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# AGENDA: PLATINUM QUARTERLY: Q1 2024 AND FULL YEAR 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



# AGENDA: PLATINUM QUARTERLY: Q1 2024 AND FULL YEAR 2024 FORECAST



#### 1. Introduction

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### 2. Platinum Quarterly, fundamentals review

 Supply, demand and balance: Q1 2024, and 2024 forecast

Edward Sterck, Director of Research

#### 3. Current thematics

Edward Sterck

#### 4. Questions

Trevor Raymond Edward Sterck



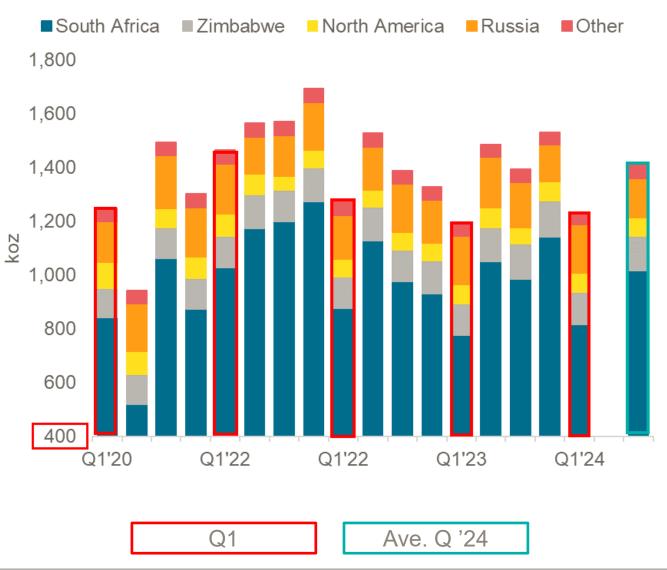
# Q1 2024 SUPPLY: TOTAL SUPPLY STABLE VERSUS LAST YEAR ALBEIT, SEASONALLY LOWER THAN Q4



SUPPLY (koz)	Q1 2023	// Q4 2023	Q1 2024	YoY	QoQ
Refined Production	1,192	1,532	1,235	4%	-19%
South Africa	778	1,143	816	5%	-29%
Zimbabwe	116	133	121	5%	-9%
North America	71	72	72	1%	0%
Russia	180	136	178	-1%	31%
Other	48	48	48	1%	1%
Inc(-)/Dec(+) in Producer Inventory	+33	-23	+0	- <u>100%</u>	-100%
<b>Total Mining Supply</b>	1,226	1,509	1,235	1%	-18%
Recycling	400	338	390	-2%	15%
Autocatalyst	287	235	275	-4%	17%
Jewellery	95	85	98	2%	15%
Industrial	17	18	17	-1%	-6%
Total Supply	1,626	1,847	1,625	0%	-12%

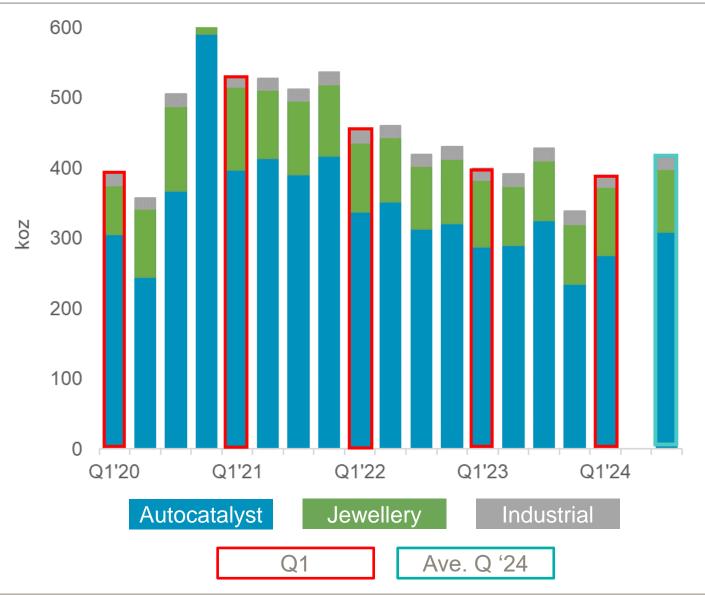
# Q1 2024 REFINED MINE SUPPLY: 1% YOY GROWTH WITH LESS LOAD CURTAILMENTS IN SA





# Q1 2024 RECYCLING: DOWN 2% YOY ON OPERATIONAL CHALLENGES AND AUTOCAT HOARDING





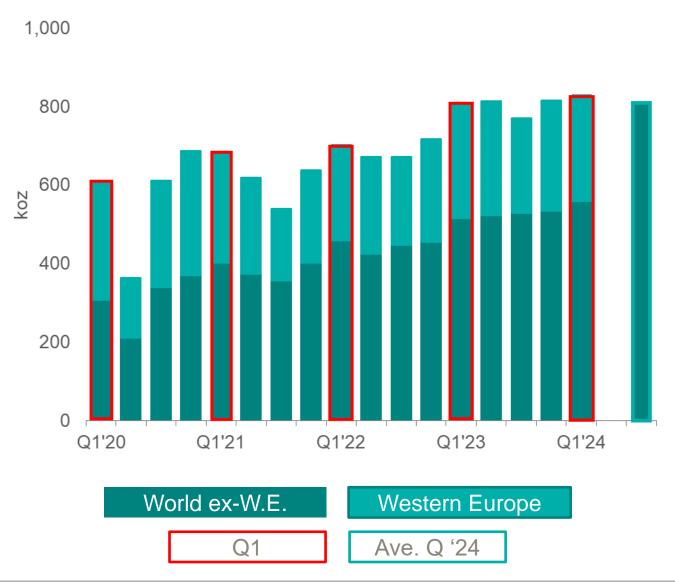
# Q1 2024 DEMAND: DOWN 6% YOY ON LOWER INDUSTRIAL AND INVESTMENT DEMAND



DEMAND (koz)	Q1 2023	// Q4 2023	Q1 2024	YoY	QoQ
Automotive	810	816	832	3%	2%
Autocatalyst	810	816	832	3%	2%
Non-road			†		
Jewellery	463	476	486	5%	2%
Industrial	656	737	612	-7%	-17%
Chemical	295	132	142	-52%	7%
Petroleum	41	38	39	-5%	2%
Electrical	23	22	22	-1%	0%
Glass	80	310	175	<b>117%</b>	-44%
Medical & Biomedical	75	71	78	3%	9%
Hydrogen Stationary and Other	5	13	14	181%	9%
Other	137	150	142	3%	-5%
Investment	198	-71	64	-68%	n/a
Change in Bars, Coins	128	61	64	-50%	5%
Change in ETF Holdings	40	-116	11	-73%	n/a
Change in Stocks Held by Exchanges	29	-16	-11	n/a	n/a
Total Demand	2,128	1,959	1,994	-6%	2%
Balance	-502	-112	-369	n/a	n/a

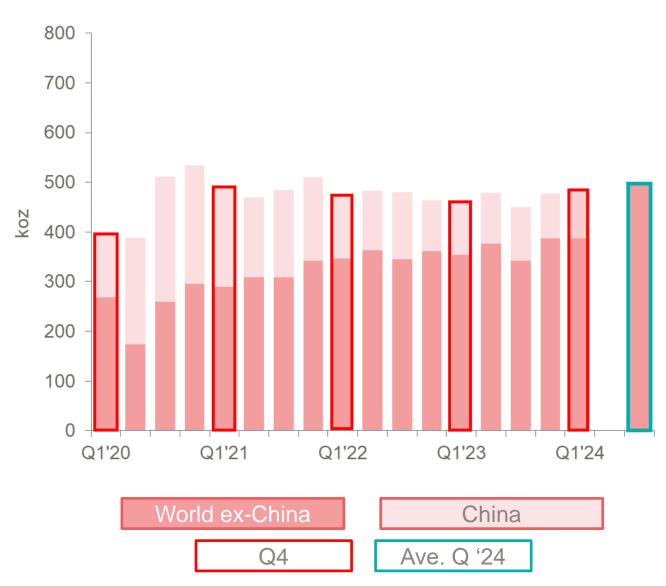
# Q1 2024 AUTOMOTIVE: UP 3% YOY ON STEADY PRODUCTION, SUBSTITUTION & HYBRIDISATION





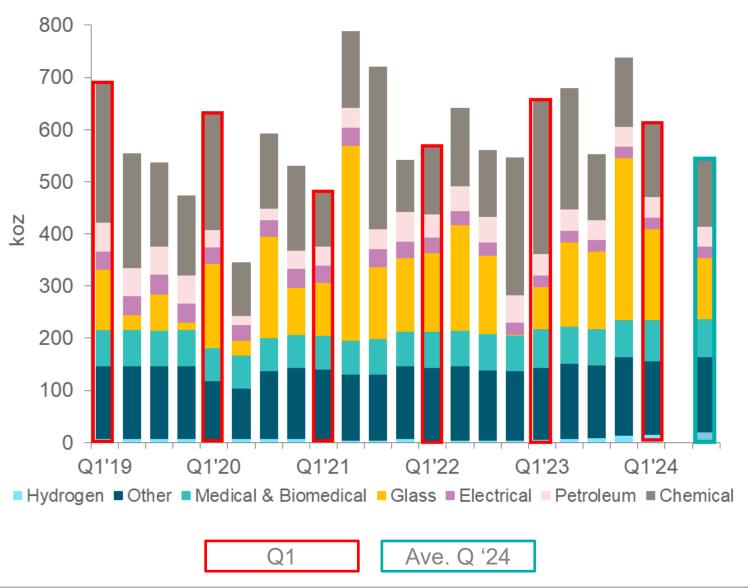
# Q1 2024 JEWELLERY: UP 5% YOY ON WIDESPREAD POSITIVITY AND SIGNIFICANT GROWTH FROM INDIA





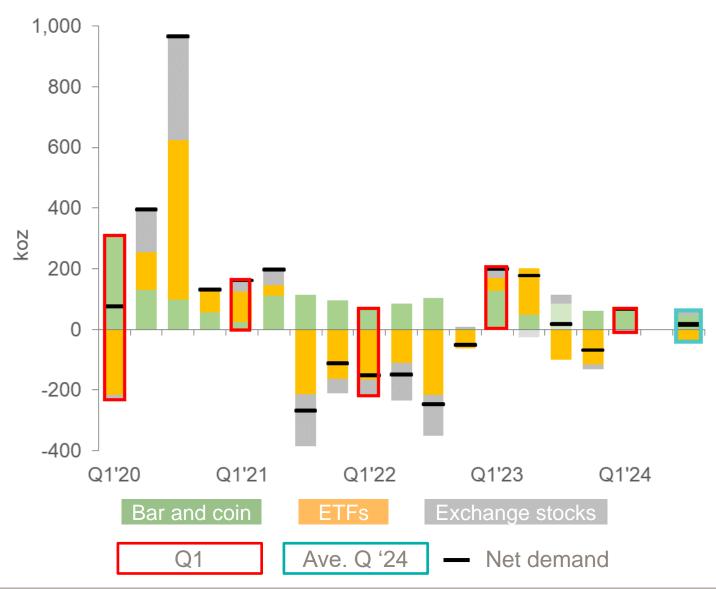
# Q1 2024 INDUSTRIAL DEMAND: DOWN 7% YOY, PRIMARILY ON LOWER CHEMICAL DEMAND





# Q1 2024 INVESTMENT DEMAND: HIGH INTEREST RATES A HEADWIND FOR INVESTMENT, FOR NOW





# 2022 - 2024F FULL YEAR: SECOND CONSECUTIVE DEFICIT DRIVING CONTINUD DEPLETION OF AGS

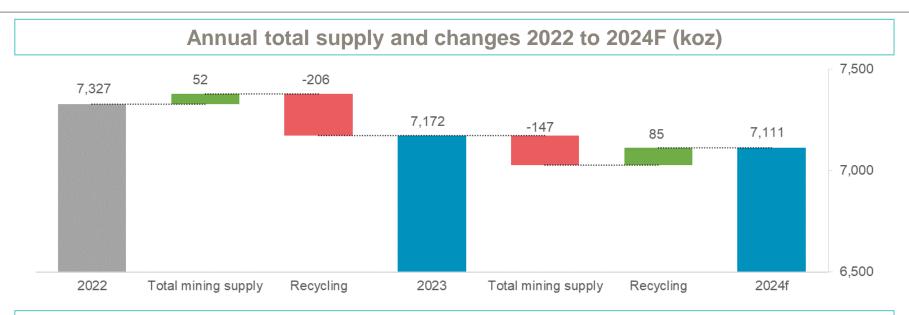


SUPPLY (koz)		2022	2023	YoY, %	2024f	YoY, %
<b>Refined Productio</b>	n	5,520	5,604	2%	5,468	-2%
	South Africa	3,915	3,956	1%	3,871	-2%
	Zimbabwe	480	507	6%	502	-1%
	North America	263	276	5%	276	0%
	Russia	663	674	2%	616	-9%
	Other	200	190	-5%	203	7%
Inc (-)/Dec (+) in Producer Inventory		+43	+11	-74%	0	-100%
<b>Total Mining Supp</b>	ly	5,563	5,615	1%	5,468	-3%
Recycling		1,764	1,557	-12%	1,642	5%
	Autocatalyst	1,323	1,138	-14%	1,201	6%
	Jewellery	372	349	-6%	366	5%
	Industrial	69	71	3%	75	7%
<b>Total Supply</b>		7,327	7,172	-2%	7,111	-1%
DEMAND (koz)						
	Automotive	2,763	3,211	16%	3,269	2%
	Jewellery	1,899	1,868	-2%	1,978	6%
	Industrial	2,316	2,626	13%	2,242	-15%
	Investment	-606	318	N/A	99	-69%
<b>Total Demand</b>		6,372	8,023	26%	7,587	-5%
Balance		955	-851	N/A	-476	N/A
Above Ground Sto	ocks	4,947	4,097	-17%	3,620	-12%
m Ouertarly O1 2021 Metals E						

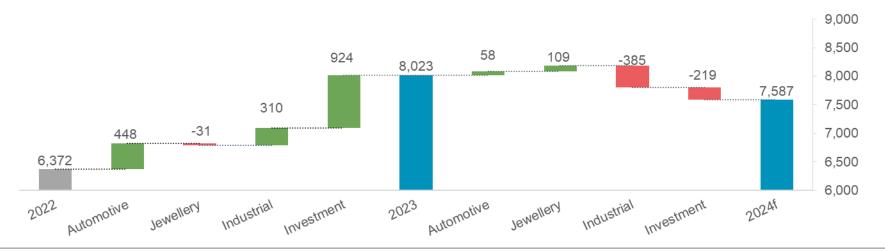
Source: WPIC Platinum Quarterly Q1 2024, Metals Focus

# 2024 OUTLOOK: SUPPLY REMAINS CONSTRAINED (-1% YOY), DEMAND DOWN SLIGHTLY (-5% YOY)









# MARKET BALANCE: SECOND SUBSTANTIAL PLATINUM MARKET DEFICIT OF 476 KOZ IN 2024





# AGENDA: PLATINUM QUARTERLY: Q1 2024 AND FULL YEAR 2024 FORECAST



#### 1. Introduction

Trevor Raymond

#### 2. Platinum Quarterly, fundamentals review Edward Sterck

#### 3. Current thematics

- Platinum's gold conundrum
- Automotive trends
- Hydrogen breaking out
- China's retail bar & coin market

Edward Sterck, Director of Research

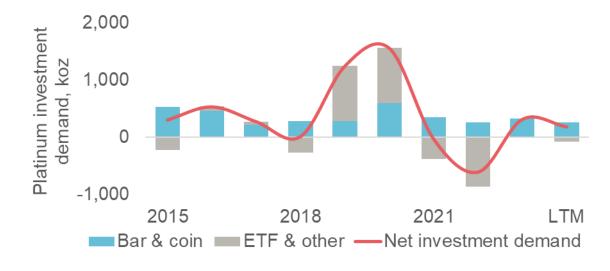
#### 4. Questions

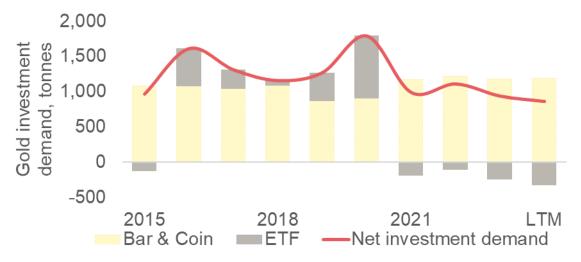
Trevor Raymond Edward Sterck



## PLATINUM PRICES: GOLD'S OUTLIER PERFORMANCE COMPOUNDS CAUTIOUS PGM SENTIMENT







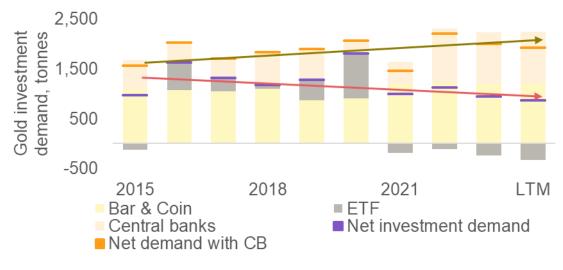
### Platinum investment demand performing as expected

- High interest rates depressing demand for non-yielding asset
- Gold bar, coin and ETF demand has trended lower over the decade

... yet platinum prices underperforming gold YTD

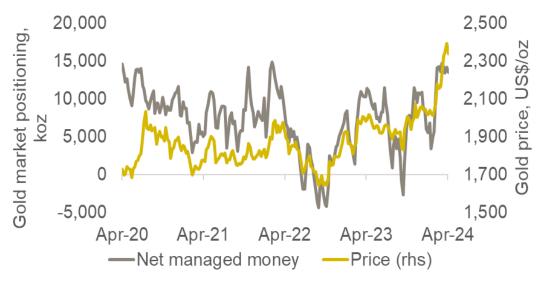
## PLATINUM PRICES: GOLD'S OUTLIER PERFORMANCE COMPOUNDS CAUTIOUS PGM SENTIMENT





### Geopolitical risks, conflicts, and dedollarisation benefitting gold

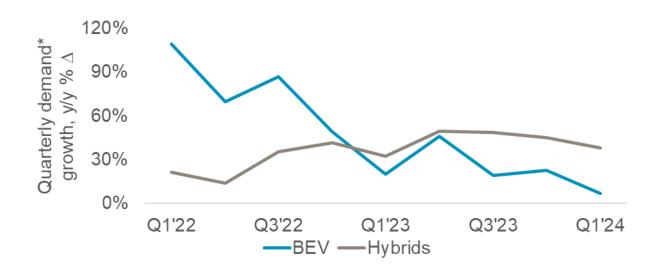
- Central bank offsetting investment
- High net worth investment not captured in bar & coin
- Building long net speculative managed money





## AUTOMOTIVE TRENDS: MORE CONSUMERS TURN TO HYBRIDS OVER BEVs





### **Consumers are talking with their wallets**

- Hybrid growth > BEV
- BEV facing range & charging headwinds
- Price is clearly a factor, however ...

- Premium EREVs\*\* China's highest growth segment
- Paying for "uncompromised" EV

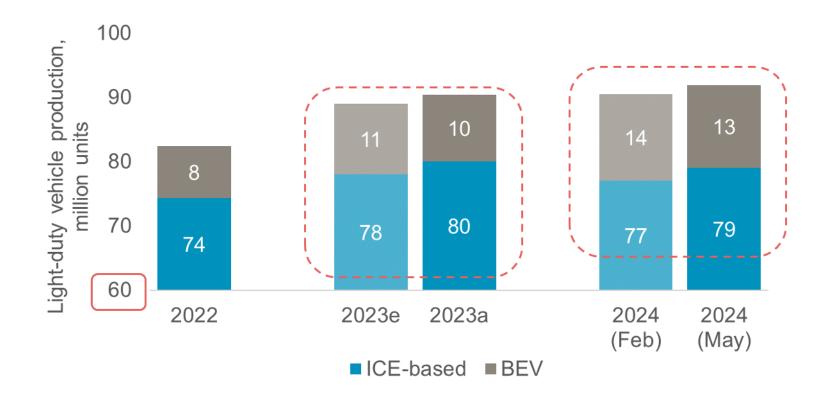
#### Might EREVs suit US consumers?



## AUTOMOTIVE TRENDS: SLOWING BEV DEMAND GROWTH IMPLIES SLOWER MARKET SHARE GAINS



#### Slow BEV growth rates filtering into 2024 full year forecasts

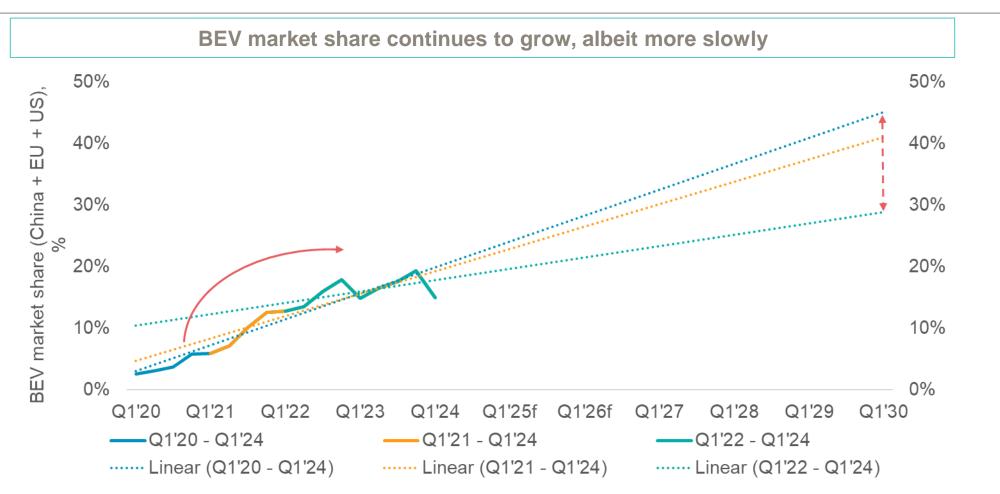


- ICE-based (incl. hybrid) demand remains resilient
  - PGM demand supported
  - What are the implications for future forecasts

Source: Metals Focus, WPIC research

## AUTOMOTIVE TRENDS: SLOWING BEV DEMAND GROWTH IMPLIES SLOWER MARKET SHARE GAINS

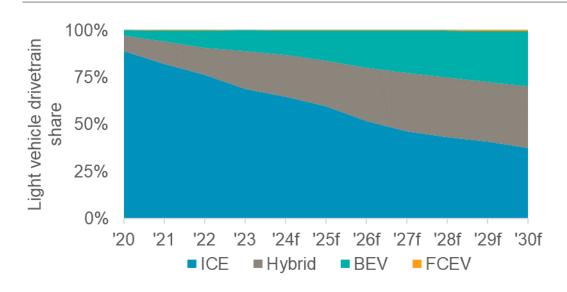




- Rate of BEV market share gains are slowing
- Linear interpolation widening to 2030, from 45% to 30%
  - Higher for longer automotive PGM demand

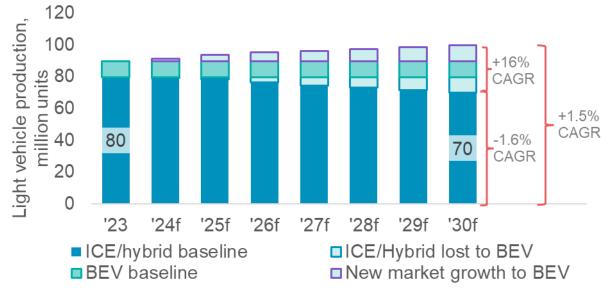
## AUTOMOTIVE TRENDS: FOCUSING SOLELY ON MARKET SHARE EXAGGERATES PGM DEMAND LOSSES





### BEV market share gains have two drivers

- All incremental growth in LV production (10m vehicles)
- Cannibalisation of ICE/hybrids (9m vehicles)



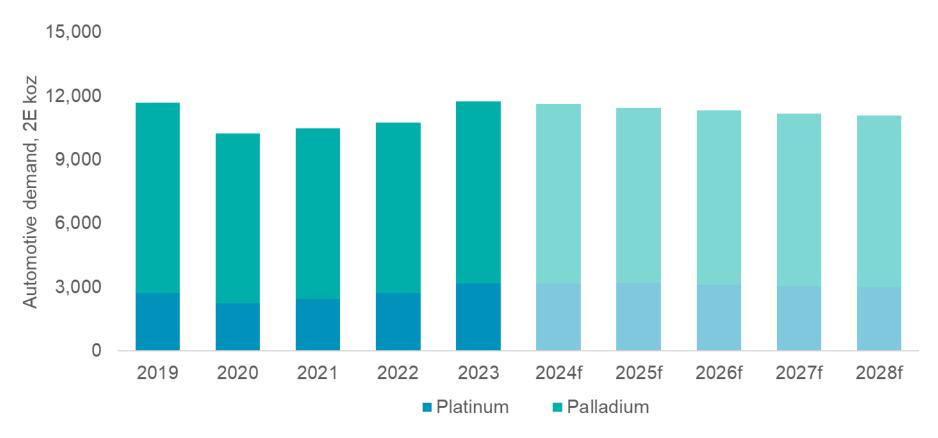
Declining ICE/hybrid share partially offset by growing total market, helping mitigate PGM demand erosion

Source: OICA, Bloomberg, WPIC Research

### AUTOMOTIVE TRENDS: HIGHER-FOR-LONGER PGM DEMAND



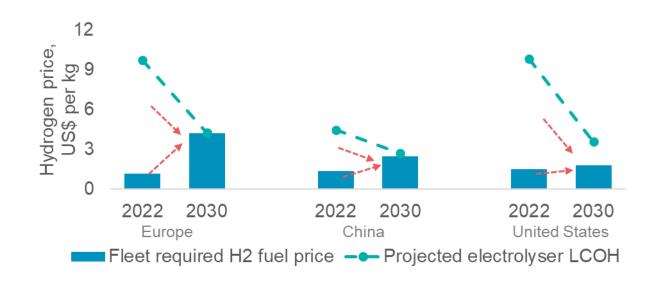
#### Automotive PGM demand erosion limited to -1.2% CAGR from 2023 to 2028f



- Higher absolute vehicle production, LD and HD
  - Increasing share of PGM intensive hybrids
    - FCEV emerge back end of decade

## FUEL CELL MOBILITY LEVELS UP HYDROGEN: CHINA & EUROPE TO LEAD RAMP UP



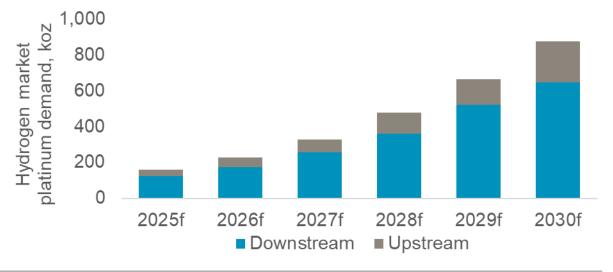


### HD-FCEV reaches diesel fleet cost parity in 2030:

- FC capacity growth
- FCEV scale + subsidies
- Electrolysis scale lowers LCOH

# Including HD-FCEV, hydrogen reaches 11% of total annual platinum demand by 2030

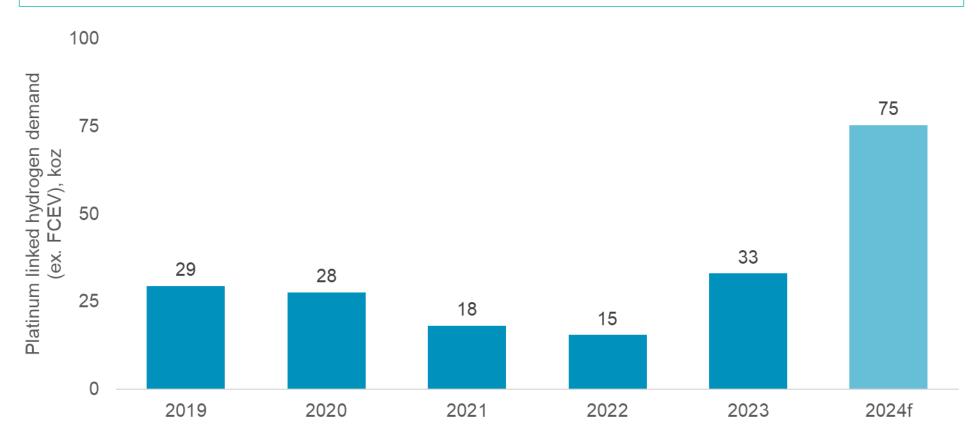
Helps offset drivetrain electrification



## HYDROGEN BREAKING OUT, SUPPORTING INCREMENTAL PLATINUM DEMAND GROWTH



Stationary & other hydrogen applications make up 1% of total platinum demand in 2024

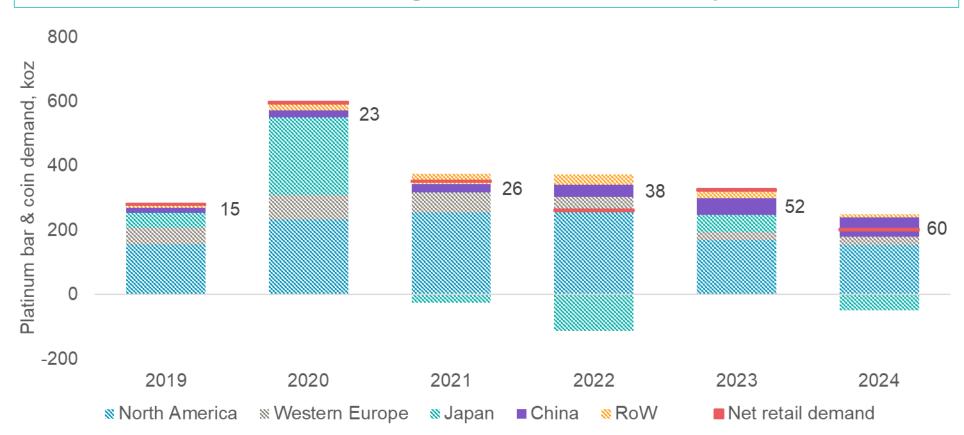


- Hydrogen economy witnessing improved regulatory support
- PEM electrolysis pipeline building
- Demand (ex. FCEV) forecast to quintuple between 2022 to 2024

## CHINESE BAR & COIN INVESTMENT: FLOURISHING DUE TO MARKET DEVELOPMENT INITIATIVES



#### Chinese bar & coin demand growth reflects market development efforts

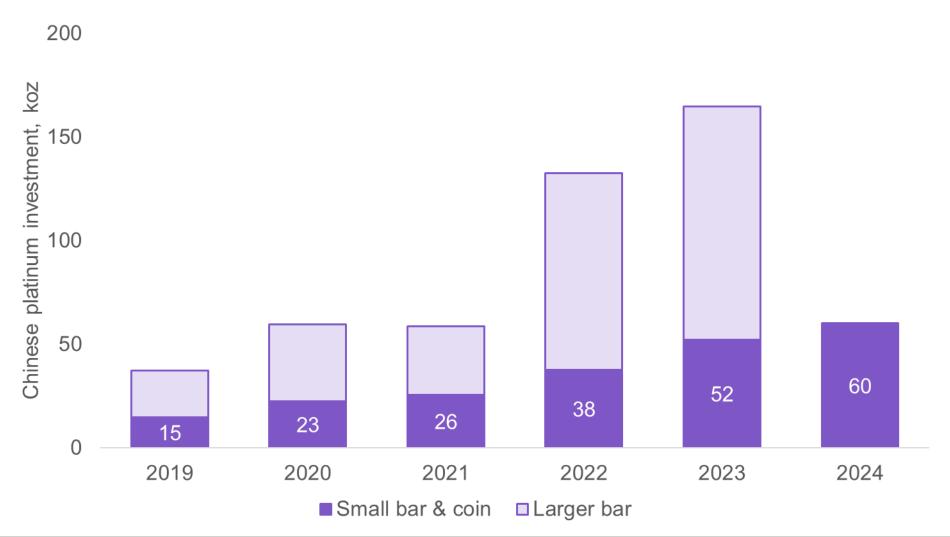


- WPIC has 13 product partners in China (7 in 2019)
- Quadrupling Chinese demand over 5 years
- Larger bars (+500g) are currently excluded from the dataset but totalled >100 koz in 2023

## CHINESE RETAIL INVESTMENT: MORE TO THE BAR & COIN STORY THAN MEETS THE EYE

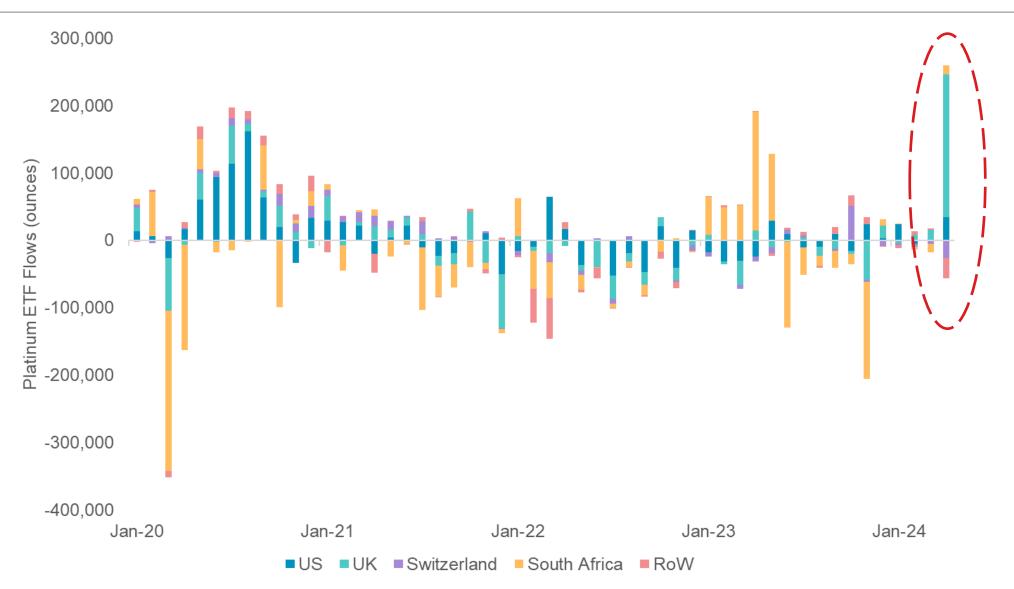


#### Chinese market data does not capture demand for larger bars >500 grams



## UK PLATINUM ETF HOLDINGS INCREASED BY 40% IN THE MONTH OF APRIL ALONE!





### WHY INVEST IN PLATINUM?





- Second consecutive annual material platinum market deficit
- Above ground stocks expected to deplete by almost 27% by end 2024 vs. end 2022, falling to less than 6 months of demand
- Persistent risks to supply for both mining and recycling could exacerbate platinum deficits
- Higher for longer automotive demand for platinum could increase demand and support automaker inventory restocking

### WPIC INITIATIVES AND UPCOMING RESEARCH





Royal Mint, Seymore Unicorn, **Queen's Beasts Series** 



Yue Xin Platinum Bars





#### **WPIC** initiatives:

- Product Partnership sales running ahead of 2023 – strong demand in China in particular
- Increased product partner salesforce training with focussed investment messaging
- New partner added platinum to its online vaulting programme in Singapore
- High impact marketing campaign with new partner in Japan

#### **Upcoming WPIC Research:**

- Updated platinum and palladium supply/demand outlooks
- Investment flow analysis

#### Sino Gem Platinum Bars









### 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

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Trevor Raymond, CEO Edward Sterck, Director of Research



### LATEST WPIC RESEARCH



#### Platinum Quarterly (link)

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

- Hydrogen 101 An introduction for investors
- Unpacking the economics of the hydrogen economy reinforces conviction that platinum demand will benefit from a major new emerging end-market

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

- Hybrid and EREV market share growth overtaking BEV supports higher-for-longer automotive PGM demand
- Revised US emission timelines support higher for longer PGM demand



