

PRECIOUS APPRAISAL



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4th December 2023

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PRECIOUS METALS REVIEW

Gold



	CLOSE	WEEKLY CHANGE	HIGH	DATE	LOW	DATE
\$/oz	2,067	3.37%	2,068	01/12/2023	2,001	27/11/2023
€/oz	1,900	3.87%	1,900	01/12/2023	1,829	27/11/2023

Bets on peak interest rates, helping to boost the gold price. Traders are now pricing in that the Fed and the ECB will be more dovish in the first half of the new year, which bodes well for gold but not for the economy. European CPIs came in softer than expected last week, signalling that the ECB was right to pause rate rises at its last meeting and that its monetary policy is working as intended. The latest Fed interest rate futures imply a 40% probability that the US central bank will begin cutting rates by March 2024. This represents a shift in market attitude away from the ‘higher for longer’ narrative that as recently as mid-October had prompted traders to see first cuts coming only in June. This pivot in market sentiment has weakened the dollar and helped to supercharge the recent rally in the gold price, even as the geopolitical landscape in the Middle East has cooled somewhat.

Money is seeping back into bullion funds. Gold outflows from ETFs slowed in November, perhaps representing some improvement of investor sentiment, though the trend is yet to convincingly reverse. Year-to-date, gold funds have seen net outflows of 7.7 moz. Though the rate of outflows fell to the lowest rate since April last month, net holdings still declined by 390 koz, showing there is still ground to be made up. A return to net inflows would show a reversion to the norm of ‘higher gold price = increase in holdings’ that has broken down since the start of the current rally in gold. If these trends realign, the gold price could be pushed even higher.

The gold price finished last week 3.37% stronger at \$2,067/oz, just below all-time highs before surging past this level early in Asian trading this morning. Gold rose as high as \$2,146/oz, more than 3% higher than the previous intra-day all time high of \$2,082/oz. The price has since given back those gains, though \$2,000/oz to \$2,050/oz could now act as a zone of support.

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Silver



	CLOSE	WEEKLY CHANGE	HIGH	DATE	LOW	DATE
\$/oz	25.50	5.12%	25.51	01/12/2023	24.26	27/11/2023
€/oz	23.43	5.60%	23.43	01/12/2023	22.20	27/11/2023

The magnitude of solar industry growth becomes clear as year-end approaches. Global new solar installations are forecast to escalate by 64% to a record 413 GW this year (source: BNEF), an upward revision of the previous forecast of 395 GW. Along with installations, silver demand from the solar power industry is expected to reach new highs this year of ~190 moz. As well as a much greater volume of installations, solar cell types with higher average loadings are becoming more popular owing to their higher efficiency. However, thrifting of silver is still ongoing in order to reduce costs. Growth in annual installed capacity in China has been the driver of the recent rapid growth, but installations outside of China are also forecast to accelerate.

Silver marked a third week of solid gains, ending November 11% higher month-on-month. Thursday's close above \$25/oz was the highest monthly close since August 2021, and by the end of Friday the silver price stood at \$25.50/oz.

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Platinum

⁷⁸ Pt	CLOSE	WEEKLY CHANGE	HIGH	DATE	LOW	DATE
\$/oz	933	0.20%	951	28/11/2023	915	27/11/2023
€/oz	858	0.73%	864	28/11/2023	837	27/11/2023

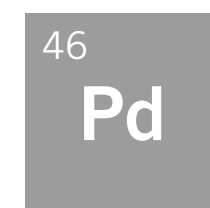
A darker outlook for South Africa's electricity supply is a risk to platinum production. The latest update from South Africa's state energy supplier, Eskom, suggests that the recent increase in load-shedding intensity may be here to stay. Eskom's base-case forecast includes at least some load-shedding on nearly every day until March 2025, at the average level of unplanned outages seen so far this year. If outages are higher than expected, and load-shedding reaches Stage 4 or higher, PGM producers begin to feel the impact at processing facilities. Excess work-in-progress (WIP) stocks grew in H1'23 as load-shedding meant producers struggled to process stocks built up during routine smelter maintenance. High-level load-shedding had been less frequent in H2'23 until last week, which may have accelerated the drawdown of these stocks. Impala Platinum plans to process much of its WIP material next year, bringing South Africa's platinum supply forecast to 2.4 moz in 2024. However, this plan is at risk of being delayed if load-shedding intensity remains elevated. Consequently, refined platinum production could be delayed into late 2024 or 2025, as Impala is also planning a smelter rebuild in 2024.

A serious incident has halted production at one of Impala's PGM shafts. Production was paused temporarily this week across all of Impala's Rustenburg operations when 12 people lost their lives in a serious incident at 11 Shaft. Work at both 11 Shaft and 11C Shaft will be suspended until internal investigations, repairs and remedial actions have been completed, while the other shafts are now back in operation. During Impala's FY23 (year-end June), 11 Shaft produced 173 koz 6E (~95 koz Pt), the third-largest output of the shafts at its Rustenburg operations. Some mine production will be lost during the shaft closure, but the volume of losses is unclear at this point as the length of the stoppage is yet to be determined. Refined production may not be much impacted as the company has some stockpiled material that could be processed earlier.

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Palladium



	CLOSE	WEEKLY CHANGE	HIGH	DATE	LOW	DATE
\$/oz	1,005	-6.23%	1,090	27/11/2023	992	01/12/2023
€/oz	923	-5.91%	995	27/11/2023	912	01/12/2023

Palladium-rich North American supply may be at risk. Sibanye-Stillwater announced last week that its US operations will cut the contract workforce by ~70% and reduce employee headcount to control costs. This is a reaction to the lower palladium price environment, which is particularly important for Stillwater mine as an estimated 75% of mine revenue is derived from the palladium produced, against an average of 21% for South African PGM mines in 2023. Sibanye-Stillwater says it expects no significant impact on palladium production from the headcount reduction. However, it is possible that earlier plans to increase production to ~700 koz 2E (~540 koz Pd) by 2027 may be cut back, and if the palladium price continues to fall, more action may need to be taken. Stillwater mine is expected to yield ~320-330 koz of palladium this year, roughly in line with 2022 production. It has also been reported that Impala Canada is contemplating a shift in business strategy owing to lower PGM prices, and this could also have a potential impact on supply. North American palladium supply is estimated to reach 920 koz next year, but this could be at risk if mines are forced to take further action.

European new car sales growth, and thus palladium demand, is forecast to decline next year. The ACEA's latest outlook sees new car sales growth slowing to 2.5% in 2024 from approximately 12% this year. It also sees the market share of BEVs growing significantly from ~15% this year to >20% in 2024 which could be a blow to European palladium autocatalyst demand. Automotive palladium demand in Europe is forecast to contract slightly next year to 1.1 moz. The growth in BEV sales plus the less impactful but still present reverse substitution of platinum for palladium in European autocatalysts are expected to offset the marginal gain from growth in overall vehicle market size.

After two stronger weeks, the palladium price reverted to its downward trend last week, declining by 6.23% but holding just above \$1,000/oz. If the platinum price were to break resistance at \$941/oz and move higher, we could see parity with palladium sooner rather than later.

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Rhodium, Ruthenium, Iridium



	RHODIUM	RUTHENIUM	IRIDIUM
Reporting Week	\$4,850/oz	\$475/oz	\$5,500/oz
Previous Week	\$4,900/oz	\$475/oz	\$5,500/oz

Green hydrogen funding could be a casualty of Germany’s constitutional court ruling. €60 billion earmarked for transfer to green hydrogen and other renewables projects has been stopped by the German constitutional court, leaving a sizeable hole in the government’s budget for 2024. It is clear that this will affect funding for various schemes and incentives that form the government’s hydrogen strategy, though exactly where and how is currently unclear. The goal of producing 10 GW of green hydrogen by 2030 may be at risk if funding is not found, which has implications for iridium demand.

The rhodium price moved lower again last week, whereas iridium and ruthenium both remained stable.

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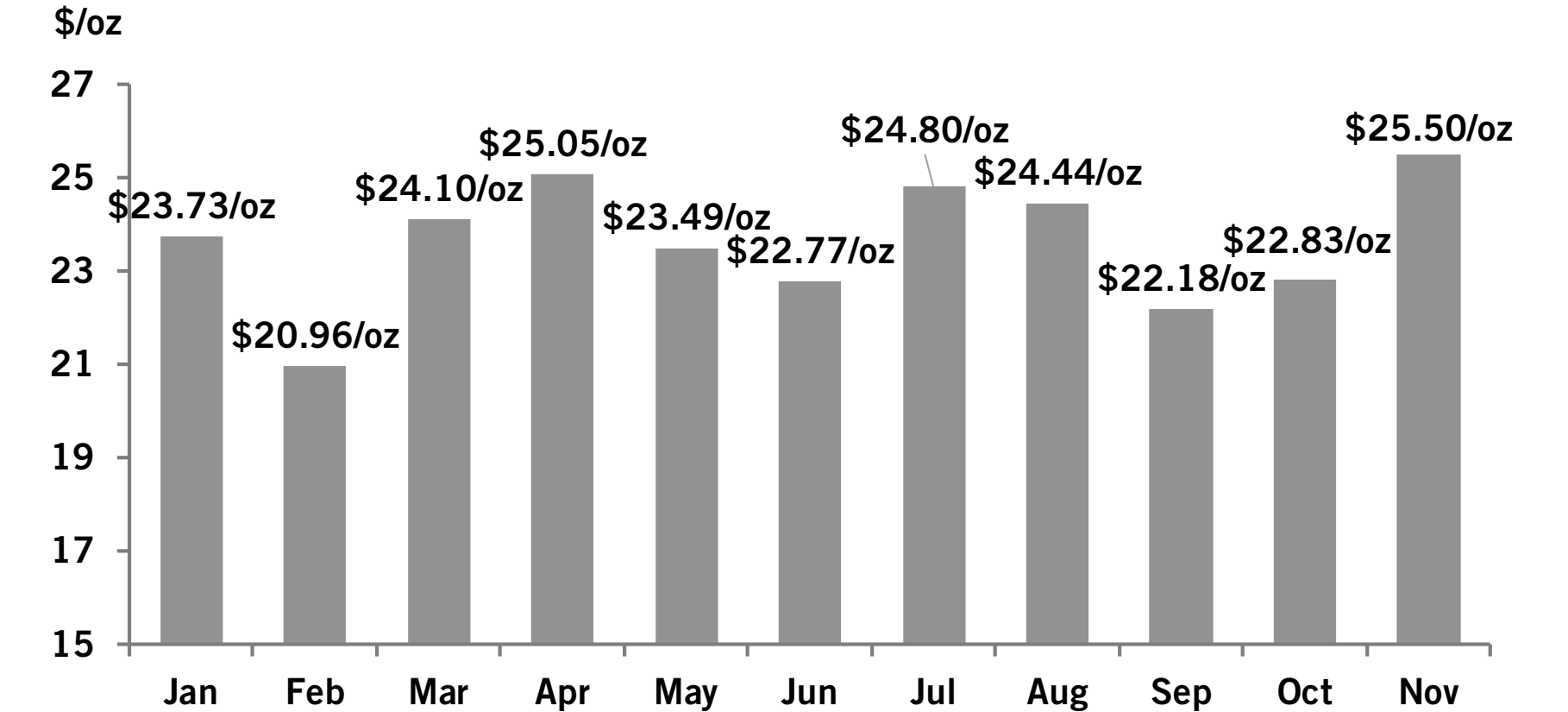
TRENDS AND INVESTMENTS

Gold price vs. ETF holdings



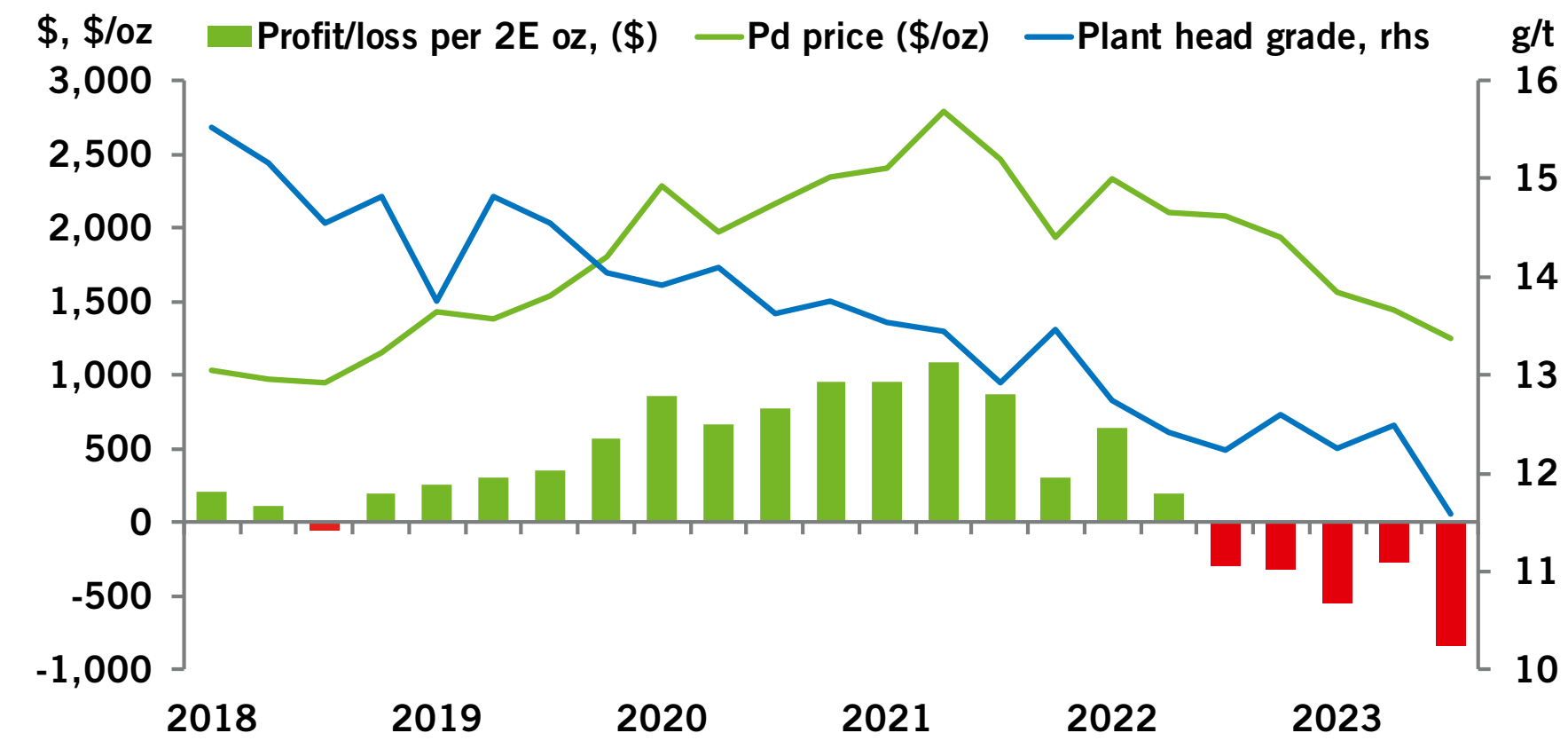
Source: SFA (Oxford), Bloomberg

Silver monthly closes, 2023



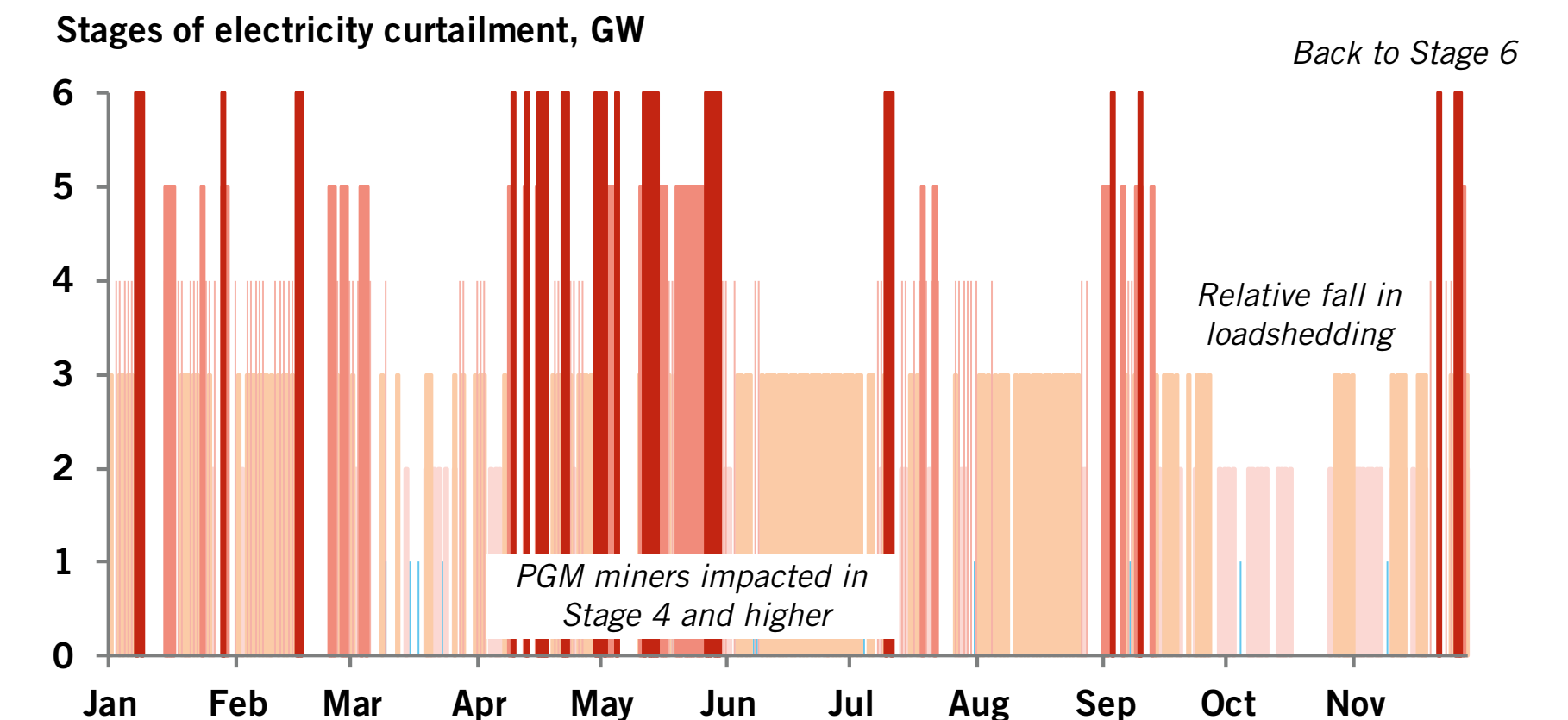
Source: SFA (Oxford), Bloomberg

Stillwater Mine profit/loss per 2E PGM oz



Source: SFA (Oxford), Sibanye-Stillwater. 2E PGM = platinum + palladium. Note: Profit/loss = 2E basket price - All-in Cost

South Africa loadshedding, 2023



Source: SFA (Oxford), EskomSePush

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