much stronger than in India this year, owing to its established online sales platform. A national lockdown in India, one of the strictest in the world, has disrupted the bricks and mortar model of Indian gold retailers and with very few outlets offering alternative online services, demand faces significant headwinds. Online sales in India account for just 1-2% of overall gold sales by value (source: World Gold Council). India is the second-largest market for gold jewellery, accounting for 12% of total gold demand last year, totalling 544.6 t. India’s economy is projected to contract by 4.5% in 2020 (compared to 1% in China), following a long period of lockdown and a drawn-out recovery in what was already a slowing economy (source: IMF). As a result, discretionary consumption of gold is expected to be significantly lower year-on-year in India, while Chinese demand is forecast to drop less dramatically, as consumption-stimulating policies from the Chinese government and access to online sales platforms support buying.

The gold price moved sideways last week, managing to hold on above $1,800/oz. The price is showing signs of slowing amid risk-on sentiment in the market.

Silver outperformed gold again last week. Despite gold’s sideways trading, the silver price rallied, pushing through and holding above $19/oz for the first time this year, which saw the gold:silver ratio slip to 93. The price is gaining investors’ interest, with over 35 moz of inflows into ETFs so far in July (+3.8%, compared to +1.7% for gold), reaching a record high of 959 moz last week. The silver price has gained 59% since its low in March, outperforming gold’s rebound (22%) by a considerable amount. However, if the gold price struggles to hold above $1,800/oz, silver could easily pull back.

Platinum

New car registrations in Western Europe saw a year-on-year drop of 24.8% in June to 1,022,196 units. Despite its falling market share, Western Europe remains the largest diesel market in the world, accounting for 1,040 koz of platinum last year (down 36% from 2016). All countries continued to post significant declines in June due to the impact of COVID-19, with the exception of France which increased by 1.2% year-on-year owing to generous subsidy and incentive schemes. In the first half of the year, auto demand in Europe contracted by 40.2%. Among the five major markets, Spain saw the greatest decrease (-50.9%), followed by the UK (-48.5%), Italy (-46.2%), France (-38.6%) and Germany (-34.5%). Government incentives are expected to slow the sales decline in the coming months, but under a fundamentally weak economic backdrop, auto demand in Europe is still forecast to fall by at least 25% this year (source: LMC Automotive). Incentives which favour ‘clean’ vehicles are expected to prompt increased demand for electrified models, likely at the expense of diesel.

The platinum price remained below $850/oz last week. With significant demand cuts pushing the market into a surplus of around 1.4 moz (excluding investment) this year, there is further room to fall.
Anglo American Platinum’s (AAP) PGM production contracted by 41% to 665 koz in Q2’20 owing to COVID-19-induced mine shutdowns in South Africa and Zimbabwe, including 228 koz of palladium (-35% year-on-year). Total 6E refined production (excluding tolling) fell by 67% to 407 koz, primarily due to the closure of the Anglo Converter Plant B Unit for repairs, which was out of use for 54 days (A unit repairs are expected to be completed by year-end). As a result, palladium sales slumped by 65% to 161 koz in Q2. However, with open-pit and mechanised operations now operating at, or close to, 100% capacity, AAP maintains its guidance for the year, including refined palladium production of 1-1.5 moz. Supply was boosted by strong performance at Mogalakwena, a palladium-rich open-pit mine which was granted the right to restart surface operations shortly after lockdown began in March, drawing down ore stockpiles. AAP is the largest palladium producer in South Africa (41% of SA Pd supply last year), but as output from Russia and North America has been largely unaffected by the pandemic, global palladium mine supply is estimated to drop by only 10% this year, around 730 koz. COVID-19 is expected to have impacted palladium supply less than demand this year, and as a result the market is forecast to be more balanced (compared to a ~670 koz deficit last year). The palladium price bounced around and broke through $2,000/oz last week, although it is unclear what is moving the market (besides AAP results).

Rhodium output limited by slow ramp-up of conventional mines in South Africa. AAP’s Q2’20 results revealed that conventional operations were still achieving only 50% of targeted production levels at the end of June, compared to 90-100% for other more mechanised operations in South Africa and Zimbabwe. Furthermore, it is expected that conventional operations in South Africa will reach only 85% by the end of the year. It is likely that other labour-intensive conventional mines in South Africa are also struggling to ramp up production owing to the strict implementation of COVID-19 prevention methods. Production from conventional operations is estimated to have dropped by up to 50% in the first half of the year, compared to around -25% for mechanised operations and -5% for open pit. Zimbabwe’s production is estimated to have fallen by around 10% in H1’20. Deep conventional mines in South Africa accounted for 44% of the country’s rhodium mine supply last year (~350 koz).

Rhodium supply is forecast to be impacted more than platinum or palladium this year, owing to the concentration of rhodium from South Africa (81% of global mine output in 2019). Ruthenium (90% of 2019 supply from SA) and iridium (81%) supply is also heavily impacted by COVID-19 this year, for the same reasons as rhodium.

The rhodium, iridium and ruthenium prices held steady for the third consecutive week.
Silver ETFs

Gold silver ratio

European car sales

PGM 3E market balance (Pt, Pd, Rh)

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