



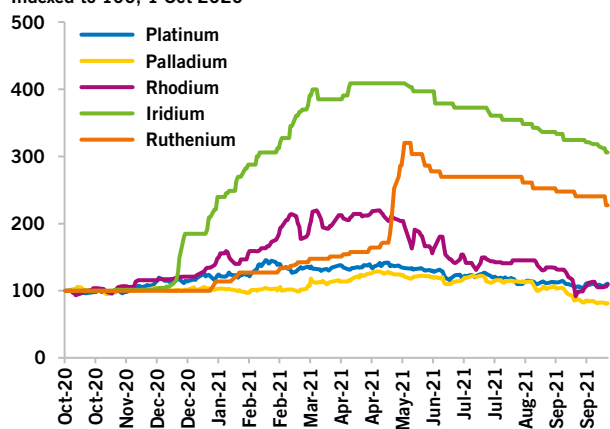
## MARKET SPOTLIGHT

### Iridium is the stand-out metal of 2021, but is the best yet to come?

Iridium has been the best-performing PGM over the last 12 months, up over 300% since last October. Ruthenium is the second-best performer, gaining over 200% since this time last year, while platinum and rhodium are close to flat on a year-on-year basis. Palladium is now 20% lower than it was in October 2020. Although the iridium price has pulled back slightly from the peak in May, with a lower volatility compared to other metals, the price is expected to remain elevated for longer even as refined output from South Africa returns to normal.

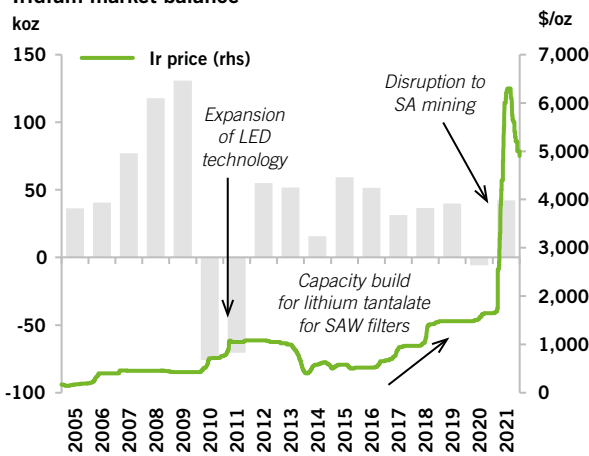
PGM prices

Indexed to 100, 1 Oct 2020



Source: SFA (Oxford), Heraeus, Bloomberg

Iridium market balance



Historically, price drivers for iridium have been centred around demand, particularly from the electrical sector. In 2011, rapid expansion of iridium crucible manufacturing capacity to meet LED growth saw the iridium price reach a then record high of \$1,200/oz. Capacity build for lithium tantalate for SAW filters was partly responsible for the rally in 2016/17. For the first time, it was a supply event that drove the price to record highs this year, with disruption to refined output from South Africa having a significant impact on the smallest PGM market. The size of the iridium market (250 koz), compared to platinum (6,800 koz) or even ruthenium (1,000 koz), means any slight shift to either supply or demand is amplified.

Rapid expansion of the hydrogen economy is expected to lift iridium demand over the next few years, particularly from the growth of green hydrogen production via PEM electrolysis. Iridium hydrogen demand is forecast to exceed 20 koz by the middle of the decade (from <1 koz last year), owing to substantial additional electrolyser capacity, particularly in Europe. Although PGM prices have collectively pulled back from the peak earlier in the year, the basket price remains at a high level by historical standards and producers are continuing to mine and process lower-grade, previously uneconomic areas at a profit. Supply creep from low-grade material and tailings, with the addition of replacement projects, is expected to keep the iridium market well supplied in the near term, which supports demand growth across all sectors, particularly hydrogen.



# PRECIOUS METALS REVIEW

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## Au Gold

	Close	Weekly change	High	Date	Low	Date
\$/oz	1,759	-0.18%	1,781	08/10/2021	1,746	06/10/2021
€/oz	1,520	0.03%	1,540	08/10/2021	1,503	04/10/2021

**A summer slump for central bank gold demand.** Central banks bought 28.4 tonnes of gold in August, down 9% from July, as the pace of buying continues to slow. After a peak of ~165 tonnes in March, central bank demand has been gradually declining since. Central bank activity in H1'21 was characterised by one-off large purchases from a few individual banks, but this has been largely absent for the past two months. If this continues for the remainder of the year, central bank demand in 2021 is expected to remain below the levels of demand seen

in 2018 (656 t) and 2019 (605 t), although it will be higher than 2020 (255 t). Central banks account for around 14% of gold demand each year (source: World Gold Council). The wrangling over the US debt ceiling and impasse over the Democrats' spending plans is increasing uncertainty over economic recovery prospects the longer it remains unresolved. However, this will be resolved eventually, so it is not adding to gold's allure as a safe haven, and the price remains range-bound.

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## Ag Silver

	Close	Weekly change	High	Date	Low	Date
\$/oz	22.77	0.97%	23.19	08/10/2021	22.21	06/10/2021
€/oz	19.68	1.21%	20.04	08/10/2021	19.17	04/10/2021

**Silver remains under pressure from its industrial exposure** and the impact of the ongoing semiconductor shortage, which is limiting output of a range of silver-containing electrical items including cars, smartphones and televisions. Silver is a component of almost all electrical

and electronic devices owing to its high conductivity, and it accounted for 304.3 moz last year (source: The Silver Institute). With a high dependency on industrial growth, concerns of an increasingly unstable US and global economy are weighing on the silver price.

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## Pt Platinum

	Close	Weekly change	High	Date	Low	Date
\$/oz	1,026	4.78%	1,043	08/10/2021	946	06/10/2021
€/oz	887	5.02%	901	08/10/2021	815	04/10/2021

**Potential labour strikes could hit South African platinum output in 2022.** Wage agreements are up for renewal in mid-2022, and as producers have been making record profits, unions are likely to push for large wage rises. However, producers' costs have also increased significantly. Sibanye-Stillwater is currently in negotiations with the AMCU and NUM at its gold operations and has stated that it would accept a strike if a dispute is not resolved. There is a possibility this could be repeated in the PGM sector as well. Besides Sibanye-

Stillwater, Anglo American Platinum and Impala Platinum also have wage negotiations next year. In 2014, South African supply fell by around 30% year-on-year to 3 moz as a result of protracted strike action by the AMCU, which affected Anglo's Rustenburg (now Sibanye-Stillwater's) and Union mines, Impala's Lease Area and Lonmin's Marikana mine (now Sibanye-Stillwater's). The platinum price closing above \$1,000/oz last week for the first time in almost two months is a positive sign for the metal.



# PRECIOUS METALS REVIEW

## <sup>46</sup> Pd **Palladium**

	Close	Weekly change	High	Date	Low	Date
\$/oz	2,076	7.82%	2,094	08/10/2021	1,849	06/10/2021
€/oz	1,793	7.99%	1,796	08/10/2021	1,603	06/10/2021

**General Motors sets its sights on an electrified future.** General Motors (GM) owns the Buick, Cadillac, Chevrolet and GMC brands, and is one of the largest automakers in the US. The company plans to double annual revenue by 2030, from a five-year average of about \$140 bn, as it steers away from gasoline vehicles toward EVs. GM has already committed to spending \$35 bn on EVs by 2025, with plans to no longer make ICE vehicles after 2035, and recently disclosed plans to increase EV manufacturing capacity so that half of its plants in North America and China will be able to make them by the end of the decade. GM plans to launch an electric version of its best-selling Chevrolet Silverado pickup

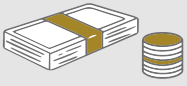
truck next year, which is expected to rival Ford's electric F-150 and so offer electrified versions of two of the most popular vehicles in North America. Despite EV pledges from automakers, gasoline ICE vehicles are expected to dominate the US market for the foreseeable future as there are still relatively limited incentives for consumers to electrify (or penalties on use of ICE). This will secure palladium demand in this region at least. North America is the second-largest palladium autocatalyst demand sector, accounting for around 1.8 moz annually. Palladium was the outperformer last week, closing above \$2,000/oz.

## <sup>45</sup> Rh <sup>44</sup> Ru <sup>77</sup> Ir **Rhodium, Ruthenium, Iridium**

	Rhodium	Ruthenium	Iridium
Reporting week	\$15,350/oz	\$670/oz	\$5,050/oz
Previous week	\$14,800/oz	\$710/oz	\$5,200/oz

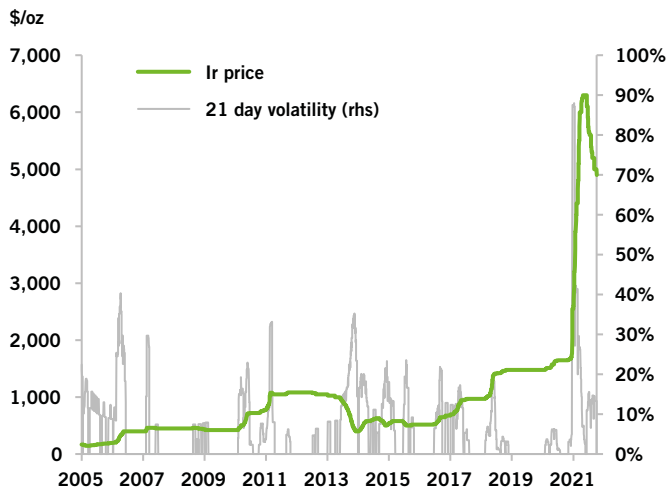
**Rhodium-rich mines in South Africa could be impacted by possible strike action next year.** Wage negotiations with unions are up for renewal for several key producers from mid-2022. Notably, the labour-intensive UG2 operations on the Western Limb, including Rustenburg, Marikana and Impala Lease Area, are rich in rhodium, so possible strikes at those mines could impact rhodium supply in

2022. The effects of strike action in 2014 cut around 160 koz from rhodium supply that year (-22% year-on-year) and was actually the worst affected of the three main PGMs, as closures disproportionately impacted marginal UG2 sections. The iridium and ruthenium prices both moved lower last week, by 3.8% and 5.6% respectively, while rhodium edged back over \$15,000/oz.



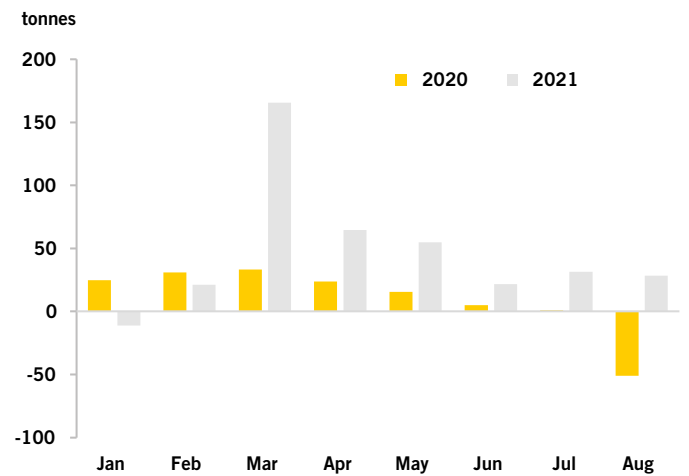
# TRENDS AND INVESTMENTS

## Iridium price volatility



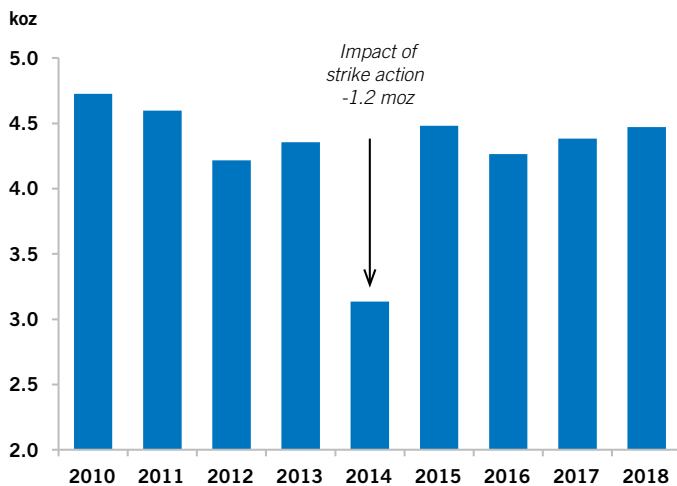
Source: SFA (Oxford), Bloomberg

## Central bank net gold demand



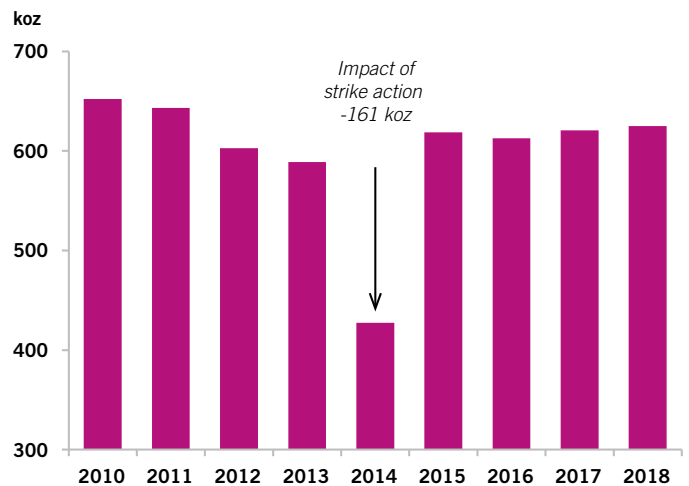
Source: World Gold Council

## SA platinum supply



Source: SFA (Oxford)

## SA rhodium supply



Source: SFA (Oxford)

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