

# PLATINUM QUARTERLY PRESENTATION Q2 2024

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London

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# AGENDA: PLATINUM QUARTERLY: Q2 2024 AND UPDATED 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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## 2. Platinum Quarterly, fundamentals review

- Supply, demand and balance: Q2 2024, and updated 2024 forecast

*Edward Sterck, Director of Research*

## 3. Current thematics

*Edward Sterck*

## 4. Questions

*Trevor Raymond*

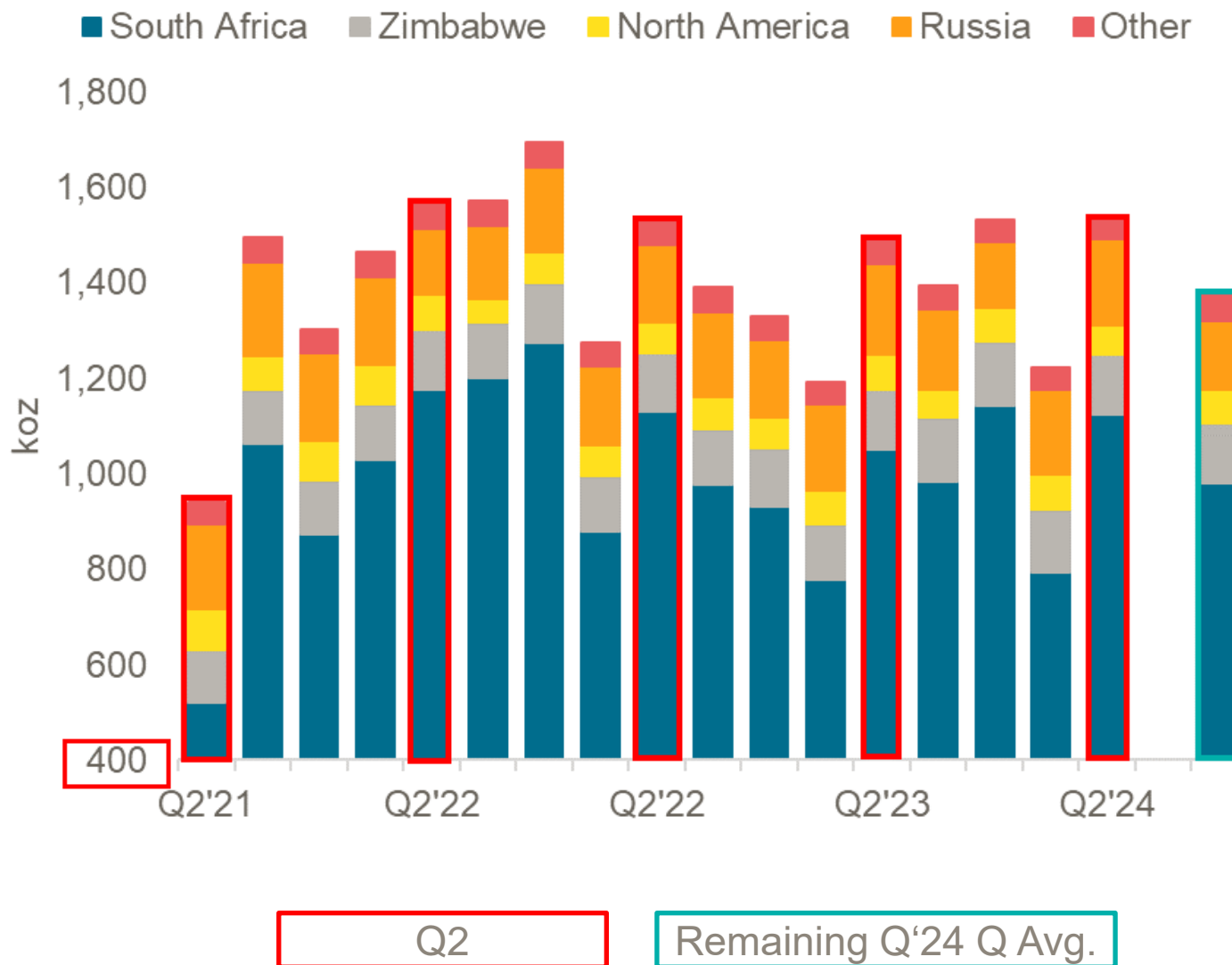
*Edward Sterck*



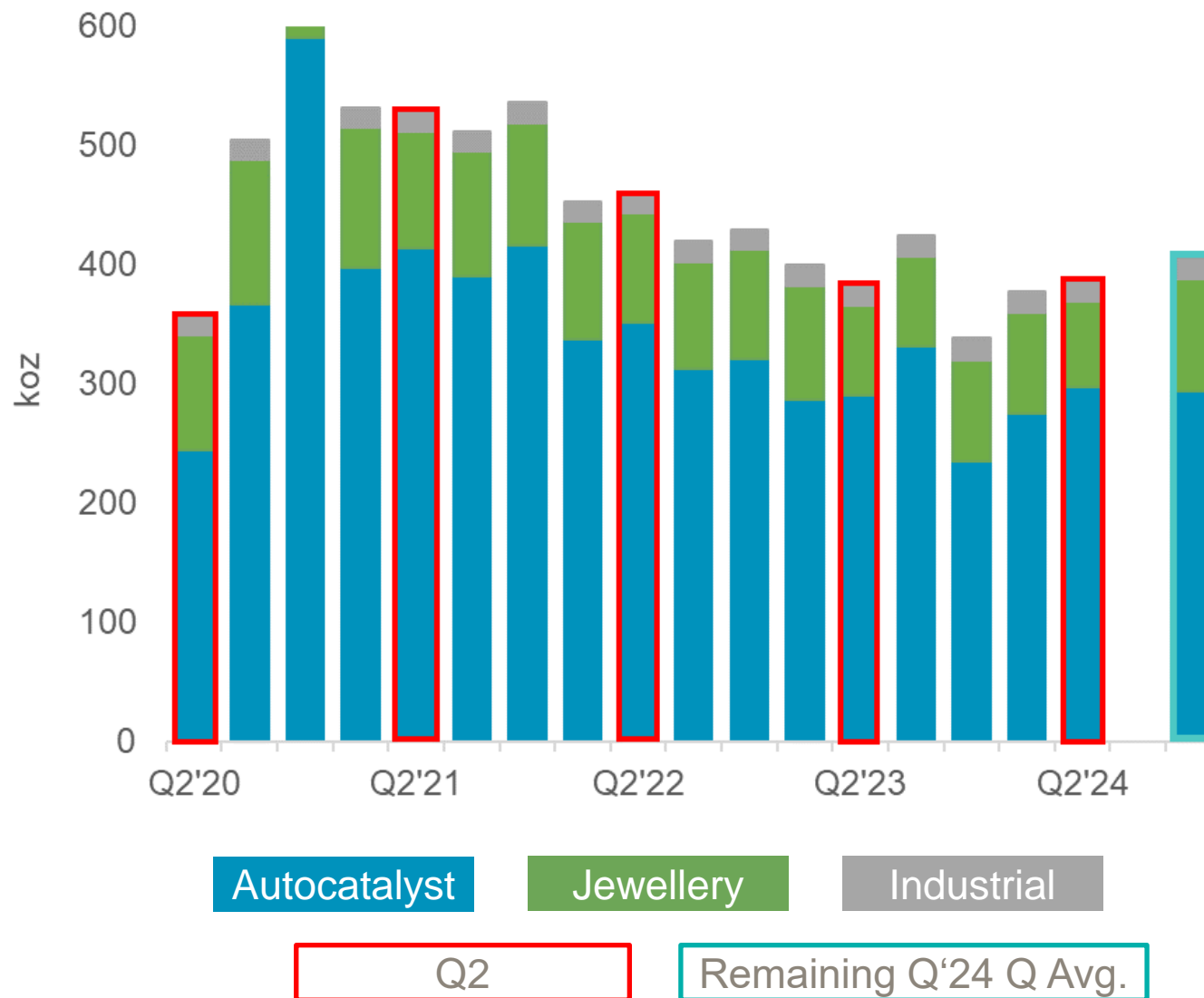
# Q2 2024 SUPPLY: MINE SUPPLY UP 7% ON REDUCED LOAD CURTAILMENT & RELEASE OF WIP INVENTORY

SUPPLY (koz)	Q2 2023	Q1 2024	Q2 2024	YoY	QoQ
<b>Refined Production</b>	<b>1,486</b>	<b>1,224</b>	<b>1,540</b>	<b>4%</b>	<b>26%</b>
South Africa	1,051	794	1,126	7%	42%
Zimbabwe	126	132	125	-1%	-5%
North America	73	71	61	-17%	-14%
Russia	190	178	181	-5%	1%
Other	46	48	48	3%	-1%
Inc(-)/Dec(+) in Producer Inventory	+8	+9	+30	294%	220%
<b>Total Mining Supply</b>	<b>1,494</b>	<b>1,233</b>	<b>1,570</b>	<b>5%</b>	<b>27%</b>
<b>Recycling</b>	<b>383</b>	<b>377</b>	<b>388</b>	<b>1%</b>	<b>3%</b>
Autocatalyst	290	275	297	2%	8%
Jewellery	76	85	72	-5%	-15%
Industrial	17	17	19	7%	8%
<b>Total Supply</b>	<b>1,877</b>	<b>1,610</b>	<b>1,958</b>	<b>4%</b>	<b>22%</b>

# Q2 2024 REFINED MINE SUPPLY: SOUTH AFRICA DOING THE HEAVY LIFTING



# Q2 2024 RECYCLING: EARLY SIGNS OF RECOVERY, FROM DEPRESSED BASE WITH DOWNSIDE RISK

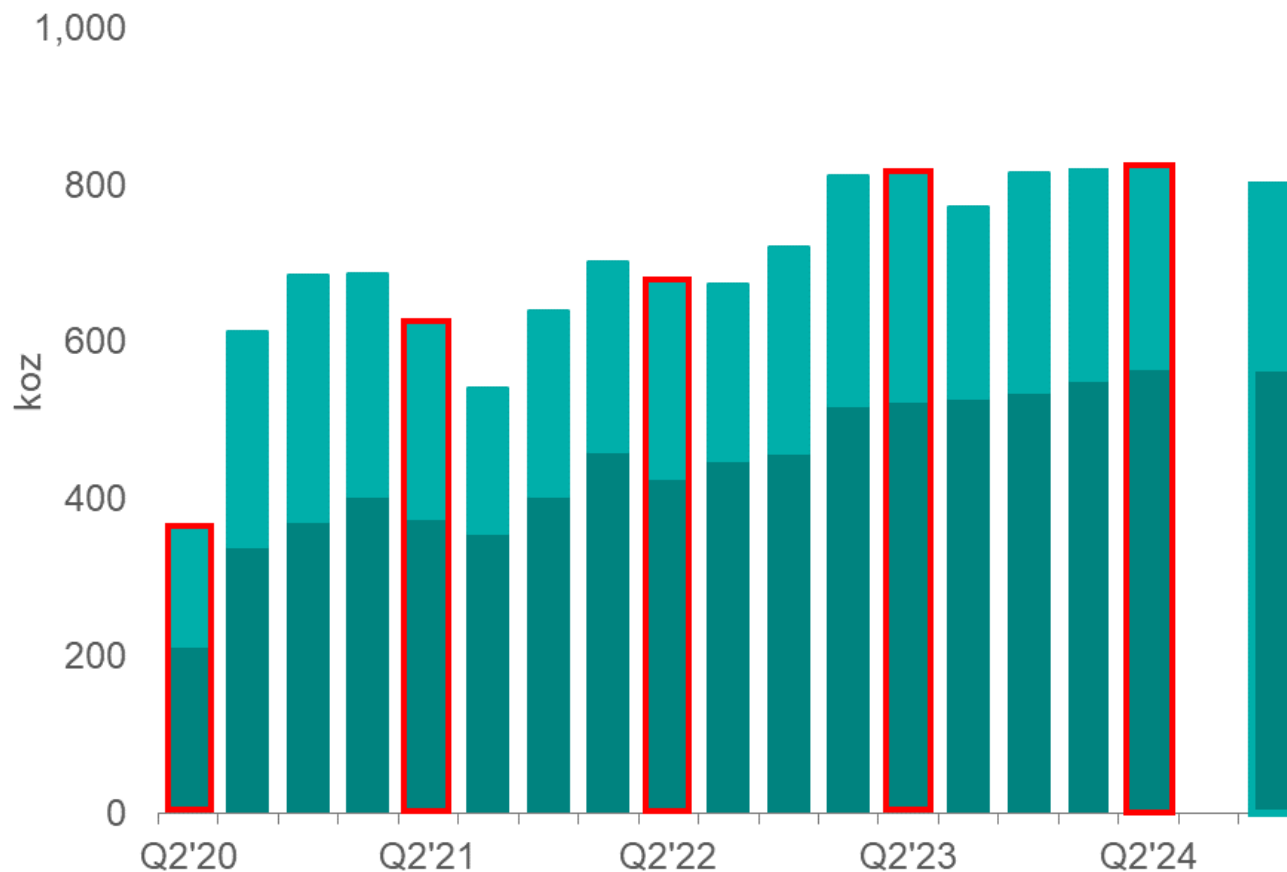


# Q2 2024 DEMAND: UP 13%, ELEVATED DEMAND MAINTAINED, WITH STRONG INVESTMENT DEMAND

DEMAND (koz)	Q2 2023	Q1 2024	Q2 2024	YoY	QoQ
<b>Automotive</b>	<b>814</b>	<b>822</b>	<b>820</b>	<b>1%</b>	<b>0%</b>
Autocatalyst	814	822	820	1%	0%
Non-road	†	†	†	†	†
<b>Jewellery</b>	<b>478</b>	<b>484</b>	<b>501</b>	<b>5%</b>	<b>4%</b>
<b>Industrial</b>	<b>663</b>	<b>627</b>	<b>638</b>	<b>-4%</b>	<b>2%</b>
Chemical	233	145	122	-48%	-16%
Petroleum	40	38	38	-5%	0%
Electrical	23	22	23	2%	3%
Glass	146	195	216	48%	11%
Medical & Biomedical	72	72	77	7%	7%
Hydrogen Stationary and Other	5	12	14	186%	15%
Other	145	142	148	2%	4%
<b>Investment</b>	<b>195</b>	<b>117</b>	<b>462</b>	<b>137%</b>	<b>294%</b>
Change in Bars, Coins	47	64	17	-63%	-73%
China Bars ≥ 500g	20	53	41	103%	-24%
Change in ETF Holdings	155	11	444	186%	±300%
Change in Stocks Held by Exchanges	-27	-11	-40	n/a	n/a
<b>Total Demand</b>	<b>2,151</b>	<b>2,051</b>	<b>2,421</b>	<b>13%</b>	<b>18%</b>
<b>Balance</b>	<b>-273</b>	<b>-441</b>	<b>-464</b>	<b>n/a</b>	<b>n/a</b>



# Q2 2024 AUTOMOTIVE: ONGOING DEMAND STRENGTH ON HYBRIDS, SUBSTITUTION AND HEAVY-DUTY



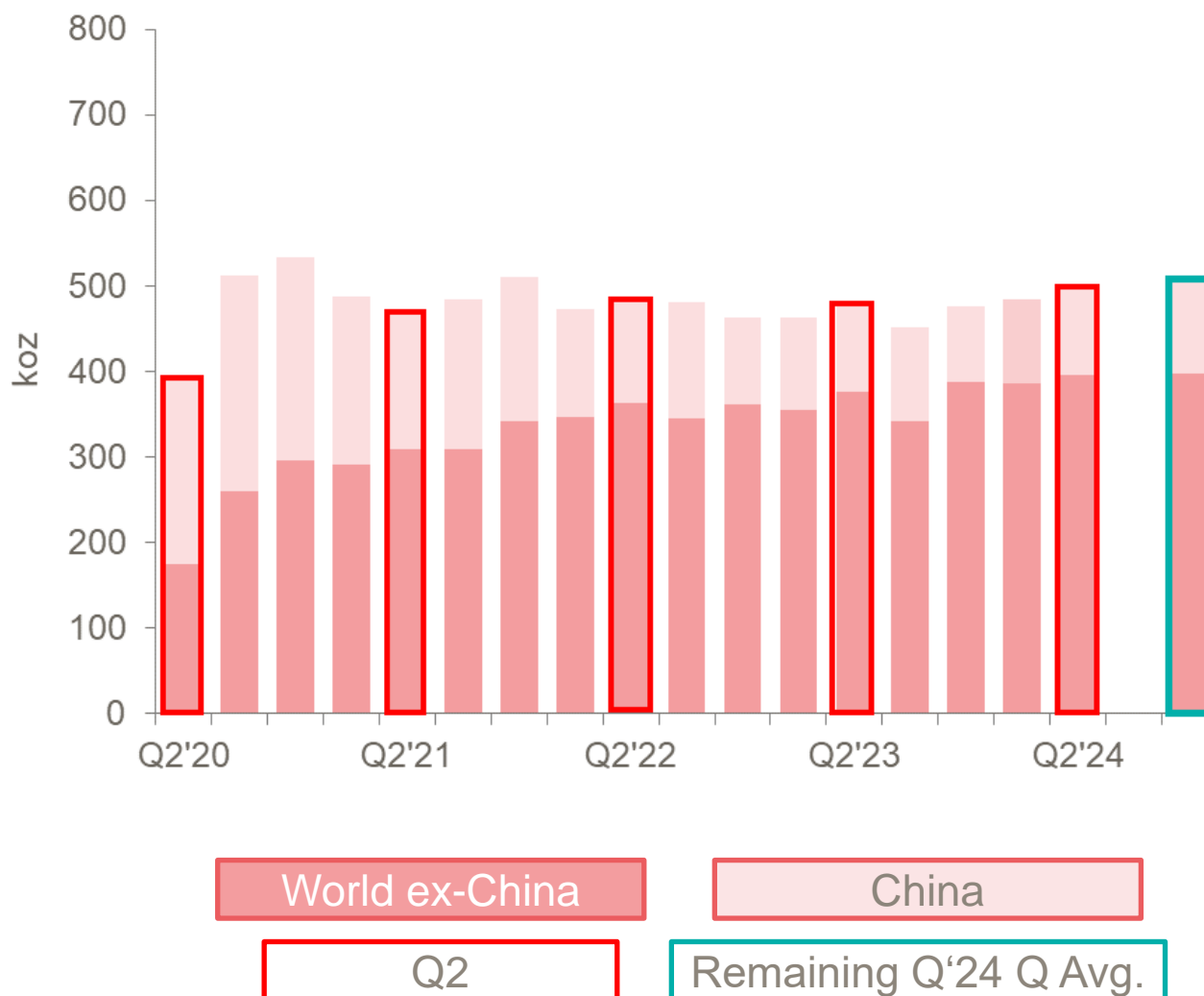
World ex-W.E.

Western Europe

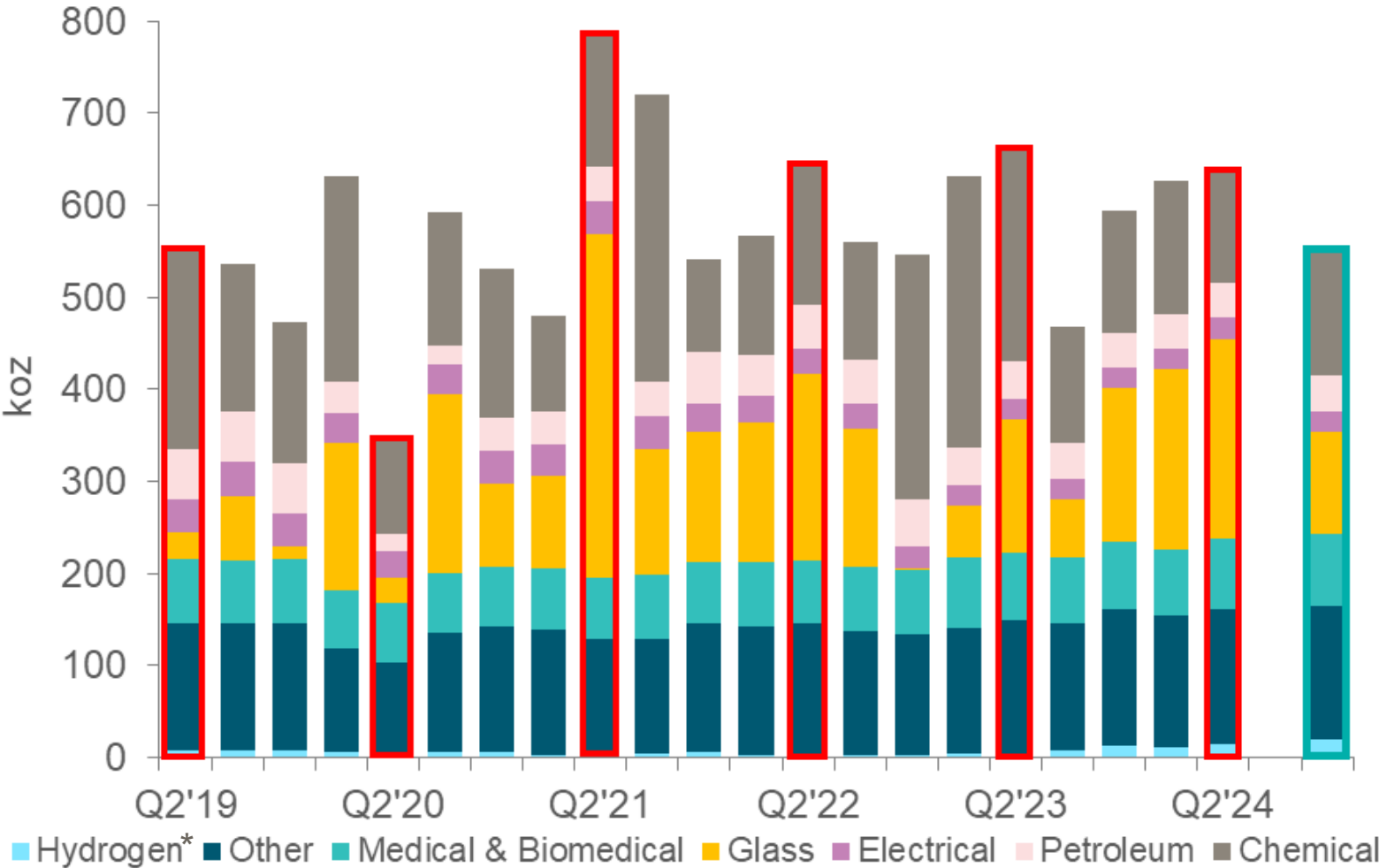
Q2

Remaining Q'24 Q Avg.

# Q2 2024 JEWELLERY: INDIA CONTINUES TO STANDOUT, WHILE CHINA MAY BE PAST ITS TROUGH



# Q2 2024 INDUSTRIAL DEMAND REMAINS ELEVATED: SOFT CHEMICALS OFFSET BY STRONGER GLASS

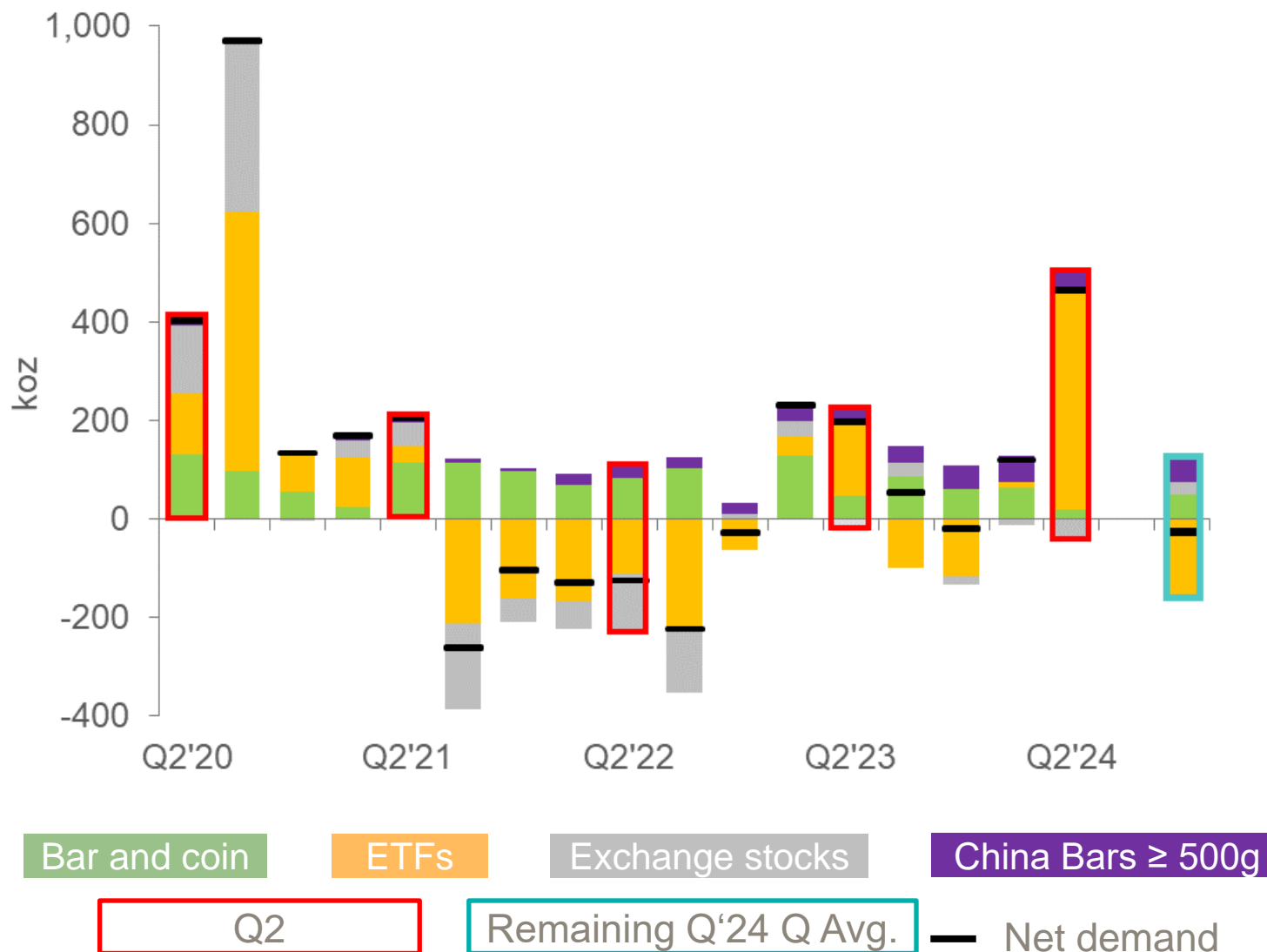


Q2

Remaining Q'24 Q Avg.

Source: WPIC Platinum Quarterly Q2 2024, Metals Focus, \*Hydrogen stationary and other excludes automotive FCEV demand

# Q2 2024 INVESTMENT DEMAND: STRONG ETF INFLOWS ON RELATIVE VALUATION AND STRONG FUNDAMENTALS

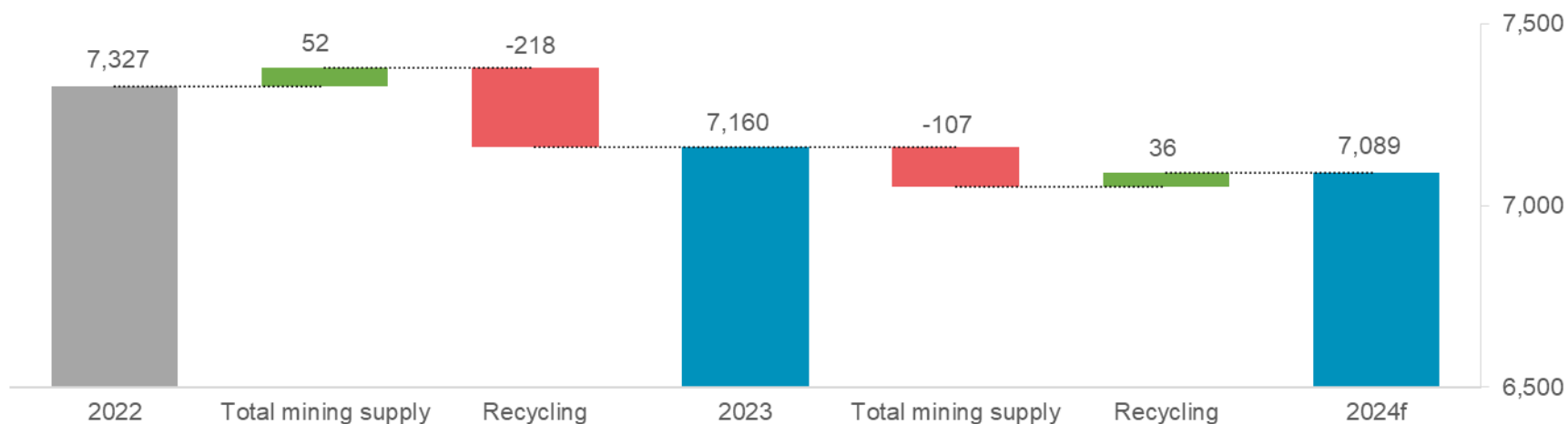


# 2022 - 2024F FULL YEAR: SECOND CONSECUTIVE AND WIDENING DEFICIT

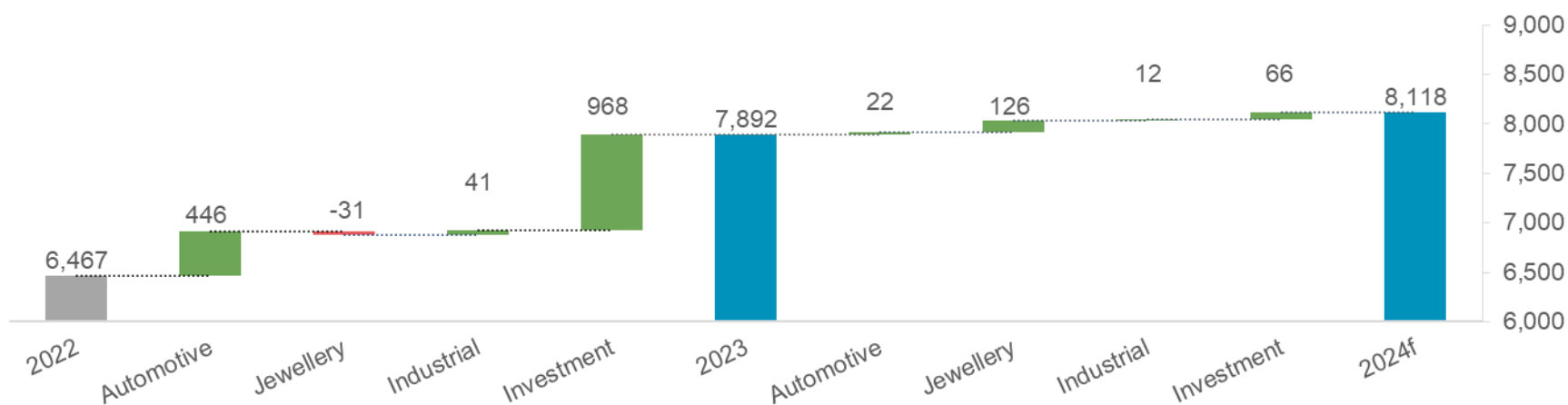
<b>SUPPLY (koz)</b>	<b>2022</b>	<b>2023</b>	<b>YoY, %</b>	<b>2024f</b>	<b>YoY, %</b>
<b>Refined Production</b>	<b>5,520</b>	<b>5,604</b>	<b>2%</b>	<b>5,508</b>	<b>-2%</b>
South Africa	3,915	3,957	1%	3,883	-2%
Zimbabwe	480	507	6%	504	-1%
North America	263	275	5%	273	-1%
Russia	663	674	2%	646	-4%
Other	200	190	-5%	203	7%
Inc (-)/Dec (+) in Producer Inventory	+43	+11	-74%	0	-100%
<b>Total Mining Supply</b>	<b>5,563</b>	<b>5,615</b>	<b>1%</b>	<b>5,508</b>	<b>-2%</b>
<b>Recycling</b>	<b>1,764</b>	<b>1,545</b>	<b>-12%</b>	<b>1,581</b>	<b>2%</b>
Autocatalyst	1,323	1,144	-14%	1,161	2%
Jewellery	372	331	-11%	344	4%
Industrial	69	71	3%	76	8%
<b>Total Supply</b>	<b>7,327</b>	<b>7,160</b>	<b>-2%</b>	<b>7,089</b>	<b>-1%</b>
<b>DEMAND (koz)</b>					
Automotive	2,769	3,215	16%	3,237	1%
Jewellery	1,899	1,868	-2%	1,994	7%
Industrial	2,315	2,356	2%	2,369	1%
Investment	-516	451	N/A	517	15%
<b>Total Demand</b>	<b>6,467</b>	<b>7,892</b>	<b>22%</b>	<b>8,118</b>	<b>3%</b>
<b>Balance</b>	<b>860</b>	<b>-731</b>	<b>N/A</b>	<b>-1,028</b>	<b>N/A</b>
<b>Above Ground Stocks</b>	<b>4,765</b>	<b>4,034</b>	<b>-15%</b>	<b>3,006</b>	<b>-25%</b>

# 2024 OUTLOOK: VASTLY DIFFERENT GROWTH TRENDS: WEAK SUPPLY AND STRONG DEMAND

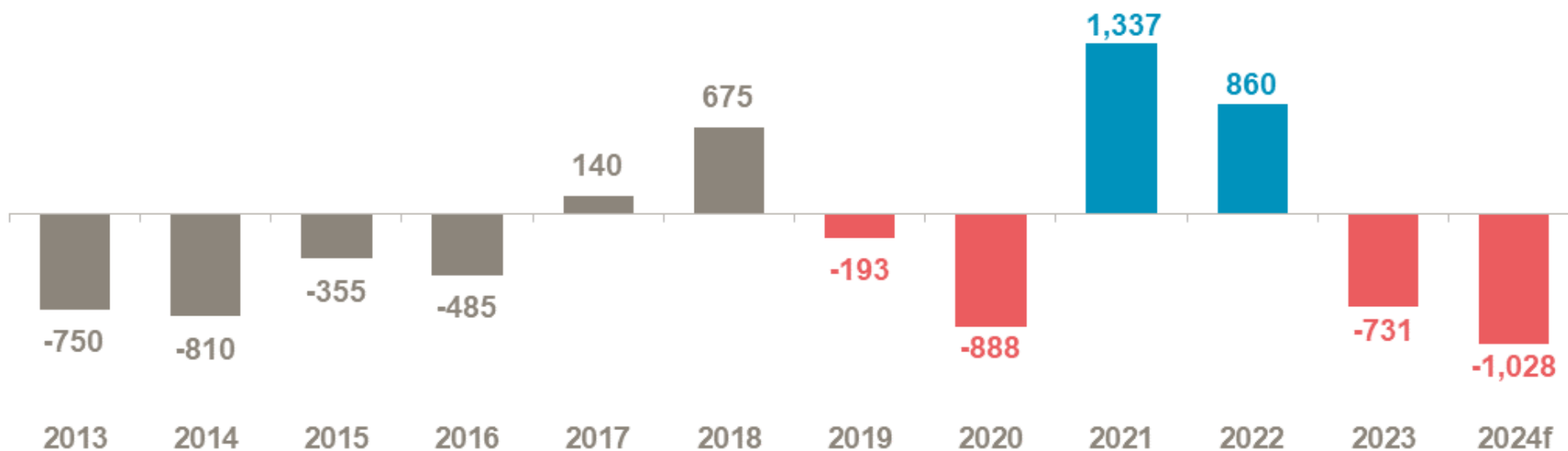
Annual total supply and changes 2022 to 2024F (koz)



Annual total demand and changes 2022 to 2024F (koz)



# MARKET BALANCE: SECOND SUBSTANTIAL PLATINUM MARKET DEFICIT OF 1,028 KOZ IN 2024



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## 3. Current thematics

- Demand resilience
  - Higher-for-longer automotive
- Supply-side uncertainty
  - Mine supply restructuring and recycling
- Price drivers – inflection potential?

*Edward Sterck, Director of Research*

## 4. Questions

*Trevor Raymond*

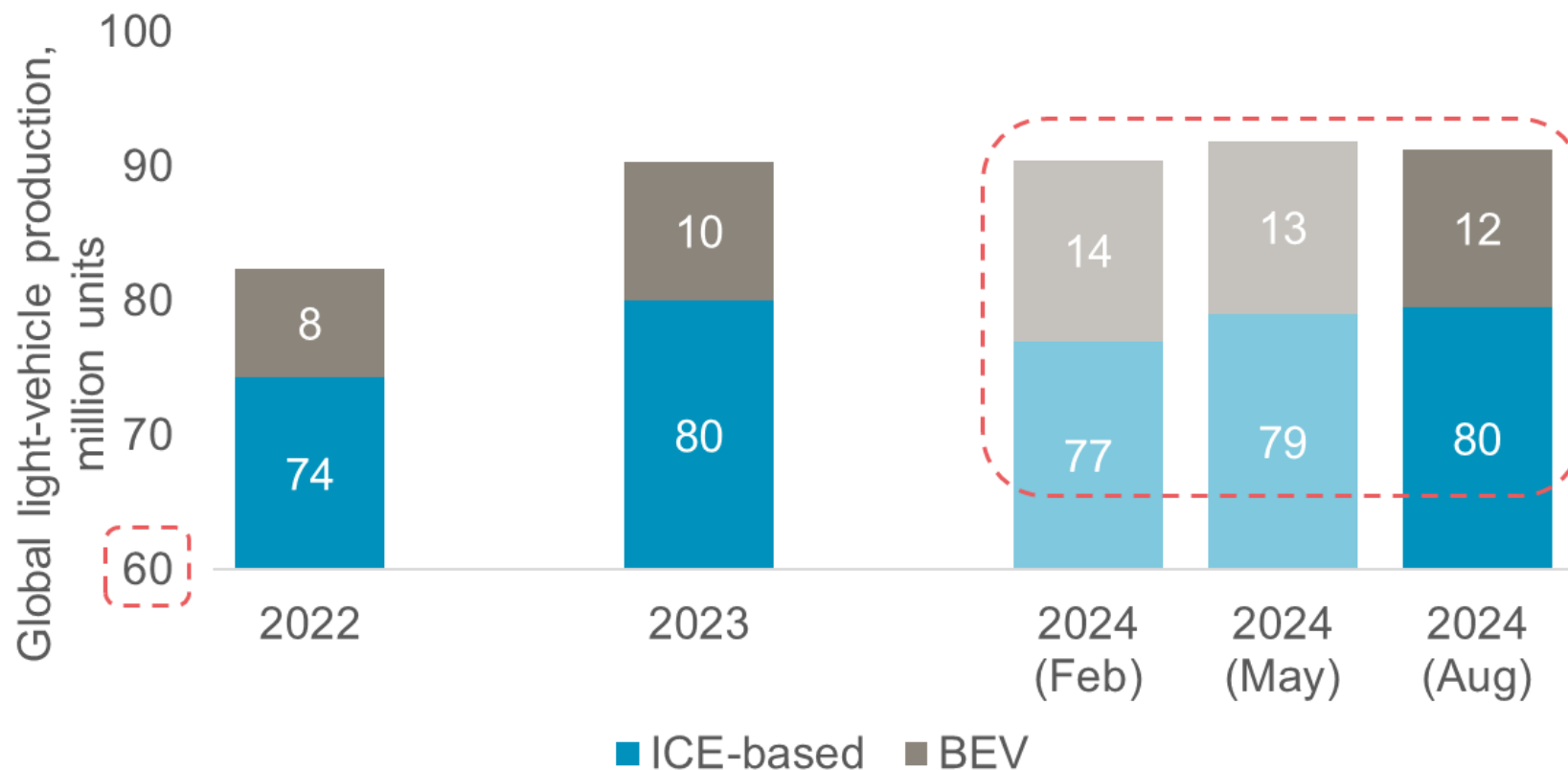
*Edward Sterck*





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

Slow BEV growth rates filtering into 2024 full-year forecasts



- ICE-based (incl. hybrid) demand remains resilient,
  - PGM demand supported,
- BEV production forecasts being revised downwards.

# AUTOMOTIVE TRENDS: GLOBALLY HYBRIDS HAVE ATTRACTED THE MOST ATTENTION IN 2024 THUS FAR

## Divergent growth trends:

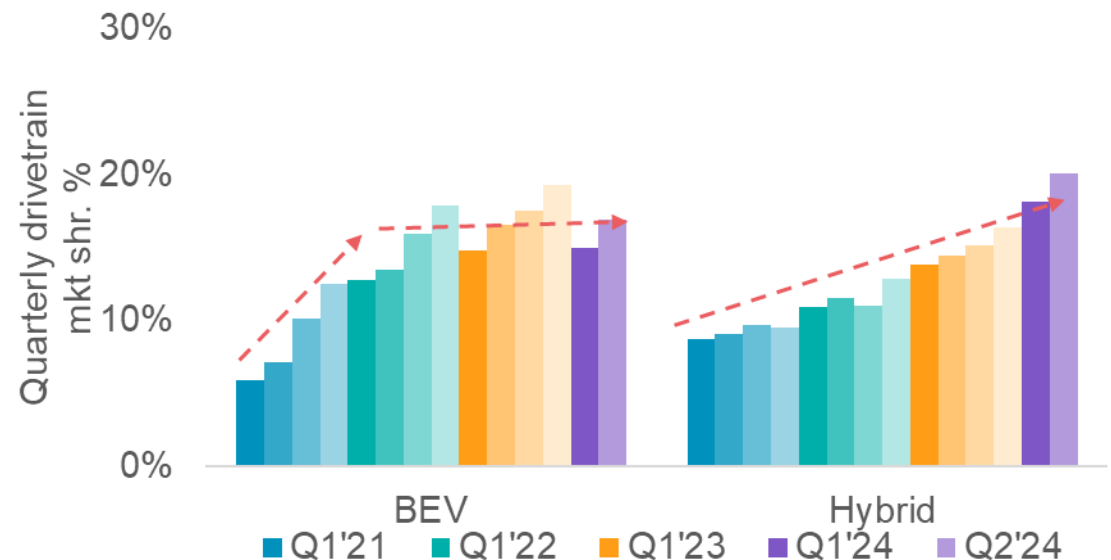
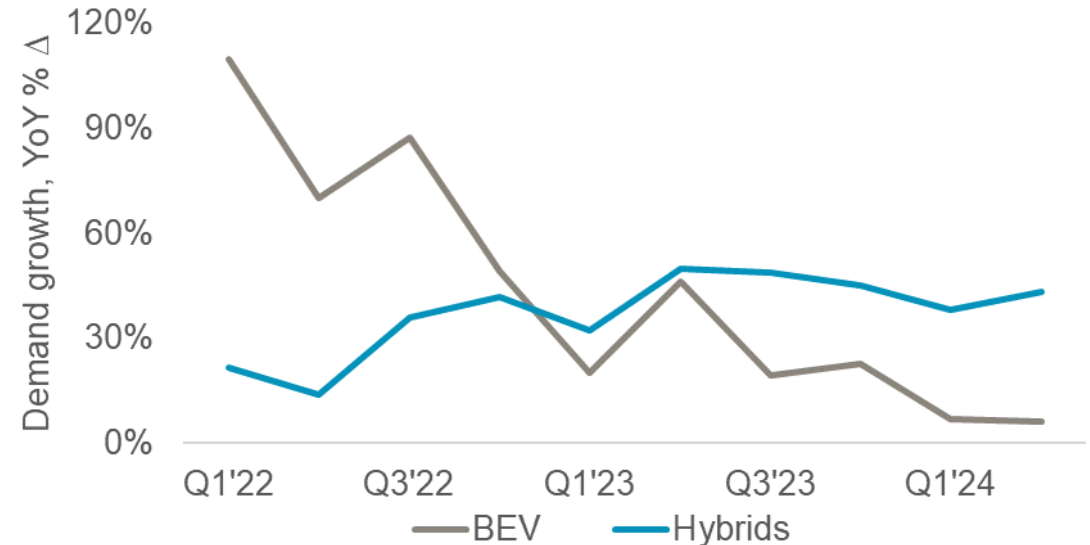
- BEV: +6% YTD,
- Hybrids: +41% YTD.

## Market share implications:

- Hybrid market share steadily growing,
- BEV penetration now flat for two years.

## What's driving the shift in momentum?

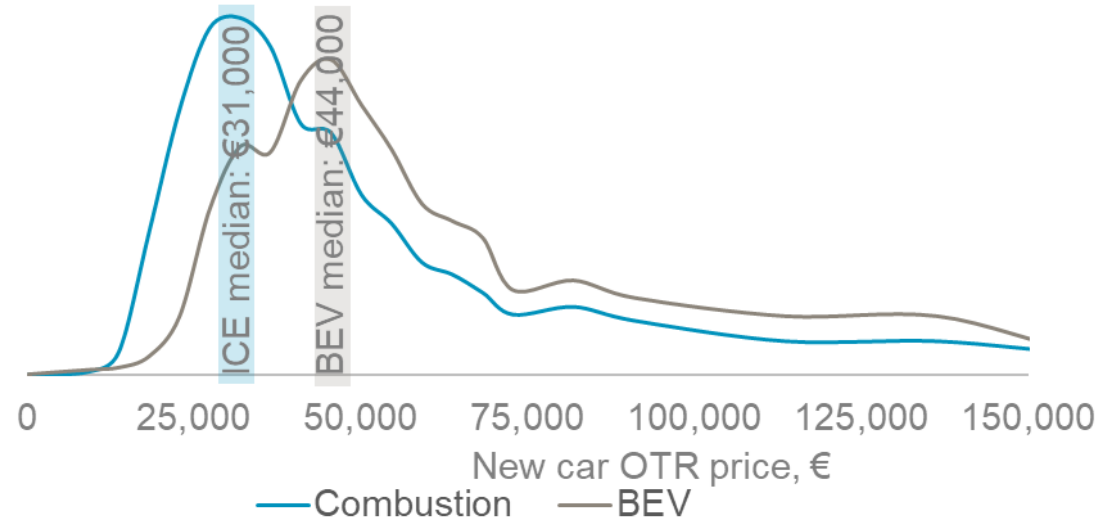
- Price,
- Consumer preferences,
- China.



# AUTOMOTIVE TRENDS: BEVS TODAY CARRY AN ICE PREMIUM BUT BUDGET BEVS ARE NOT A PANACEA

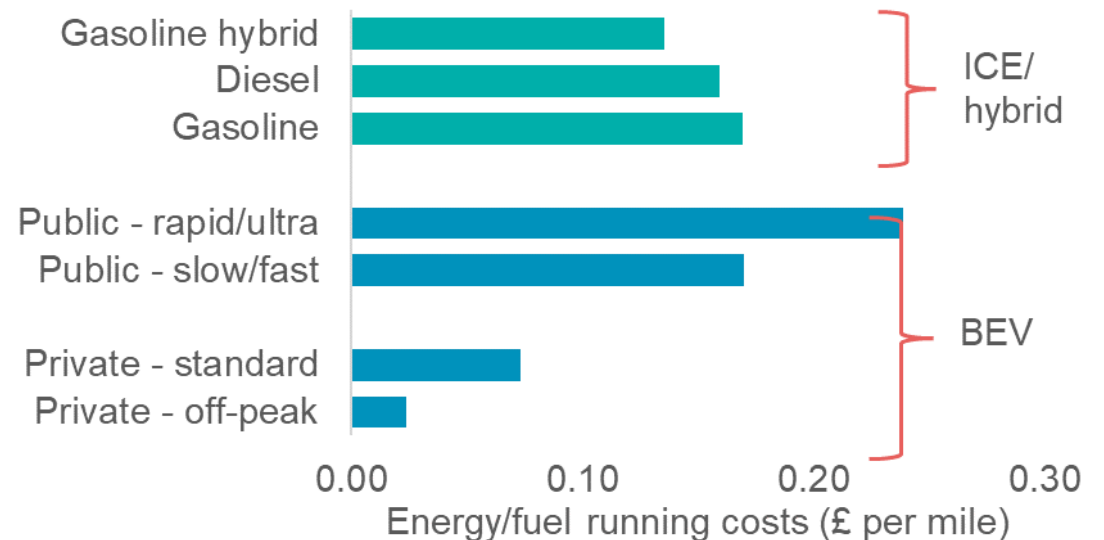
## New car listings distributed by price

- High interest rates, price differentials and macro uncertainty weighing on consumer sentiment,
- Consumers drawn to more affordable ICE-based vehicles.



## ICE vs. BEV running costs

- Budget BEVs will look cheaper on paper,
- But, a greater reliance on expensive public charging eliminates any Running cost advantage.



# AUTOMOTIVE TRENDS: WHAT HAPPENS IN CHINA HAS GLOBAL IMPLICATIONS

## Global leadership:

- China accounted for >60% of global BEV production in 2023.

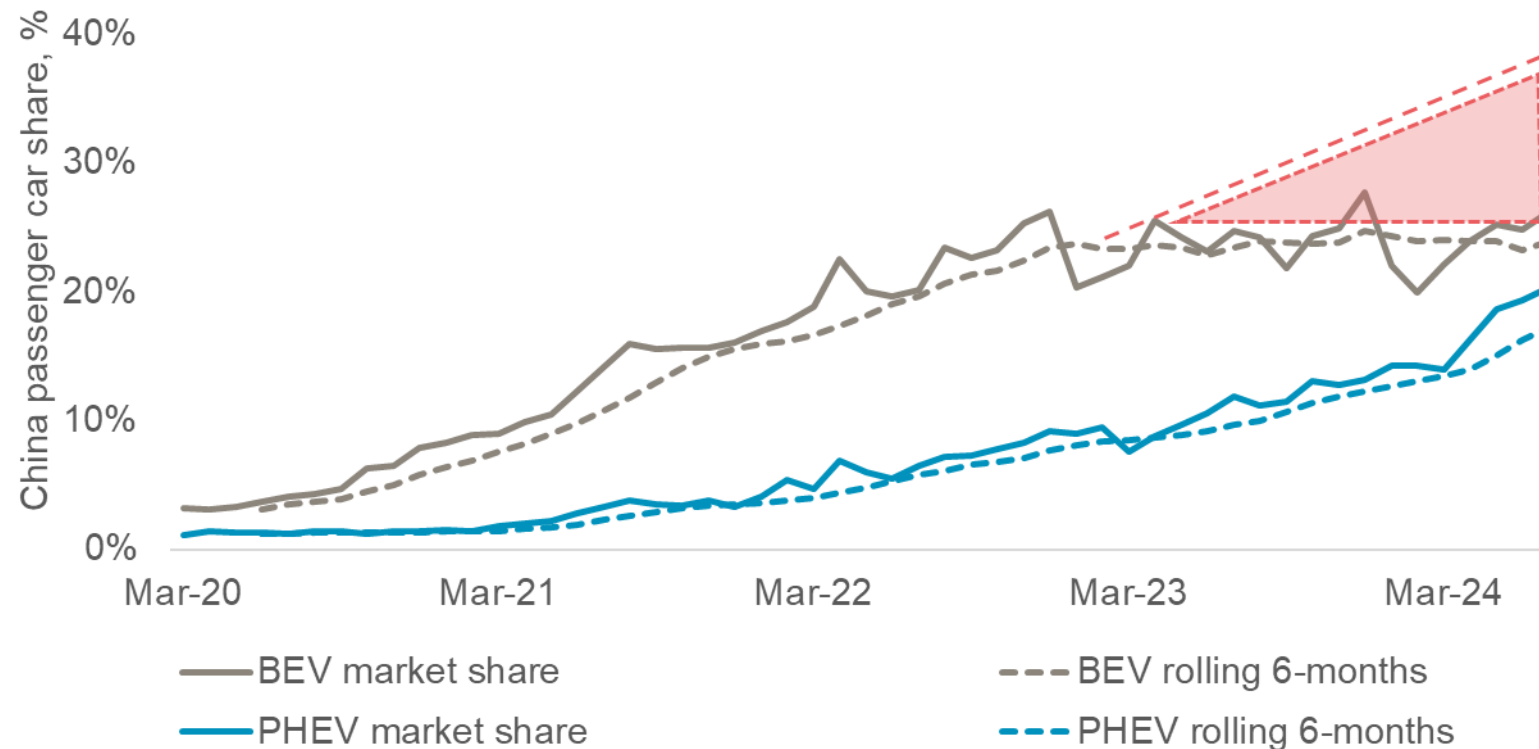
## China's market should be thriving:

- Scrapping incentives,
- Competition driving prices lower, with NEV approaching pure-ICE.

## Positive NEV narrative needs unpacking:

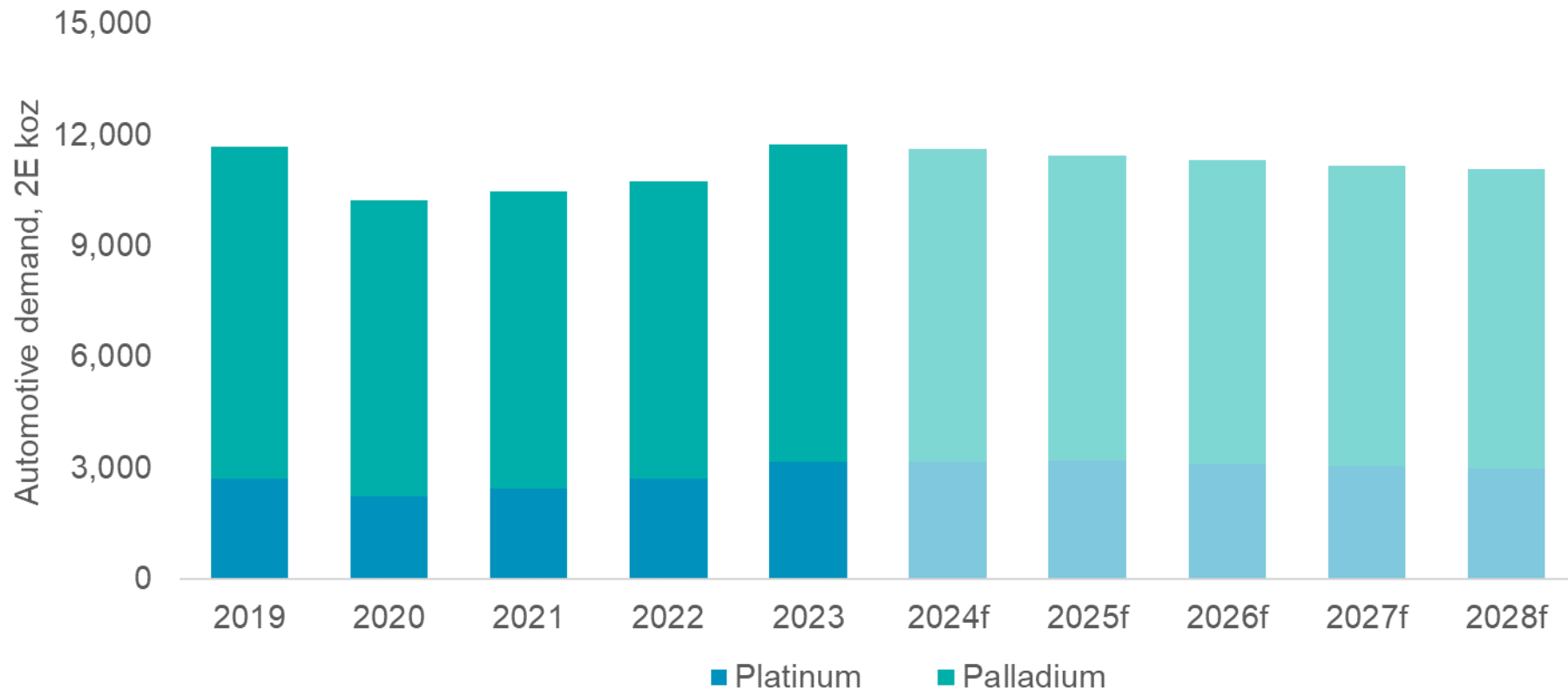
- Hybrids driving growth, not BEV,
- Hybrid market share approaching BEV.

Slowing Chinese demand implies ~3.5m fewer BEVs than historic growth trends



# AUTOMOTIVE TRENDS: HIGHER-FOR-LONGER PGM DEMAND

Automotive PGM demand erosion limited to -1.4% CAGR from 2023 to 2028f



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

# MINE SUPPLY: PRICE TROUGH APPEARS TO BE STABLE, GIVING A BASELINE FOR PRODUCERS TO WORK FROM

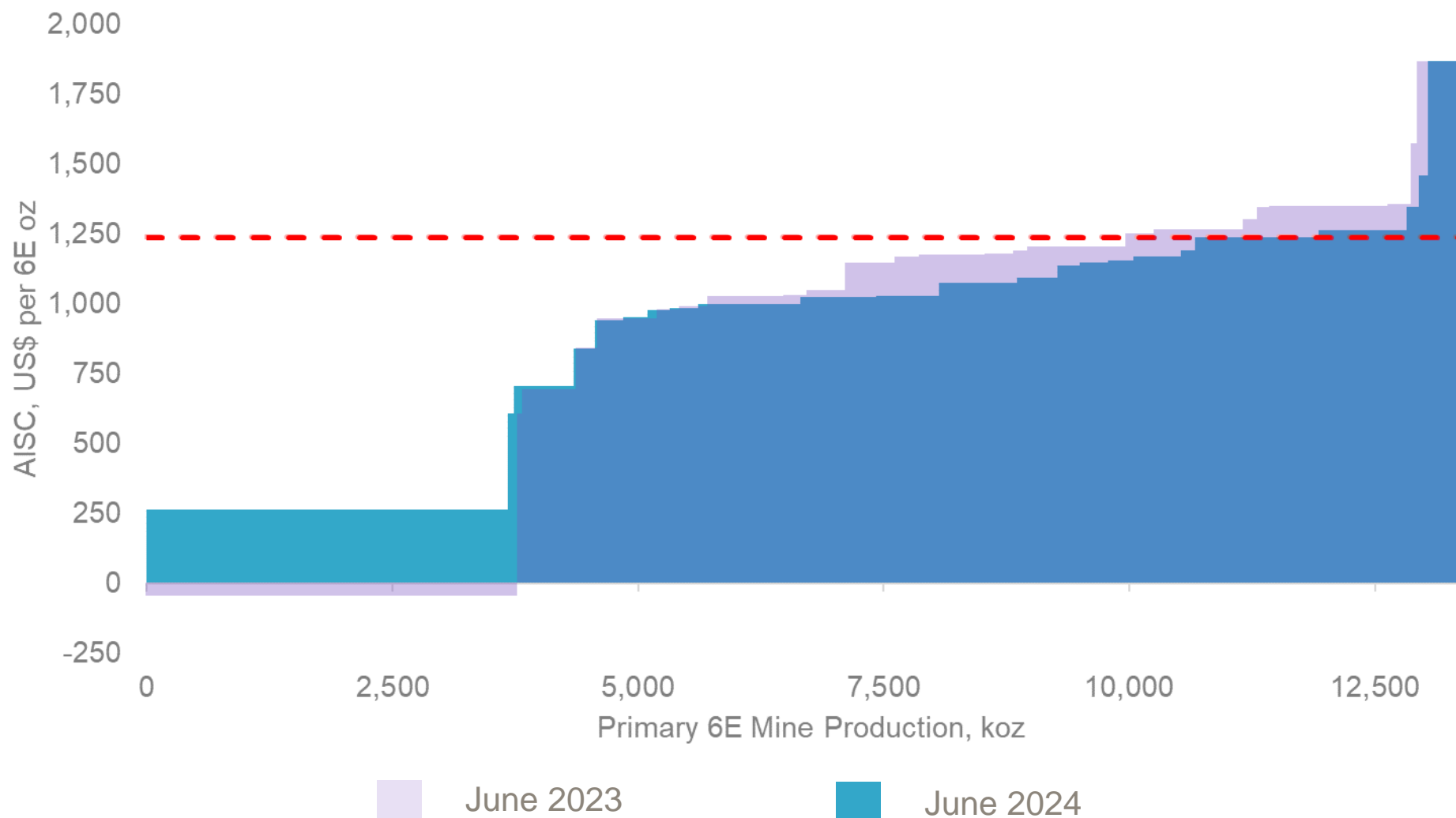


**Miners have a “target” to achieve sustainability:**

- Jobs
- Growth capex
- Sustaining capex

# SUPPLY UNCERTAINTY: CAPEX AND LABOUR RESCHEDULING MAY BE ONLY SHORT-TERM REPRIEVES

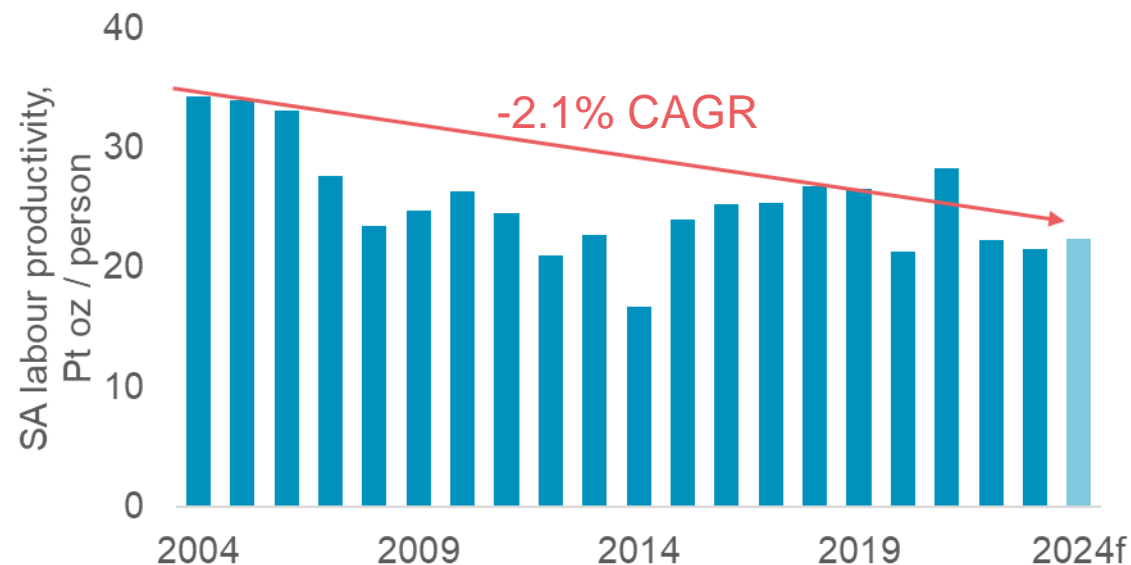
Restructuring is most evident amongst 3<sup>rd</sup> and 4<sup>th</sup> quartile operations (2024 vs. 2023)



# SUPPLY UNCERTAINTY: MINERS ARE RESTRUCTURING TO TARGET SUSTAINABILITY

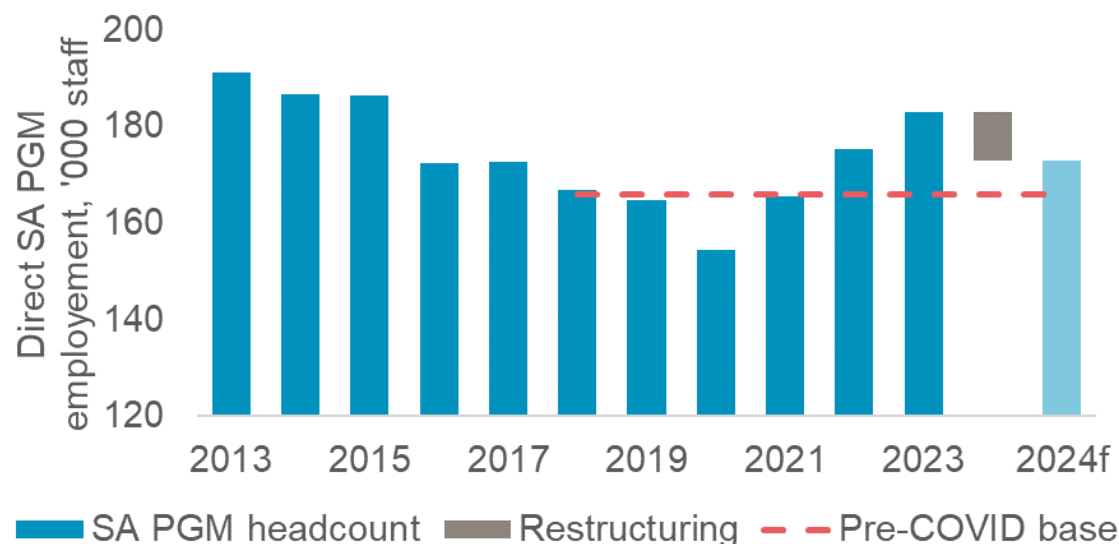
## Productivity on a long-term down trend

- -2.1% CAGR between 2004 to 2024,
- Best resources been depleted,
- Mining deeper, more challenging resources,
- Greater safety focus.



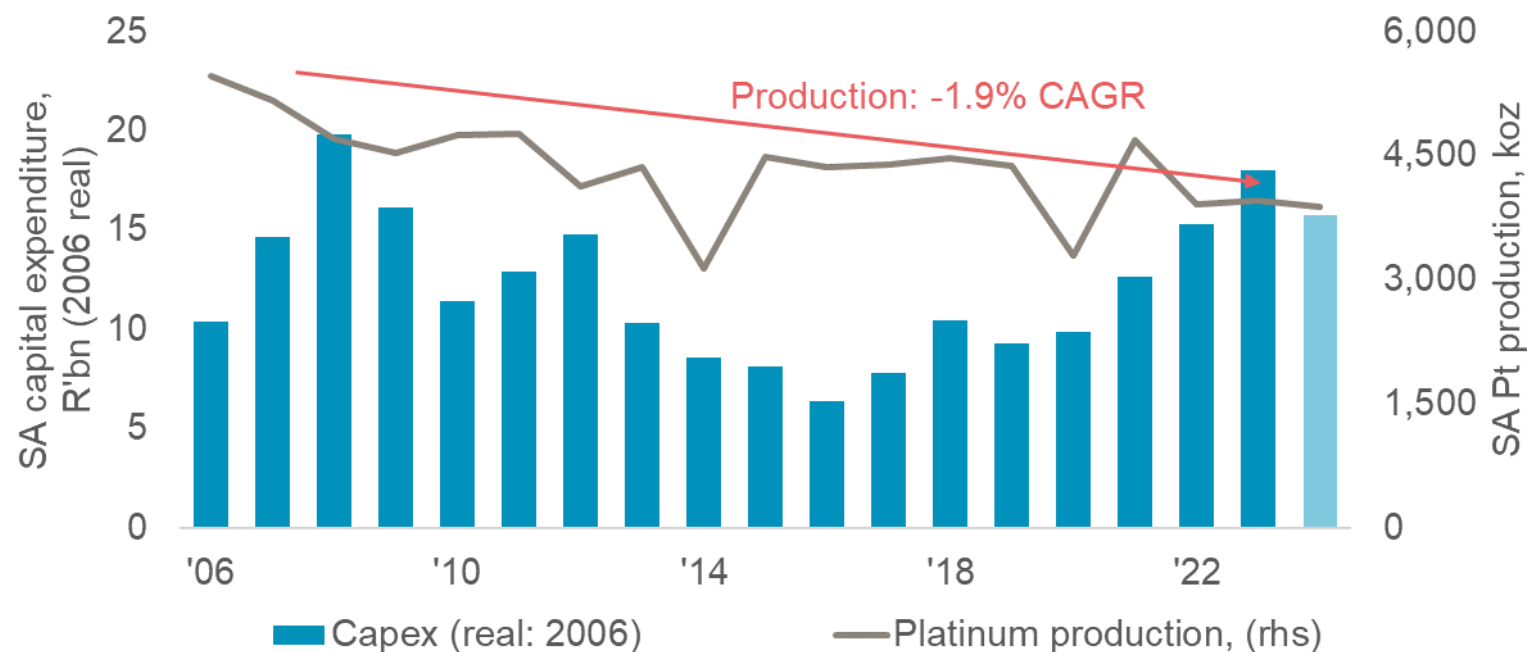
## Headcount restructuring

- ~10,000 fewer SA PGM jobs in 2024 vs. 2023, down the equivalent of 6%,
- But targeting productivity improvement to sustain output at guidance levels.





# SUPPLY UNCERTAINTY: LONGER-TERM TRENDS POINT TO DOWNSIDE RISKS TO PRODUCTION



## Capital rescheduling

SA capex increased 2.5x between 2019 and 2023

- Catching-up on prior deferrals,
- Broad-based inflation.

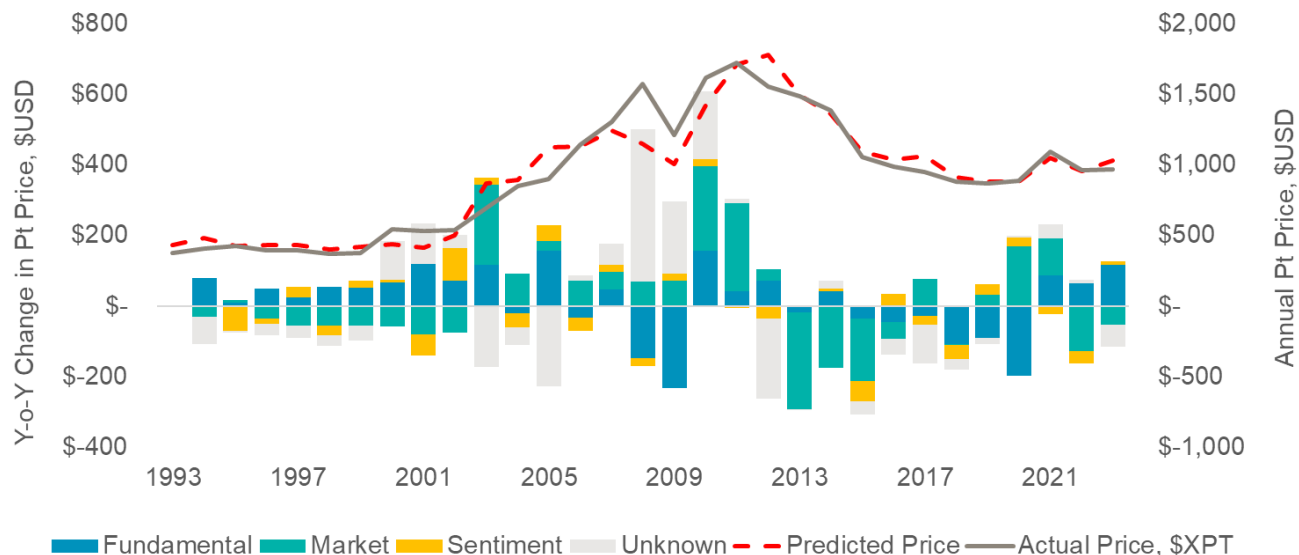
## Responding to the market

- Capex down 20% between 2023 to 2025f:
  - Deferring growth & replacement.

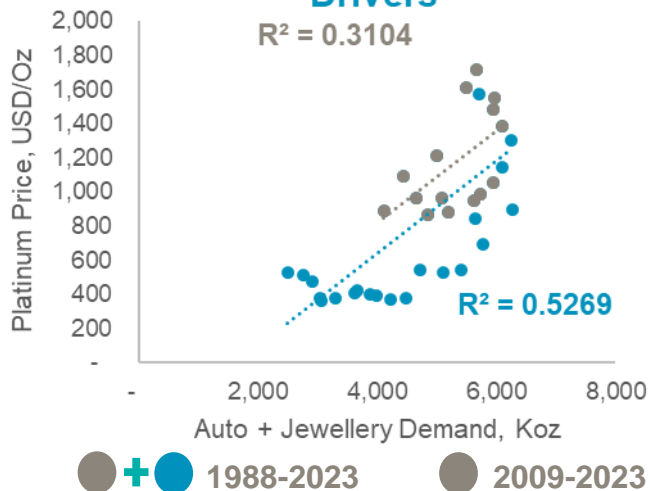
## Historic declines in real capex are difficult to recover from

- Real capex declined ~70% between 2008 to 2016 on lower PGM prices.
- Longer term + enduring production impacts -1.9% CAGR since 2006,

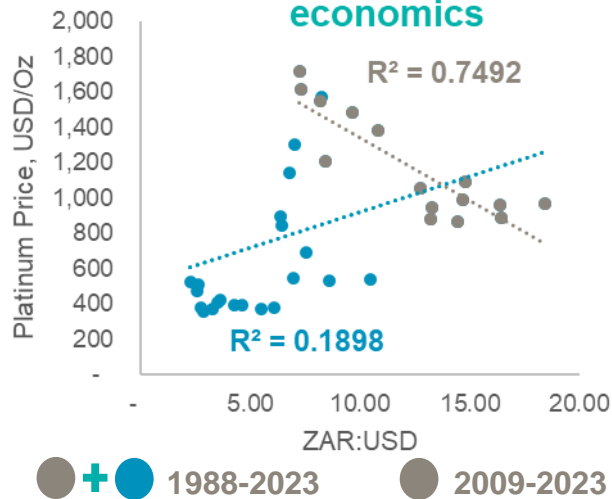
# PRICE DRIVERS: PLATINUM PRICE DRIVERS HAVE CHANGED OVER TIME AND WILL CONTINUE TO EVOLVE



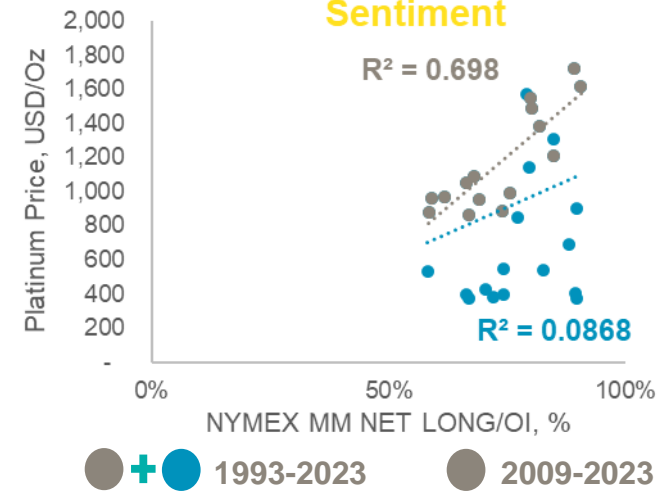
## Fundamental Demand Drivers



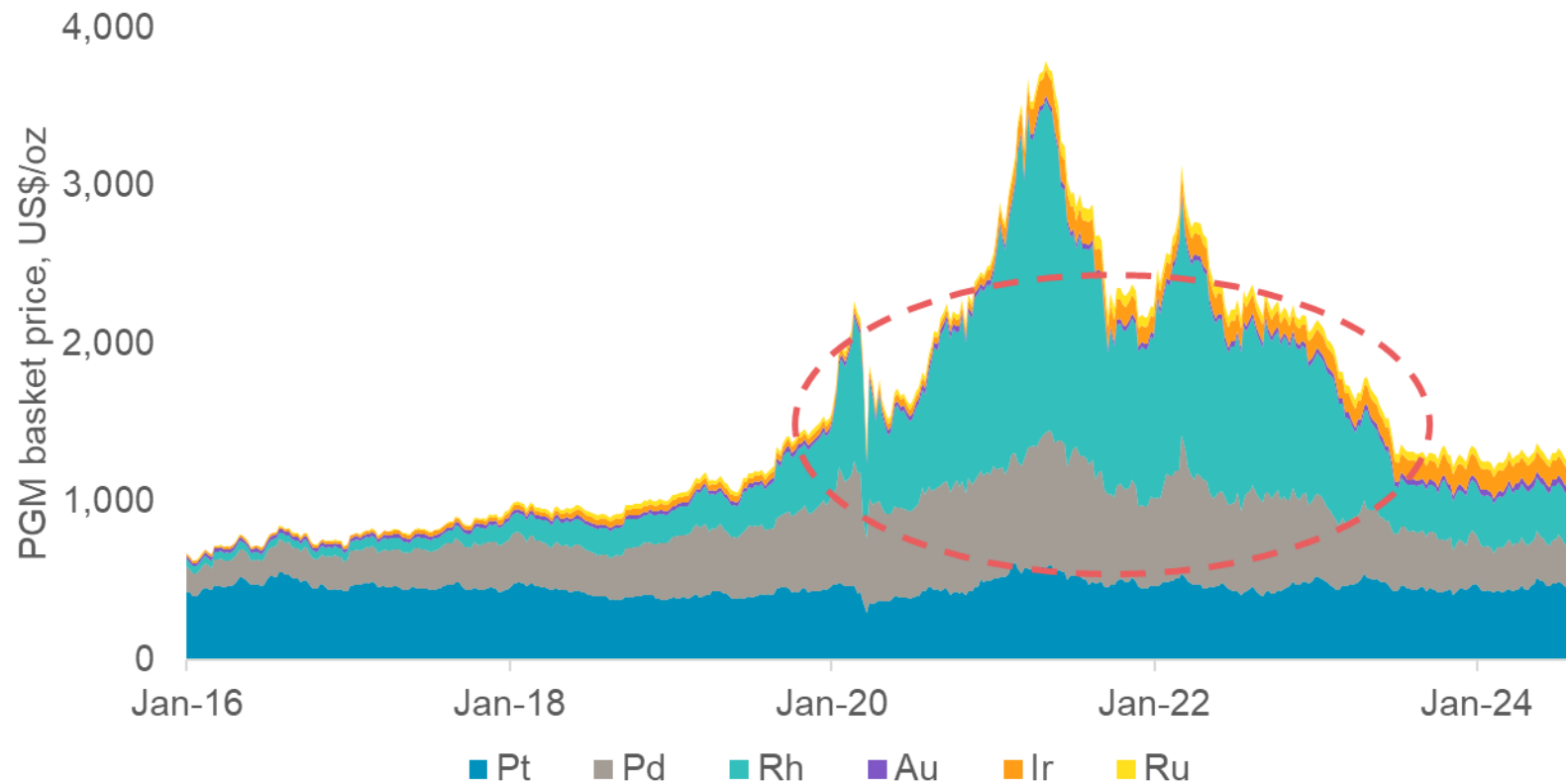
## FX: ZAR:USD impacts economics



## Futures Positioning Reflects Sentiment



# PRICE DRIVERS: PALLADIUM & RHODIUM TEMPORARILY OVERSHADOWED PLATINUM



Without palladium and rhodium price support, it now falls to platinum to react to underlying fundamentals to support mine and recycling supply, where:

- Demand is robust,
- Supply is challenged.

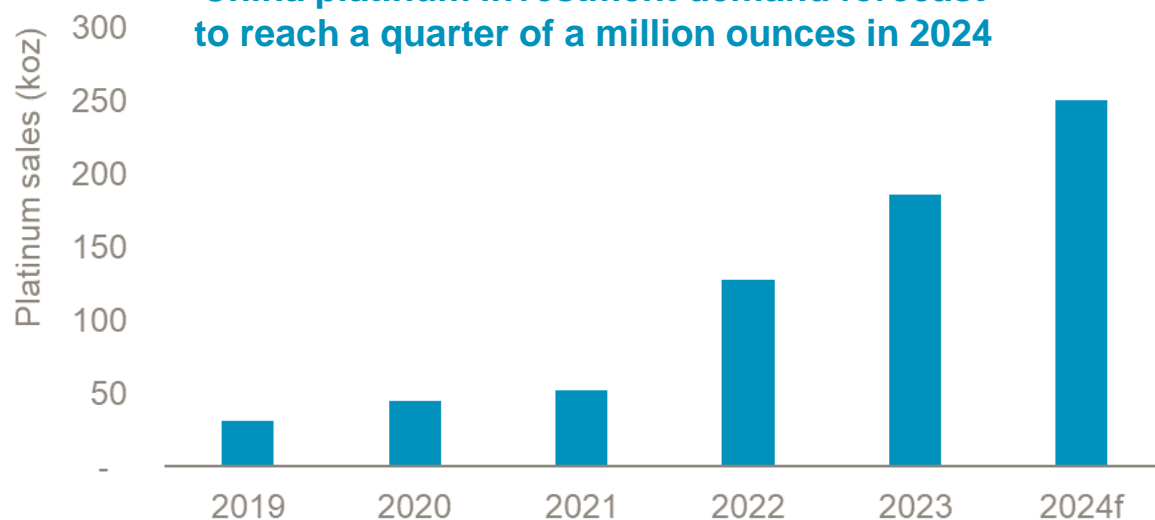
# WHY INVEST IN PLATINUM?



- Underlying fundamentals are expected to once again become the most important price setting factor as a result of:
  - **Second consecutive annual material platinum market deficit**
  - **Above ground stocks expected to deplete by almost 37% 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 should increase demand and support automaker inventory restocking**

# WPIC INITIATIVES AND UPCOMING RESEARCH

## China platinum investment demand forecast to reach a quarter of a million ounces in 2024



## Yue Heng Investment-grade (99.95) Pt Jewelry



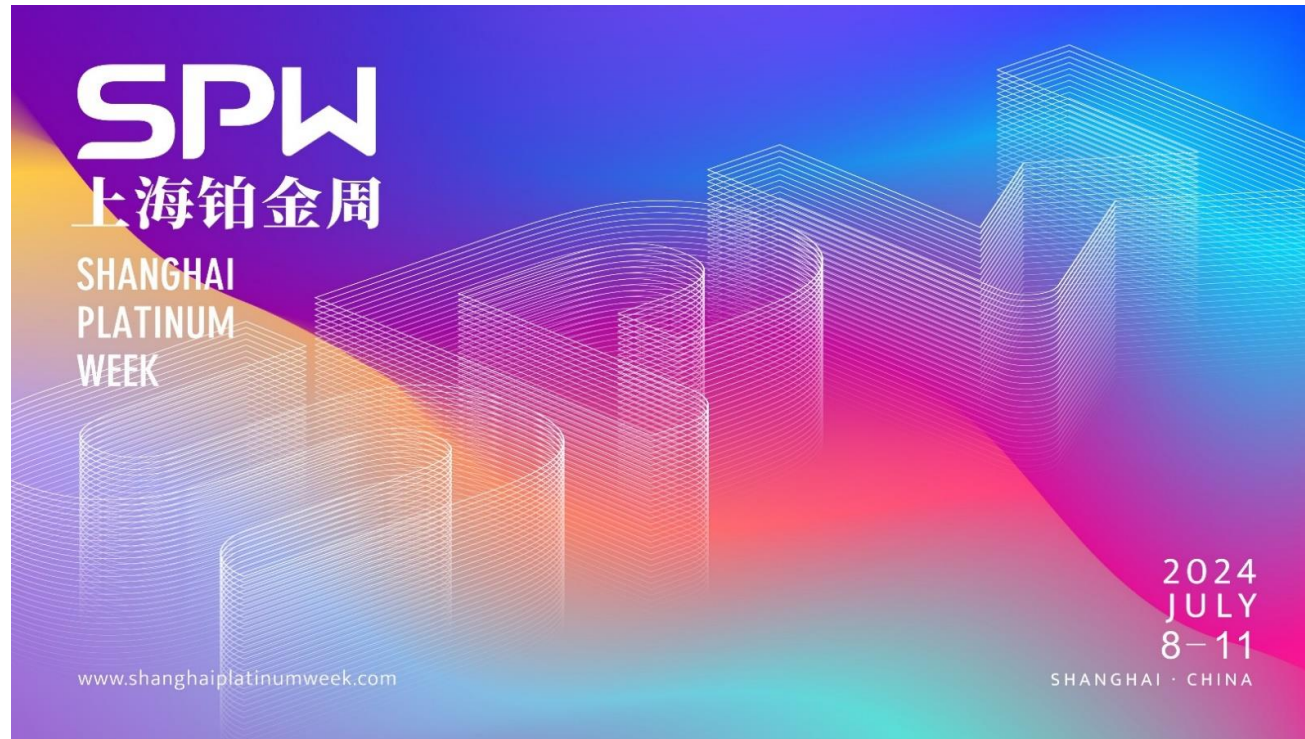
## WPIC initiatives:

- Continued strong demand for platinum investment products, particularly China (Q2 yoy +108%)
- Introduction of large-sized investment-grade platinum jewellery (Pt .9995)
- Support for Guanzhou Futures Exchange, Pt and Pd imminent

## Upcoming WPIC Research:

- Updated two- to five-year supply demand outlook
- Price modelling analysis
- Mine supply evolution – will future production be aligned with PGM demand?

# SHANGHAI PLATINUM WEEK – LINKING PGM VALUE CHAIN AND INCREASING AWARENESS AND OWNERSHIP



## SPW 2024 statistics

- 13 events
- 42 presentations
- >500 in-person delegates
- >470 thousand online viewers
- Site visits to 7 associated PGM and hydrogen value chain organisations

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*Edward Sterck, Director of Research*



## Platinum Quarterly ([link](#))

## Platinum Essentials ([link](#)):

- Slowing BEV market growth is driving investor interest in platinum on a higher-for-longer ICE automotive thesis; are budget BEVs a threat to this outlook?
- Updated palladium supply/demand outlook: Reduced supply and stronger near-term demand prolong larger deficits.

## Platinum Perspectives ([link](#)):

- Policy certainty is accelerating hydrogen electrolyser approvals and supporting platinum's investment case
- Politics and policy changes could further benefit the investment case for platinum





