

PRESS RELEASE

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Platinum deficit of 556 koz forecast in 2023, as strong demand growth outstrips constrained supply

- Platinum deficit forecast for 2023 as demand to grow by 24%, while supply by just 3% due to severe constraints
- Automotive demand set to rise 10% in 2023 on increased platinum for palladium substitution and higher loadings
- Industrial demand in 2023 to increase 12% year-on-year, almost matching its strongest year on record
- Investment demand in 2023 forecast to improve by over 900 koz on strong bar and coin demand and much lower ETF and exchange stock outflows

The World Platinum Investment Council - WPIC® - today publishes its Platinum Quarterly for the fourth quarter of 2022, full year 2022, and a revised forecast for 2023.

After two years of significant surpluses the platinum market is forecast to move to a material deficit in 2023. The change from the 776 koz surplus in 2022 to the forecast deficit of 556 koz in 2023 is over 1.3 Moz. This reflects total supply remaining close to the weak level in 2022, up only 3% to 7,428 koz (+201 koz), and strong demand growth of 24% to 7,985 koz (+1,534 koz).

Supply down 12% in 2022, and expected to remain weakened

Total supply was down in both Q4'22 (-18% year-on-year to 1,739 koz) and full year 2022 (-12% to 7,227 koz), as prevailing headwinds in both mining and recycling supply severely curtailed output.

For 2022, total mining supply declined 11% year-on-year (-659 koz) and is forecast to remain broadly flat in 2023 (+28 koz). Refined mine production in 2022 also declined 11% year-on-year (-718 koz) almost entirely due to lower output from South Africa. Output here declined 24% (-300 koz) year-on-year in Q4'22 as a result of smelter maintenance, operational challenges, and the impact of the country's well-documented electricity supply issues. Meanwhile, Russian production in Q4'22 declined 10% (-18 koz) year-on-year due to logistical challenges impacting the flow of material between Russian and Finnish processing facilities.

Global recycling in 2022 fell 17% year-on-year (-349 koz) on reduced availability of end-of-life vehicles and lower jewellery recycling. Autocatalyst recycling declined as a result of new vehicles' low availability meaning cars are being driven for longer. This was compounded by changes in consumer behaviour as a result of cost-of-living concerns and lower mileage due to remote working. Jewellery recycling was down, primarily due to slower jewellery sales in China impacting sell-backs. Global recycling is expected to recover by 10% in 2023 to 1,856 koz, driven by an increase in the availability of spent autocatalysts, with autocatalyst recycling forecast to recover by 12% to 1,391 koz.

Automotive demand growth trajectory continues into 2023

The global automotive market remained on an improving path during much of last year, showing resilience despite the lingering chip shortage, cost-of-living concerns, the impact of the Russia-Ukraine war, and the severe lockdown in China. Automotive demand for full year 2022 increased by 12% year-on-year (+311 koz), reaching 2,957 koz.



Despite vehicle production remaining short of pre-pandemic levels, a combination of factors are boosting platinum automotive demand growth. Firstly, in 2022, there was a 28% increase in the manufacture of hybrid vehicles, which typically require higher loadings in the aftertreatment system. Secondly, tighter emissions legislation, particularly in China, also resulted in higher loadings (especially in heavy-duty diesel vehicles). Lastly, there was growing platinum for palladium substitution, and, significantly, the increase has meant an upward revision to the substitution estimate by close to 100 koz, to 540 koz for 2023.

With these trends set to continue, global automotive demand is expected to increase by 10% in 2023 to 3,246 koz (+288 koz).

Industrial demand in 2023 forecast to match the strongest on record Industrial demand for platinum is expected to be an area of stand-out strength in 2023, up 12% year-on-year to 2,505 koz (+262 koz), and just 26 koz below the level in 2021, the strongest year on record.

This strong demand growth will be driven by the construction of new LCD capacity installations in Japan and from China's project pipeline as the country's COVID-19 restrictions ease. Within the glass industry, platinum demand will increase by 55% to 737 koz, offsetting modest declines forecast in the chemical (-2%), petroleum (-4%) and electronics (-6%) sectors.

Jewellery demand set to increase as restrictions in China ease

With China, the largest platinum jewellery market, in lockdown for much of 2022, jewellery demand declined by 3% (-59 koz) to 1,894 koz for full year 2022.

As restrictions ease, and consumer confidence returns, 2023 is forecast to see a 15% (+73 koz) demand increase in China. Growth is also expected in Japan and in India. Meanwhile, declines are anticipated in Europe and North America on account of fewer weddings and recessionary fears. In all, global jewellery demand is expected to improve by 2% (+42 koz), growing to 1,936 koz in 2023.

Investment demand recovery forecast in 2023 – improving by over 900 koz Investment demand is expected to improve significantly in 2023. Platinum bar and coin demand is forecast to jump by 100% to 450 koz in 2023, a three-year high, reflecting improved product availability in North America and Europe and net disinvestment in Japan swinging to net investment. Meanwhile, outflows in ETFs (-132 koz) and exchange stocks (-20 koz) will continue to slow, with some renewed interest in South Africa for platinum ETFs in preference to mining equities. The result will mean net investment demand of 298 koz in 2023.

Trevor Raymond, CEO of the World Platinum Investment Council, commented: "From a macro perspective, 2023 is expected to be a difficult year, with an uncertain economic environment, inflationary headwinds, and a global energy crisis. And yet, going against the grain, the platinum market is forecast to be in deficit after two consecutive years of significant surpluses. This year's forecast deficit is unlikely to be a one-off, either, with challenges to supply expected to continue and future demand growth, supported by the needs of the hydrogen economy, likely to result in deficits continuing for a number of years.

"Although power supply risks and operational challenges are included in forecast mining supply for 2023, a worsening of electricity supply shortages in major producer South Africa or sanctions-related operating challenges in Russia present downside risks to supply. In contrast, although demand forecasts include the negative impact of inflation and lower global economic growth, their downside is well protected. Here, strong demand growth results mainly from ongoing platinum for palladium substitution in automotive applications, already committed glass capacity additions, robust bar and coin demand, and the significant outflows from ETFs and exchange stocks having largely run their course.



"Since 2021, we have observed the massive platinum imports into China – which were far in excess of identified demand – much of which have not been captured by our published data. Whether this will reflect actual demand – as we are seeing with the glass capacity expansions in 2023 identified in today's report – or stock held in China, it may not be available to re-enter Western markets to address the deficit in 2023 due to domestic export controls, and so will lead to further market tightening.

"Looking beyond today's report we continue to highlight the strong link between platinum and the hydrogen economy. While hydrogen-related platinum demand is relatively small, it is expected to grow substantially in the medium term; as hydrogen demand becomes meaningful platinum could become a proxy for investors looking for exposure to hydrogen. An emergent new end source of demand for a commodity is a relatively rare occurrence and somewhat unique to platinum at this point in time, which only strengthens the investment case for platinum, particularly in a deficit market".



Total Supply		8.211	6.876	8.235	7.227	7.428	-12%	3%	2.127	1.772	1.73!
Total Supply		8,211	6,876	8,235	7,227	7,428	-12%	3%	2,127	1,772	1,739
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DEMAND									_		_
Automotive	0.44-14	2,870	2,403	2,647	2,957	3,246	12%	10%	681	727	763
	Autocatalyst	2,870	2,403	2,647	2,957	3,246	12%	10%	681	727	763
	Non-road	t	t	Ť	†	Ť	Ţ.			t	
Jewellery		2,106	1,830	1,953	1,894	1,936	-3%	2%	511	481	452
Industrial		2,142	2,096	2,530	2,243	2,505	-11%	12%	631	586	477
industriai	Chemical	679	693	682	629	619	-11%	-2%	188	174	157
		219	109	171	188	180	10%	-4%		48	5
	Petroleum								57		
	Electrical	144	130	135	106	100	-21%	-6%	32	26	2
	Glass	236	407	728	474	737	-35%	55%	142	128	42
	Medical	277	256	269	275	283	2%	3%	67	70	6
	Other	586	501	546	570	587	5%	3%	145	141	134
Investment		1,233	1,536	(53)	(643)	298	N/A	N/A	(111)	(277)	(59
	Change in Bars, Coins	263	571	324	225	450	-31%	100%	92	92	1
	Change in ETF Holdings	991	507	(238)	(560)	(132)	N/A	N/A	(155)	(235)	(67
	Change in Stocks Held by Exchanges	(20)	458	(139)	(307)	(20)	N/A	N/A	(48)	(134)	7
		0.056	7.000	7.07-	0.454	7.005	001	040/	4710	4 545	4.00
Total Demand		8,350	7,866	7,077	6,451	7,985	-9%	24%	1,712	1,517	1,634
Balance		-139	-990	1,158	776	-556	-33%	N/A	416	255	10
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Above Ground Stocks		3.511**	2,521	3,679	4,455	3.899	21%	-12%			

Source: Metals Focus 2019 - 2023

Notes:

1. **Above Ground Stocks 3,650 koz as of 31 December 2018 (Metals Focus).

2. † Non-road automotive demand is included in autocatalyst demand.

-ENDS-

Notes to Editors:

About Platinum Quarterly

Platinum Quarterly is the first independent, freely available, quarterly analysis of the global platinum market. Platinum Quarterly is a World Platinum Investment Council publication. It is largely based upon research and detailed analysis commissioned by WPIC and conducted by Metals Focus, an independent authority on the platinum group metals markets.

About the World Platinum Investment Council - WPIC®

The World Platinum Investment Council Ltd. is a global market authority on physical platinum investment, formed to meet the growing investor demand for objective and reliable platinum market intelligence. WPIC's mission is to stimulate global investor demand for physical platinum through both actionable insights and targeted product development. WPIC was created in 2014 by the leading platinum producers in South Africa. WPIC's members are: Anglo American Platinum, Impala Platinum, Northam Platinum, Royal Bafokeng Platinum, Sedibelo Platinum and Tharisa.



For further information, please visit www.platinuminvestment.com

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About Metals Focus

Metals Focus is one of the world's leading precious metals consultancies. They specialise in research into the global gold, silver, platinum and palladium markets producing regular reports, forecasts and bespoke consultancy. The Metals Focus team, spread across eight jurisdictions, has an exhaustive range of contacts across the world. As such, Metals Focus is dedicated to delivering world-class statistics, analysis and forecasts for the precious metals markets.

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About Platinum

Platinum is one of the rarest metals in the world with distinctive qualities making it highly valued across a number of diverse demand segments. Platinum's unique physical and catalytic properties have established its value in industrial applications. At the same time, its unique precious metal attributes have made it the premier jewellery metal.

Platinum's supply comes from two main sources: primary mining output, and recycling, which typically comes from end-of-life auto catalysts and jewellery recycling. Over the last five years, between 73% and 77% of total annual platinum supply (in refined ounces) has come from primary mining output.

Global demand for platinum is robust and becoming more diverse. There are four core segments of platinum demand: automotive, industrial, jewellery and investment demand.

Platinum demand from autocatalysts has equated to between 31% and 46% of total demand in the last five years. Platinum's diverse non-automotive industrial uses account on average for 30% of total global demand (five-year average). Over the same period, global annual jewellery demand has averaged 27% of total platinum demand. Investment demand is the most variable category over the past five years, ranging between -10% and 20% of total demand (excluding movements in unpublished vaulted investor holdings).

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