

PRECIOUS APPRAISAL



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13th February 2023

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PRECIOUS METALS REVIEW

Gold

⁷⁹ Au	CLOSE	WEEKLY CHANGE	HIGH	DATE	LOW	DATE
\$/oz	1,858	-0.53%	1,890	09/02/2023	1,853	10/02/2023
€/oz	1,742	0.92%	1,758	07/02/2023	1,728	10/02/2023

Jobs data prompt traders to 'sell bonds - buy the dollar', hurting gold.

The US economy added more than 500,000 new jobs in January, much higher than the 185,000 expected. The far stronger than anticipated figure triggered a sell-off in US government debt as traders reassessed the Federal Funds Rate (FFR) outlook higher. For the Federal Reserve to pivot, both inflation and employment will have to cool further, although by exactly how much is uncertain. More interest rate hikes will strengthen the dollar and put downside pressure on gold, but how much further the Fed can raise rates is called into question by the relationship between the FFR and the 2-year Treasury bond yield. The yield on the 2-year bond has not been above the FFR since the 50 bp hike on 14 December. The 2-year yield and FFR typically have a positive relationship. When short-term yields have fallen below the FFR in the past, the Fed's next move has been a pause or a cut in rates. February's Federal Open Market Committee (FOMC) meeting and 25 bp hike is the first time since 1981 that a hike has followed when the 2-year yield was lower than the FFR. A great deal could change in the 37 days until the next FOMC meeting, at which traders currently see another 25 bp being added to interest rates. When rates are finally cut, the dollar is likely to weaken, which is broadly supportive for the gold price. Until then, if hikes persist, gold is expected to be under pressure.

Newmont spots a golden opportunity in previous spin-out Newcrest.

Gold mining M&A has been punctuated by several large transactions over the last year. Agnico Eagle's takeover of Kirkland Lake Gold, and Yamana Gold's split between Agnico and Pan American Silver are due to conclude in the coming weeks. Newmont's recent proposal for a takeover of Australian miner Newcrest for \$17 billion would be the largest ever gold mining takeover in dollar terms, and boost Newmont's production to ~8.4 moz, or more than 7% of 2022 global gold production, highlighting miners' preference to expand by acquisition rather than make new discoveries. Gold exploration spending increased by an estimated 12% to \$6.9 billion last year (source: S&P Global). The majority of this was spent at mine sites rather than on developing new resources.

Following the key reversal at the beginning of February, gold showed some resilience above \$1,860/oz, adding gains to start last week. Gold eventually finished the week lower week-on-week at \$1,858/oz.

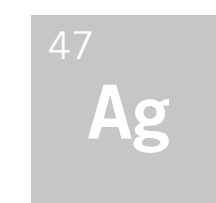
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Silver



	CLOSE	WEEKLY CHANGE	HIGH	DATE	LOW	DATE
\$/oz	21.93	-2.00%	22.61	06/02/2023	21.83	10/02/2023
€/oz	20.56	-0.57%	20.97	06/02/2023	20.37	10/02/2023

The US expects a boost to solar installations this year. More than half of new electricity generating capacity added in the US will be solar if all planned projects go ahead. The US solar market is set to add 29.1 GW of new utility-scale photovoltaic (PV) installations in 2023 (source: US Energy Information Administration). If that new capacity goes online as planned, 2023 will have the largest new utility-scale PV capacity added in a single year, more than twice the previous record of 13.4 GW in 2021. These additions could account for ~13 moz of silver in PV cell manufacturing. Supply chain and pandemic-related disruption slowed US installations last year, but an improving supply chain situation in China and falling polysilicon prices will contribute to installations ramping up in the US and elsewhere. Global PV silver demand is forecast to reach record highs of around 150 moz this year, as growing installations outweigh thriftiness of silver and the development of silver alternatives for charge conduction in PV panels.

Silver dials in new lows for the year, falling below \$22/oz. Silver underperformed gold, finishing the week down 2%.

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Platinum

⁷⁸
Pt

	CLOSE	WEEKLY CHANGE	HIGH	DATE	LOW	DATE
\$/oz	949	-3.25%	992	08/02/2023	948	10/02/2023
€/oz	889	-1.88%	923	08/02/2023	887	10/02/2023

Processing plant maintenance, rather than power problems, to blame for most South African supply constraints. Year-end production results for the two of the largest of South Africa's platinum producers highlight that although the issues with load-shedding have dominated headlines as impacting platinum production, the majority of stock build-up has been the result of smelter refurbishment and associated downtime that has introduced a lag between mined and refined production. Anglo American Platinum (AAP) had ~350 koz 6E PGMs in above-ground stocks at the end of 2022. Additionally, Impala Platinum reported a build-up of approximately 140 koz 6E PGMs for a combined contained metal value of ~\$1 billion. Most of AAP's build-up was the result of delays to the Polokwane smelter rebuild, and Impala cites the impact of load-shedding on refined production of 38 koz 6E PGMs in the six months ending 31 December 2022. Combined, this equates to approximately 220 koz of platinum locked up, equivalent to ~3% of average primary platinum production over the last five years. This contributes to a tightening of the platinum market, though the market is still expected to be in a surplus this year.

Platinum remained below \$1,000/oz last week but is oversold which could see the decline pause. However, while the dollar strengthens against the rand, the platinum price could remain under pressure.

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Palladium

⁴⁶
Pd

	CLOSE	WEEKLY CHANGE	HIGH	DATE	LOW	DATE
\$/oz	1,554	-3.97%	1,688	08/02/2023	1,551	10/02/2023
€/oz	1,456	-2.55%	1,568	08/02/2023	1,453	10/02/2023

International automotive markets shift up a gear. India, one of the fastest growing automotive sales regions and the fifth-largest in terms of automotive palladium demand, recorded strong growth in the passenger sales market to start off 2023. Passenger vehicle sales rose by 22% year-on-year and by 8% from January 2020 (pre-Covid) to 340,000 units in January, making India the fourth-largest market behind Japan. The outlook for light-vehicle sales, and therefore palladium demand, is positive in India compared to the rest of the major global economies. Increased scrappage funding and general income tax rebates announced in India's latest budget are likely to boost new vehicle sales in 2023 owing to replacement demand and higher disposable income, respectively. India's palladium demand is forecast to grow by 6% in 2023, while global demand could see a decline of 1.7% to 7.6 moz. International Monetary Fund projections place India's 2023 economic growth above all other major economies at 6.1% year-on-year. For comparison, other major palladium markets, the US and Germany, are forecast to grow by 1.4% and 0.1%, respectively. Auto sales were also up year-on-year in the US and UK in January.

Another week, another cycle low for the palladium price. Speculators' net short position in palladium continues to grow to a six-month high of 650 koz as the palladium price dropped to \$1,551/oz intra-week. Platinum's discount to palladium closed in on \$600/oz during last week, the smallest discount since September 2019. Given the downside risk to autocatalyst demand from potential recessions, the palladium price could continue lower.

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Rhodium, Ruthenium, Iridium



	RHODIUM	RUTHENIUM	IRIDIUM
Reporting Week	\$13,550/oz	\$515/oz	\$4,750/oz
Previous week	\$13,500/oz	\$515/oz	\$4,750/oz

Green policy in India will boost hydrogen electrolyser production.

Following the recent announcement of \$2 billion in public funding for India's National Green Hydrogen Mission, the European Investment Bank and the India Hydrogen Alliance will provide an additional \$1 billion to support large-scale green hydrogen projects across India. The Indian government's National Green Hydrogen Mission aims to level-up the country's self-reliance for the entire hydrogen economy and plans to provide direct financial incentives for electrolyser manufacturing. If proton exchange membrane (PEM) electrolysers are the technology of choice for its domestic industry, this could be positive for iridium demand. The government's plan over the next eight years is to develop manufacturing of electrolyser components, including catalyst-coated membranes and membrane electrode assemblies.

The rhodium price edged up last week, while ruthenium and iridium remain stable.

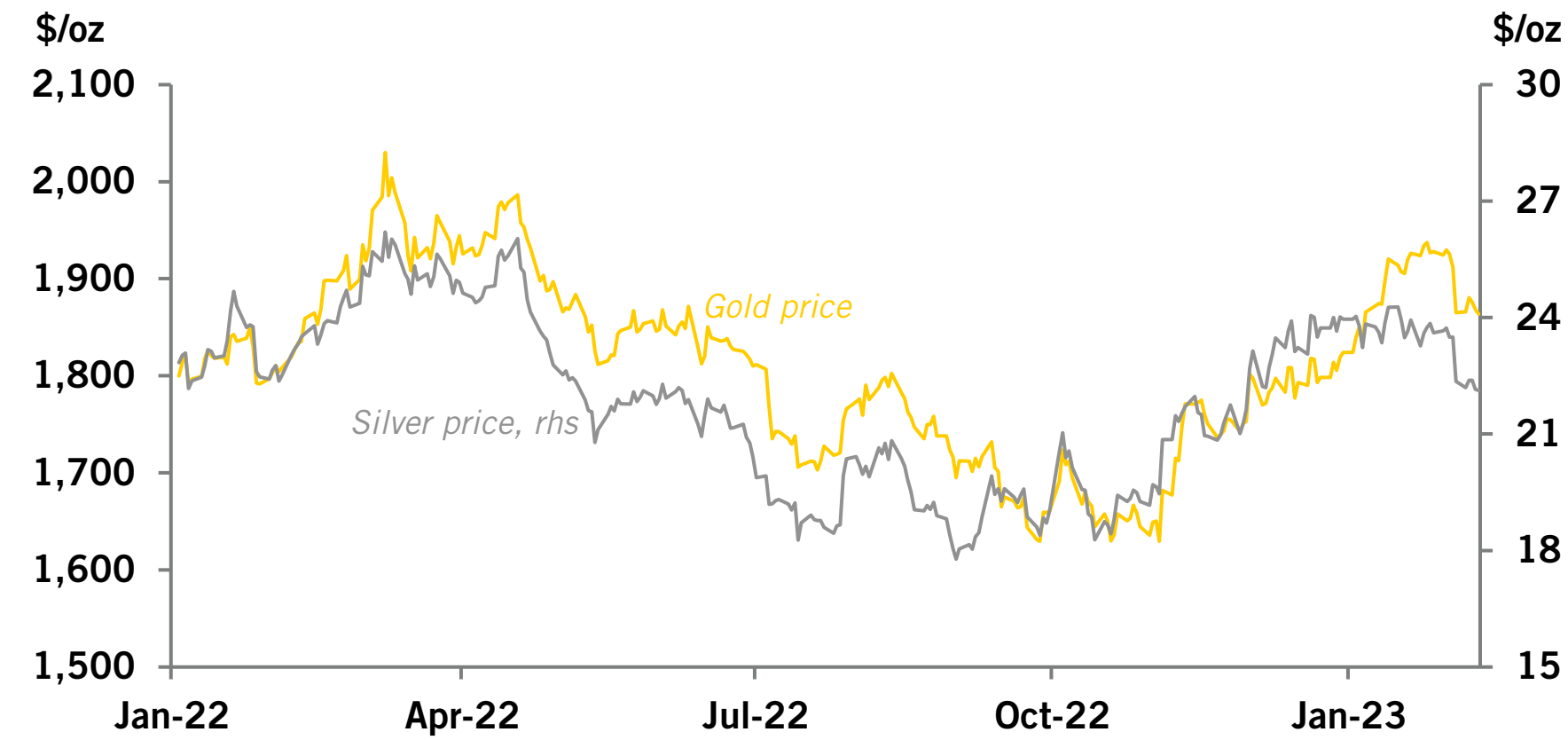
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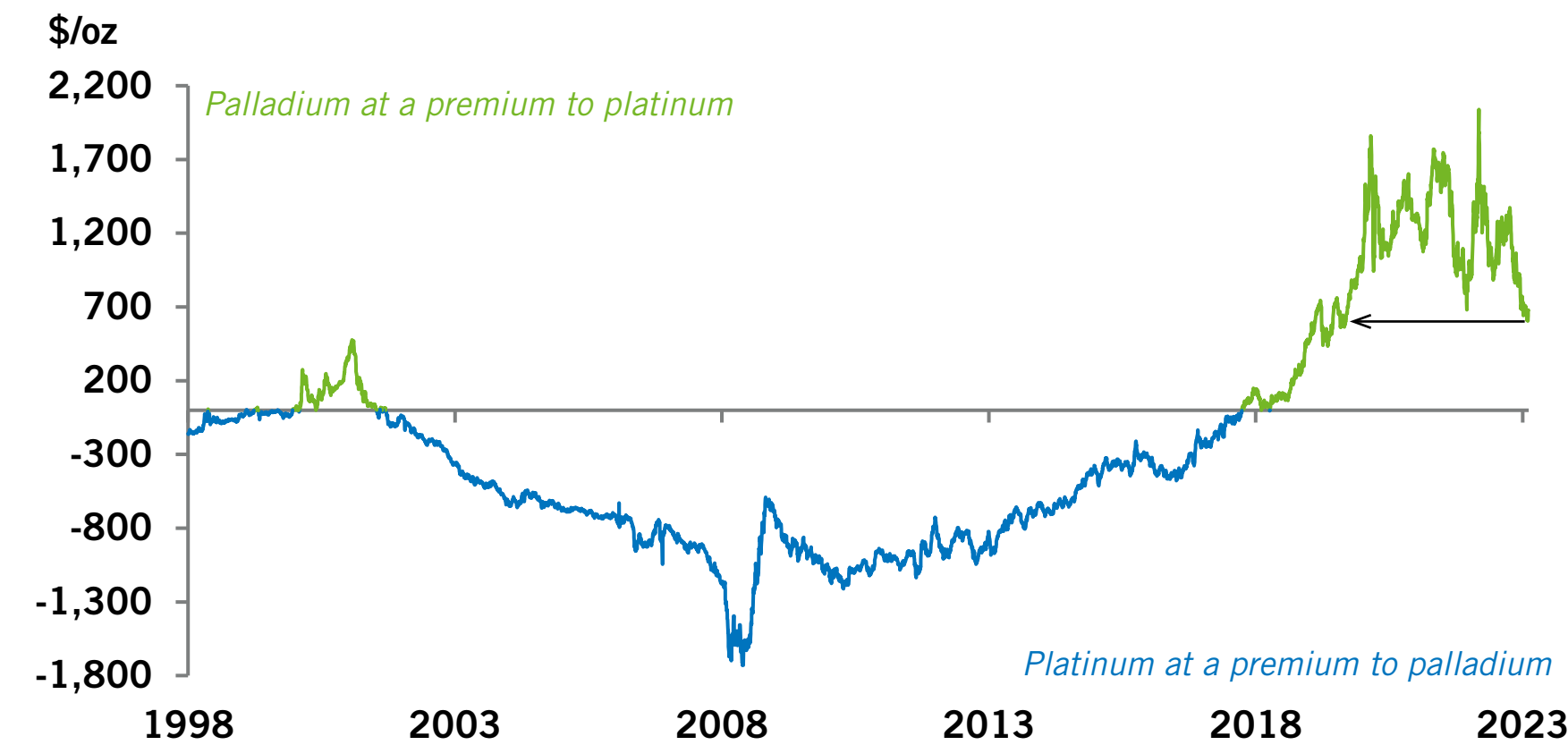
TRENDS AND INVESTMENTS

Gold price vs. silver price



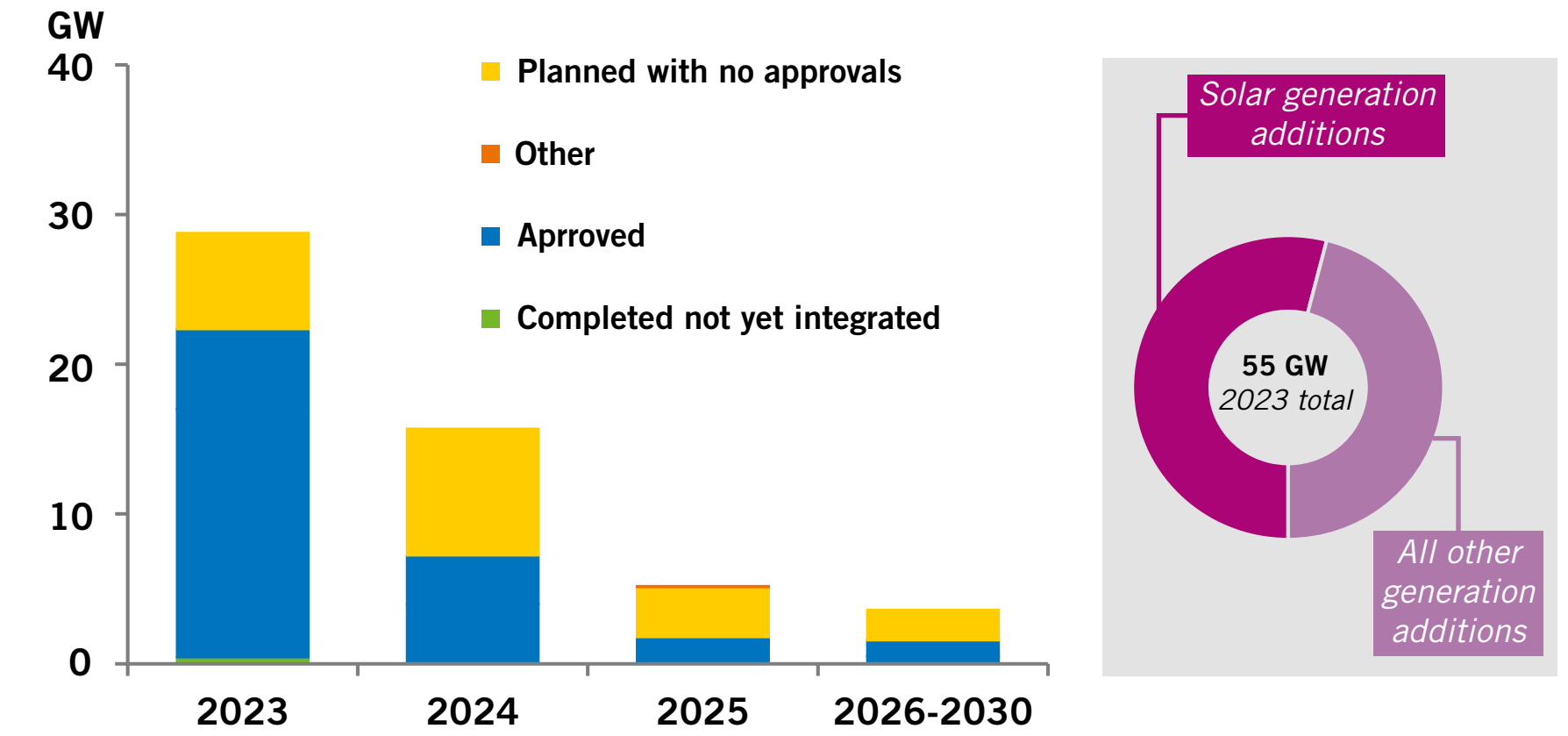
Source: SFA (Oxford), Bloomberg

Palladium's premium to platinum



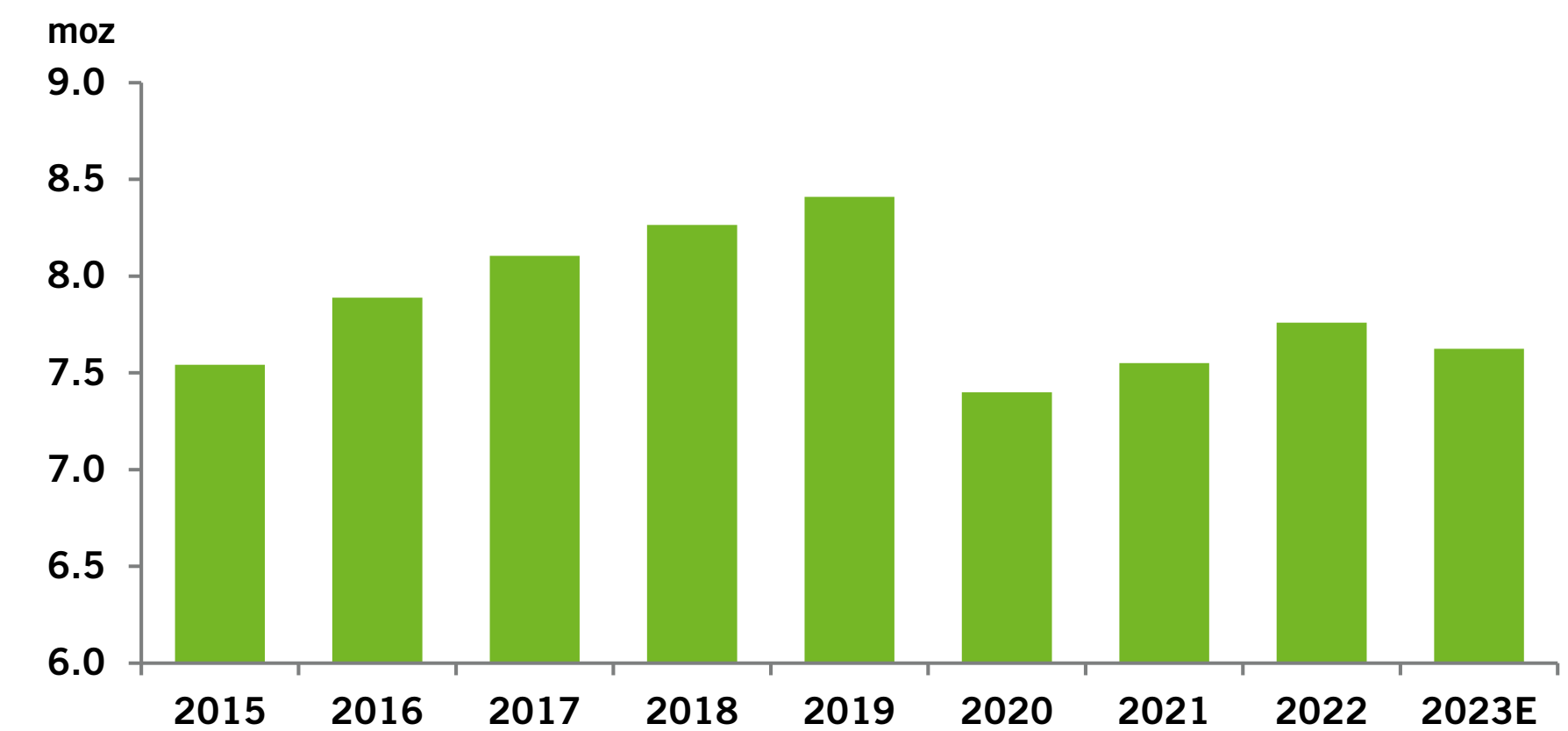
Source: SFA (Oxford), Bloomberg

Planned generation additions to US grid, 2023



Source: SFA (Oxford), US Energy Information Administration

Global palladium autocatalyst demand



Source: SFA (Oxford)

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