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AGENDA: PLATINUM QUARTERLY: Q4 2023, FULL YEAR 2023 AND 2024 FORECAST



1. Introduction

Trevor Raymond, CEO

2. Platinum Quarterly, fundamentals review Edward Sterck

3. Current thematics

Edward Sterck

4. Questions

Trevor Raymond Edward Sterck



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 Supply, demand and balance: Q4 2023, 2023 and 2024 forecast

Edward Sterck, Director of Research

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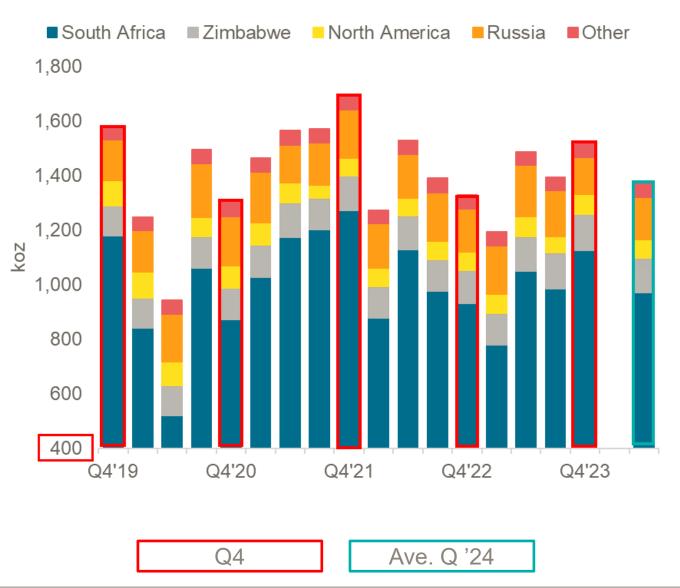
Q4 2023 SUPPLY: TOTAL SUPPLY UP 5% YOY ON MINE SUPPLY PERFORMANCE



SUPPLY	Q4 2022	// Q3 2023	Q4 2023	YoY	QoQ
Refined Production	1,329	1,394	1,516	14%	9%
South Africa	931	985	1,127	21%	14%
Zimbabwe	123	132	133	8%	0%
North America	65	60	72	11%	20%
Russia	160	168	136	-15%	-19%
Other	49	49	48	-2%	-1%
Inc(-)/Dec(+) in Producer Inventory	+23	+16	-11	n/a_	n/a
Total Mining Supply	1,352	1,410	1,505	11%	7%
Recycling	405	357	346	-14%	-3%
Autocatalyst	296	254	244	-18%	-4%
Jewellery	92	85	84	-8%	-1%
Industrial	17	17	18	6%	5%
Total Supply	1,757	1,767	1,852	5%	5%

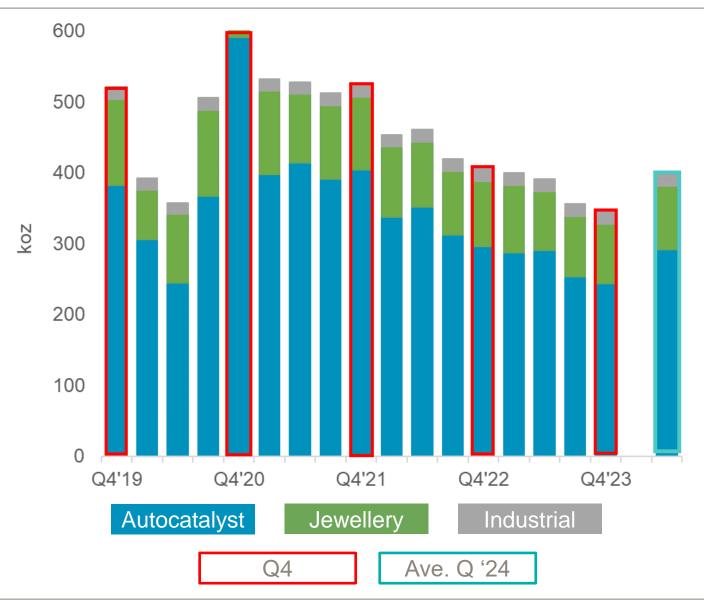
Q4 2023 REFINED MINE SUPPLY: 11% YOY GROWTH UNDERPINNED BY SOUTH AFRICAN REBOUND





Q4 2023 RECYCLING: DOWN 14% YOY ON PERSISTING SUPPLY CHAIN CHALLENGES





Q4 2023 DEMAND: UP 14% YOY ON STRENGTH IN AUTO AND INDUSTRIAL SECTORS



DEMAND	Q4 2022	// Q3 2023	Q4 2023	YoY	QoQ
Automotive	734	791	824	12%	4%
Autocatalyst	734	791	824	12%	4%
Non-road	†		†	†	
Jewellery	463	450	462	0%	3%
Industrial	551	552	730	33%	32%
Chemical	268	123	128	-52%	4%
Petroleum	52	41	41	-20%	1%
Electrical	24	22	22	-6%	1%
Glass	2	149	310	n/a	108%
Medical & Biomedical	68	70	70	3%	0%
Other	138	148	158	15%	7%
Investment	-62	2	-90	n/a	n/a
Change in Bars, Coins	-7	73	42	n/a	-42%
Change in ETF Holdings		-99	-116	n/a	n/a
Change in Stocks Held by Exchanges	7	28	-16	n/a	n/a
Total Demand	1,686	1,795	1,926	14%	7%
Balance	71	-29	-74	n/a	n/a

Q4 2023 AUTOMOTIVE: UP 12% YOY ON THE CONTINUED RECOVERY IN PRODUCTION & SUBSTITUTION GROWTH





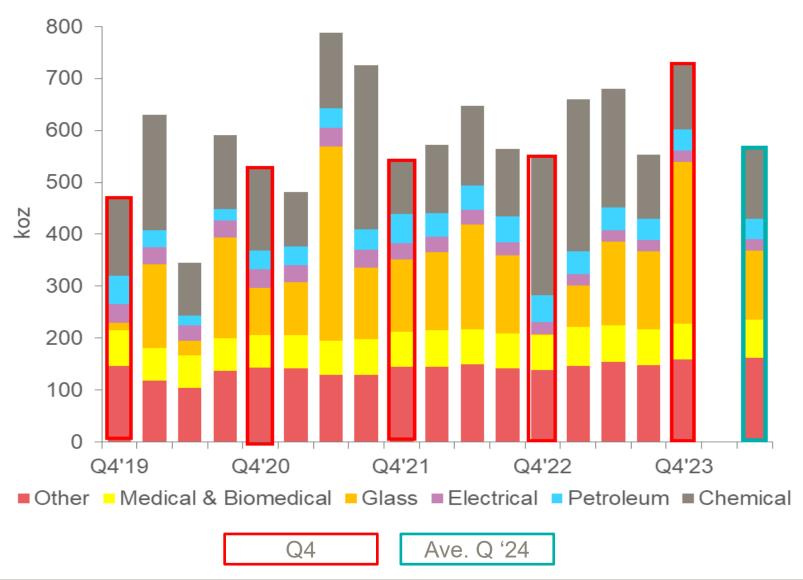
Q4 2023 JEWELLERY: STABLE DEMAND AS CHINA'S SUBDUED APPETITE OFFSET ELSEWHERE





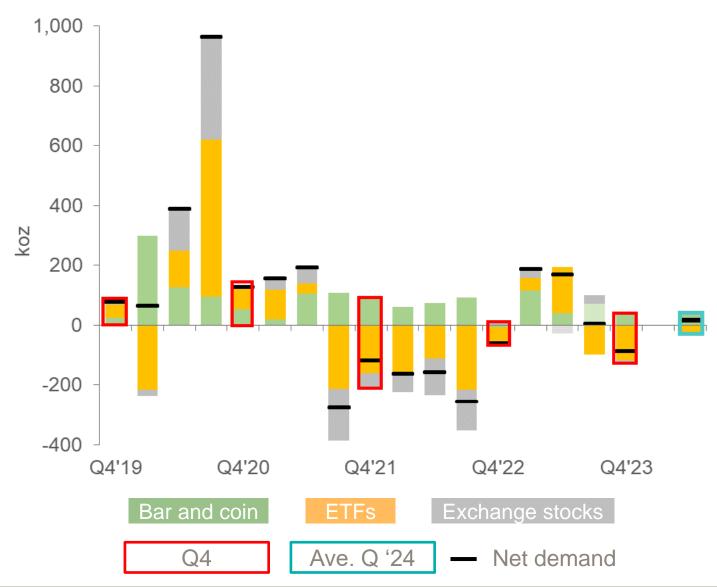
Q4 2023 INDUSTRIAL DEMAND: UP 33% YOY ON TIMING OF GLASS CAPACITY ADDITIONS





Q4 2023 INVESTMENT DEMAND: NET DISINVESTMENT AS ETF OUTFLOWS OFFSET BAR AND COIN





2022 - 2024F FULL YEAR: CONSECUTIVE DEFICITS FOR 2023 AND 2024 DESPITE MODERATING DEMAND



SUPPLY		2022	2023	YoY, %	2024f	YoY, %
Refined Product	tion	5,522	5,590	1%	5,489	-2%
	South Africa	3,915	3,941	1%	3,887	-1%
	Zimbabwe	480	507	6%	502	-1%
	North America	263	276	5%	279	1%
	Russia	663	674	2%	616	-9%
	Other	201	192	-5%	205	7%
Inc (-)/Dec (+) in F	Producer Inventory	+43	+46	7%	0	-100%
Total Mining Sup	pply	5,565	5,636	1%	5,489	-3%
Recycling		1,740	1,495	-14%	1,600	7%
	Autocatalyst	1,299	1,076	-17%	1,167	9%
	Jewellery	372	349	-6%	358	3%
	Industrial	69	71	3%	75	6%
Total Supply		7,305	7,131	-2%	7,089	-1%
DEMAND						
	Automotive	2,815	3,272	16%	3,297	1%
	Jewellery	1,899	1,850	-3%	1,900	3%
	Industrial	2,336	2,622	12%	2,258	-14%
	Investment	-644	265	N/A	52	-80%
Total Demand		6,406	8,009	25%	7,507	-6%
Balance		899	-878	N/A	-418	N/A
Above Ground S	Stocks	4,878	4,000	-18%	3,581	-10%
Quarterly Q4 2023 Metals	s Focus					

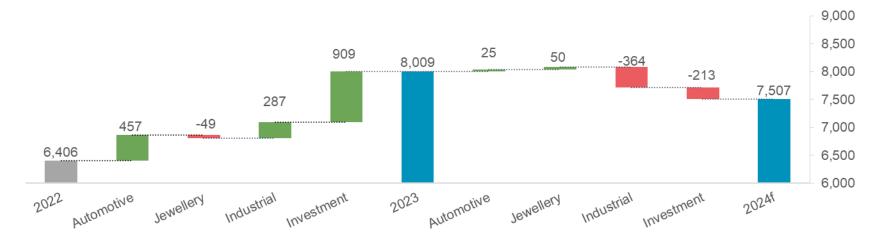
Source: WPIC Platinum Quarterly Q4 2023, Metals Focus

2024 OUTLOOK: DEPRESSED SUPPLY (-3% YOY) AND NORMALISED DEMAND (-6% YOY)



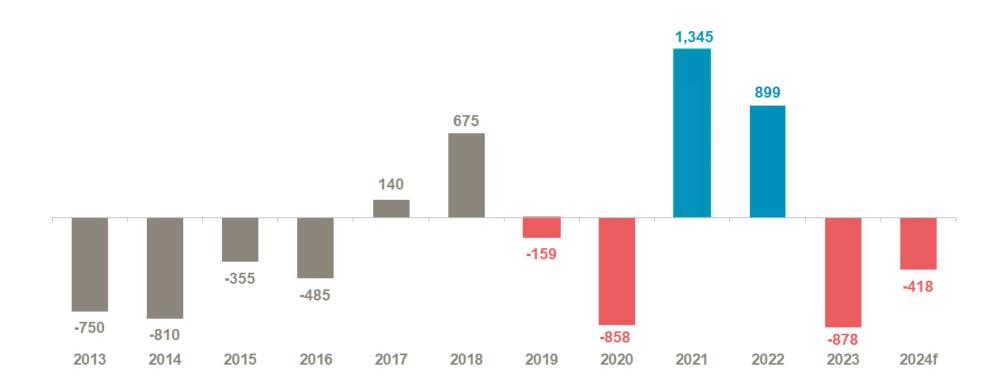






MARKET BALANCE: SUSTAINED DEFICIT OF 418 KOZ IN 2024 AFTER RECORD DEFICIT IN 2023





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3. Current thematics

- Market positioning
- China imports
- Supply challenges
- Automotive trends
- Hydrogen market update

Edward Sterck, Director of Research

4. Questions

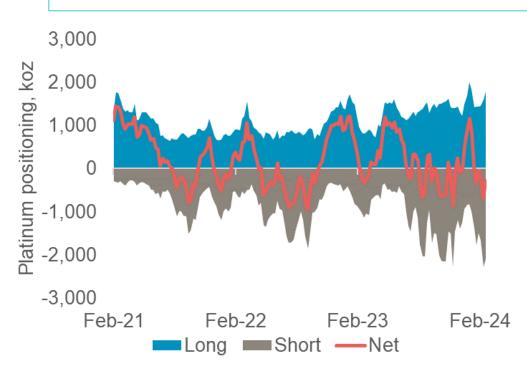
Trevor Raymond Edward Sterck

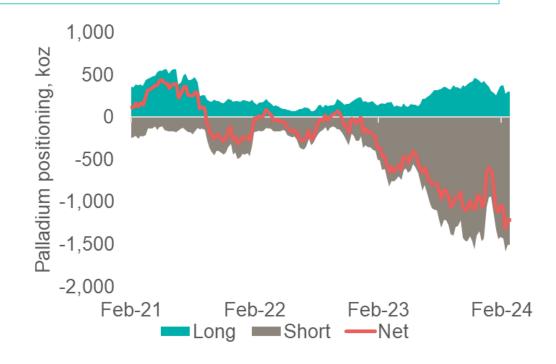


CONVERGING PALLADIUM AND PLATINUM PRICES IGNORES UPSIDE FOR BOTH METALS



Platinum futures positioning reflects its rangebound trading, palladium its outlook





Platinum

- Platinum's underlying fundamentals remain highly attractive
- Platinum needs to break out of its range

Palladium

- Palladium appears oversold and vulnerable to short squeezes
- There are risks to palladium supply growth

Source: Bloomberg, WPIC Research

CHINESE PLATINUM BUYING REMAINS ELEVATED COMPARED TO IMPLIED DEMAND



China opportunistically increases/decreases platinum imports at price troughs/peaks

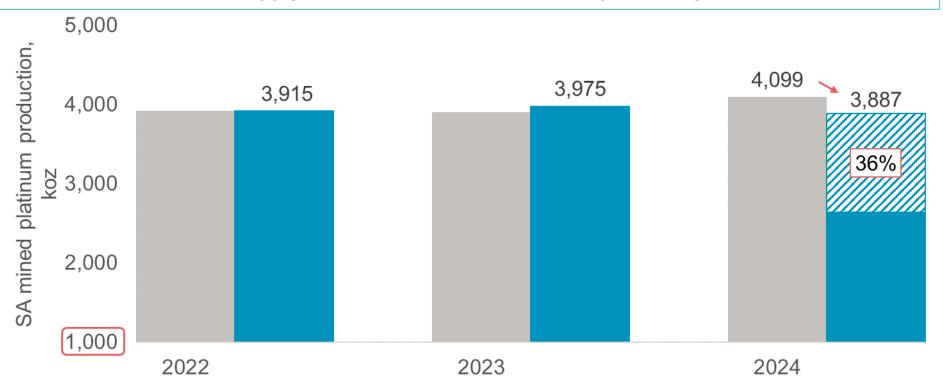


Source: Bloomberg, WPIC Research

DECLINING PGM PRICES ARE LEADING TO A GREATER FOCUS ON THE SUSTAINABILITY OF MINE SUPPLY



South African mined supply forecasts were lowered with potentially more ounces at risk



■ Q3'23 - PQ expectations (old) ■ Q4'23 - PQ expectations (updated) ■ High cost ounces

Nov '23 expectations

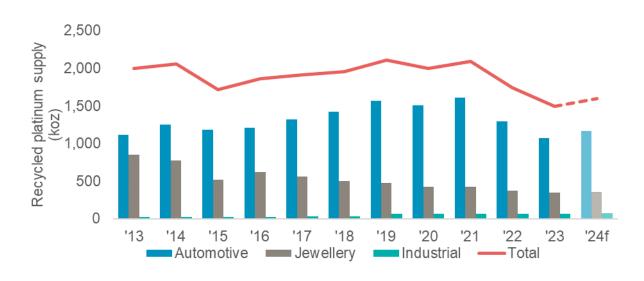
- Load shedding turnaround
- Operational/processing recovery
- Production ramp-up

Mar '24 realities

- Muted operational/processing turnaround
- Restructuring announcements
- Curtailed growth plans

RECYCLING SUPPLY EXPECTED TO RECOVER IN 2024, BUT THERE ARE RISKS TO THIS OUTLOOK





Recycling headwinds:

- A shortage of end-of-life vehicles
- Regulatory restrictions
- Muted jewellery demand limiting sellbacks

Recycling expectations impact market balances and price expectations:

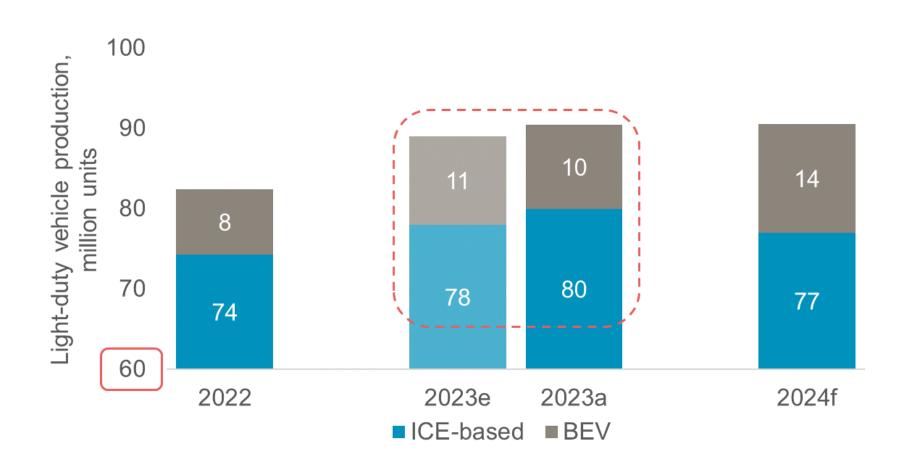
- Deeper platinum deficits
- Continued palladium market tightness



DRIVETRAIN TRANSITION DIRECTIONALLY UNCHANGED, TO BUT SIGNS POINT TO LESS BEV AND MORE ICE-HYBRIDS



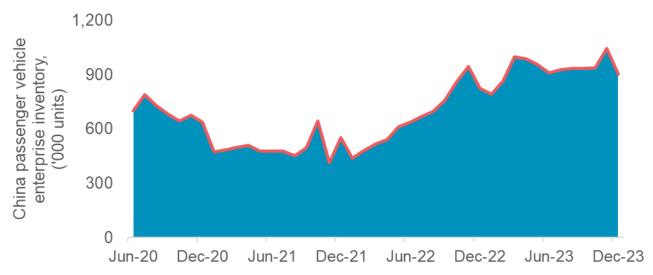
First downgrade to BEV production forecasts after finalising 2023 estimates



Source: Metals Focus, WPIC Research

GROWING CHINESE VEHICLE INVENTORY IS DUE TO ELECTRIFIED MODELS



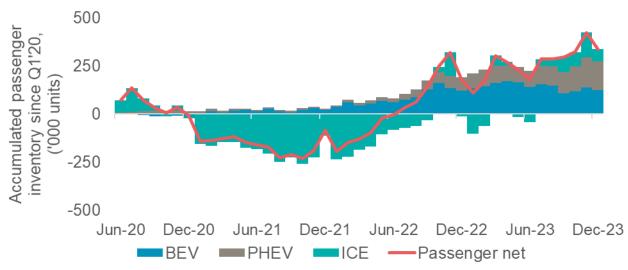


Chinese LV inventories rising from 2022:

- Normalising supply chain
- Weaker economic outlook
- Exceeded a million vehicles in Q4
 '23

Production & sales differentials indicate:

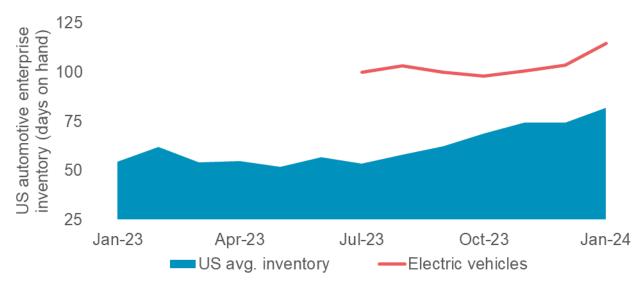
- ICE led supply chain destock, while
- Electric vehicles led a restock over past 18-months



Source: CAAM, WPIC Research

US CONSUMERS RESISTANT TO BEVS



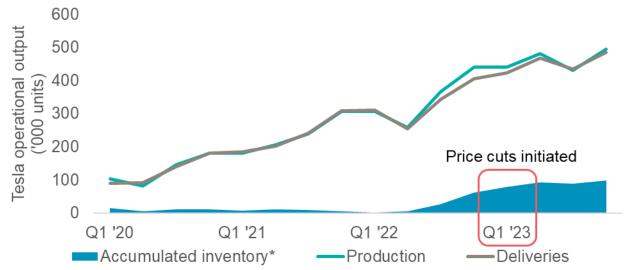


US inventories began building through H2 '23

- Electric vehicles taking longer to sell than the avg. fleet
- >3-months to sell an EV

Slowing BEV demand, lagged Tesla's production growth

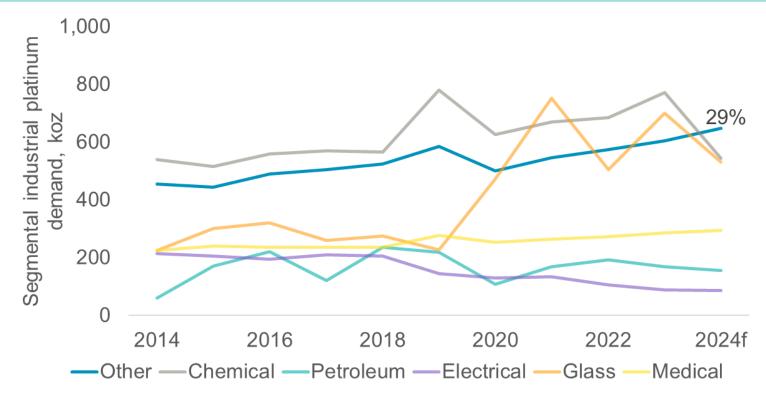
- First signs of inventory build in H2 '22,
- Price cuts implemented to revive growth through 2023



INDUSTRIAL PLATINUM DEMAND CONTINUES TO EXHIBIT ITS DIVERSIFICATION CHARACTERISTICS



Hydrogen end markets will drive "Other" platinum demand growth

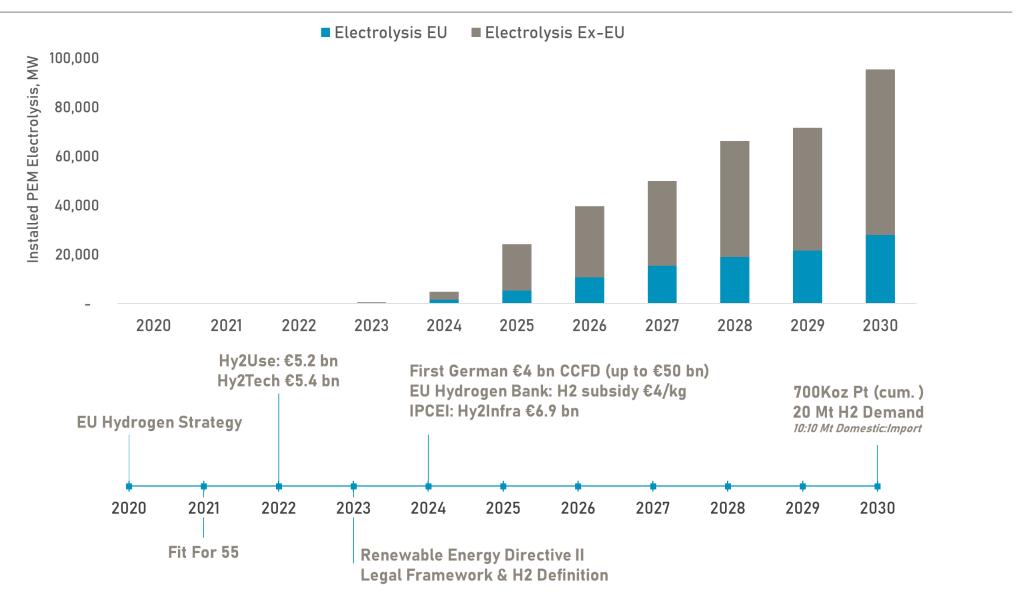


Other industrial platinum demand

- PEM electrolysis demand for platinum is expected to increase by 121% year-on-year in 2024
- Non-catalyst automotive demand such as spark plugs are benefitting from increased volumes and platinum for iridium substitution

MATURING POLICY PROVIDES BACKBONE TO HYDROGEN GROWTH





WHY INVEST IN PLATINUM?





- Second year of material platinum market deficit
- Above ground stocks expected to deplete by almost 30% by end 2024 vs. end 2022
- Persistent risks to supply for both mining and recycling could exacerbate platinum deficits
- Expecting a normalisation of automaker purchasing patterns to tighten market through 2024

WPIC INITIATIVES AND UPCOMING RESEARCH



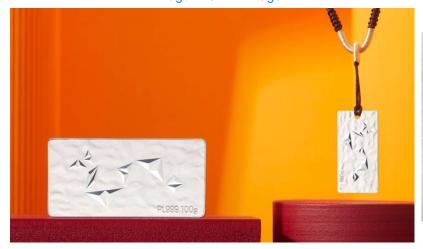




Royal Mint 2024 Britannia

1g Pt card

CGC's Pt bars in year of Dragon 2024 mintage



1g Pt beans



WPIC initiatives:

- Supporting the launch of new products in China, including the Year of the Dragon bar and coin
- Added two new partners in Q4, Ishifuku in Japan and Silver Bullion in Singapore
- Supported Korea Gold Exchange with the publication of a platinum investment guide

Upcoming WPIC Research:

- Hydrogen and Platinum 101 reports
- Updated palladium supply/demand outlook

SHANGHAI PLATINUM WEEK 8-11 JULY 2024





China is the biggest consumer of platinum globally

A reminder: SPW 2023 statistics

- 13 events
- 44 presentations
- 1,265 attendees from over 400 companies
- 180,000 livestreaming viewers

Draft 2024 agenda:

- July 8 Monday: Reception and VIP Cocktail Party followed by Gala Dinner
- July 9 Tuesday: China PGMs Market Summit (Day 1), followed by networking drinks and VIP Dinner
- July 10 Wednesday: China PGMs Market Summit (Day 2)
- July 11 Thursday: Site visits to industrial end users of platinum

Source: WPIC 28

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LATEST WPIC RESEARCH



Platinum Quarterly (<u>link</u>)

Platinum Essentials (<u>link</u>):

- Platinum's consecutive market deficits could deepen as lower PGM prices increase mine supply risks
- Updating WPIC's two- to five-year supply demand outlook: Multi-year deficits expected

Platinum Perspectives (<u>link</u>):

- Platinum for palladium substitution is embedded into automotive demand and unlikely to reverse swiftly
- Sustained recycling challenges could deepen platinum supply-demand deficits



