

PLATINUM QUARTERLY PRESENTATION Q4 2017

London

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AGENDA: PLATINUM QUARTERLY 2017, Q4 2017 AND 2018 FORECAST

1. Introduction

Paul Wilson, CEO, WPIC

2. Platinum Quarterly, Fundamentals review

Trevor Raymond, Director of Research, WPIC

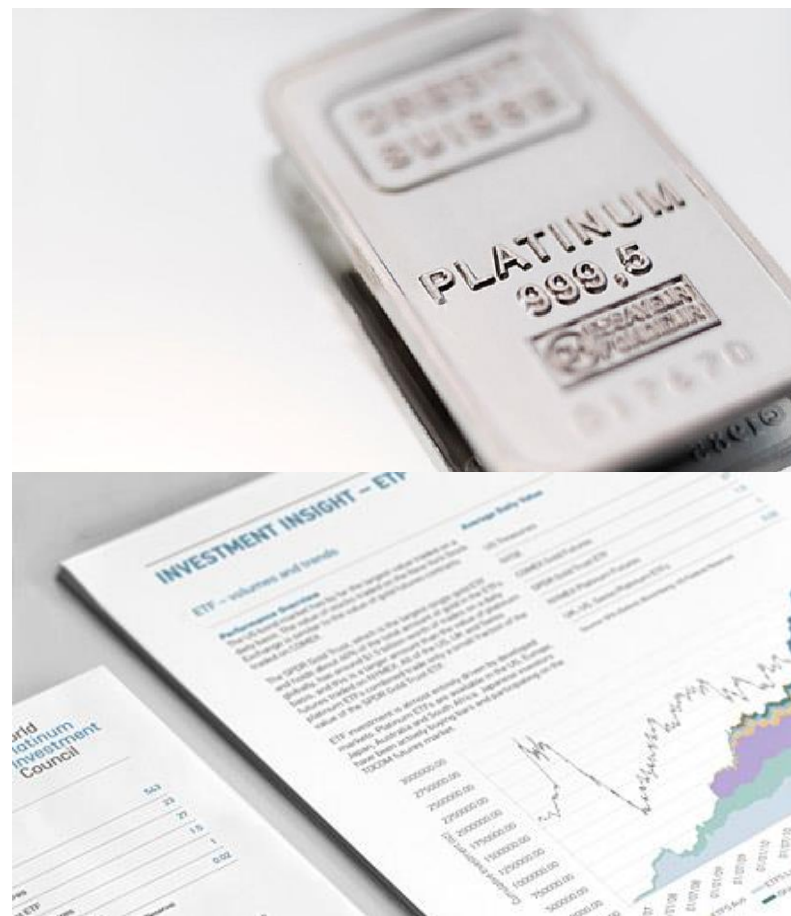
3. Fundamental insights

Trevor Raymond

4. Questions

Paul Wilson

Trevor Raymond



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Supply, demand and balance

- 2017
- Q4'17
- 2018 forecast

Trevor Raymond, Director of Research, WPIC

3. Fundamental insights

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4. Questions

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2017: MARKET IN SURPLUS

SUPPLY	2016	2017	YoY, oz	YoY, %
Refined Production	6,035	6,075	40	1%
South Africa	4,255	4,370	115	3%
Zimbabwe	490	445	-45	-9%
North America	395	365	-30	-8%
Russia	715	715	0	0%
Other	180	180	0	0%
Inc (-)/Dec (+) in Producer Inventory	+30	+35	5	17%
Total Mining Supply	6,065	6,110	45	1%
Recycling	1,855	1,905	50	3%
Autocatalyst	1,225	1,340	115	9%
Jewellery	625	560	-65	-10%
Industrial	5	5	0	0%
Total Supply	7,920	8,015	95	1%
DEMAND				
Automotive	3,490	3,395	-95	-3%
Jewellery	2,505	2,460	-45	-2%
Industrial	1,790	1,650	-140	-8%
Investment	535	260	-275	-51%
Total Demand	8,320	7,765	-555	-7%
Balance	-400	250	-	-
Above Ground Stocks	1,905	2,155	250	13%

- Strong S.A. mine supply, autocatalyst recycling offset by weakness elsewhere – flattish supply
- Moderate decline in automotive demand – headwinds overestimated
- Lower jewellery demand due to rebasing of India
- Investment demand down YoY; as very strong Japan bar buying not repeated

Q4 2017 SUPPLY: STRONG RECYCLING, MINING SUPPORTED BY INVENTORY RELEASE

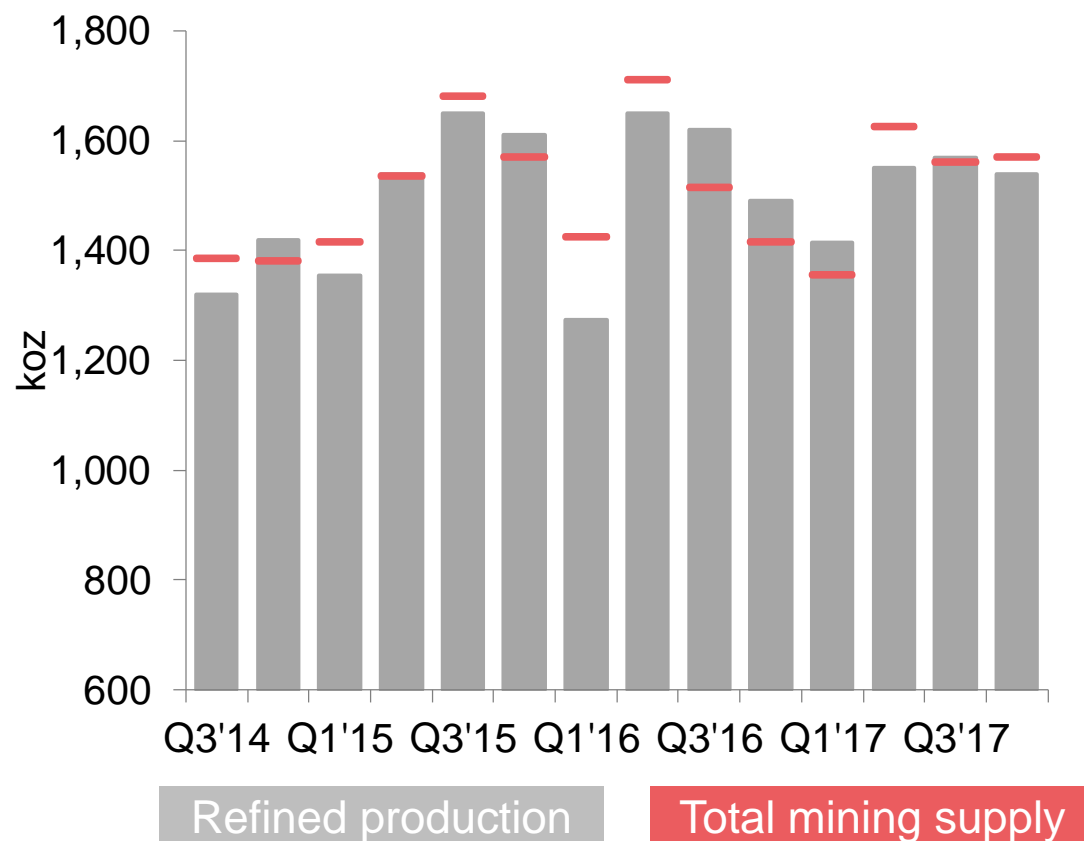
SUPPLY Q4 2016 // Q3 2017 Q4 2017

Refined Production		1,490	1,570	1,540	
South Africa		1,065	1,140	1,120	
Zimbabwe		120	100	105	
North America		85	95	90	
Russia		170	185	185	
Other		50	45	45	
Inc(-)/Dec(+) in Producer Inventory		-75	-10	+30	
Total Mining Supply		1,415	1,560	1,570	
Recycling		470	480	520	
Autocatalyst		290	330	380	
Jewellery		180	150	140	
Industrial		0	0	0	
Total Supply		1,885	2,040	2,090	

- Total supply +205 koz YoY
- Mine supply +155 koz YoY, given S.A. outperformance and inventory release
- High prices increased autocatalyst recycling

MINING SUPPLY: INVENTORY DRAWDOWN BOLSTERS SUPPLY AGAIN

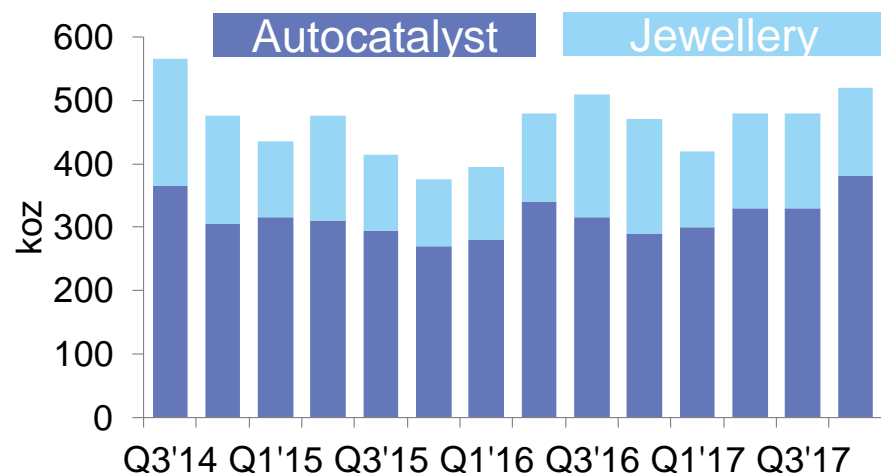
Total mining supply and refined production



- Refined production -2% QoQ but +3% YoY
- S.A. outperformed on lower safety stoppages, operational improvements
- Further 30koz inventory drawdown, though inventory now at “normal” levels

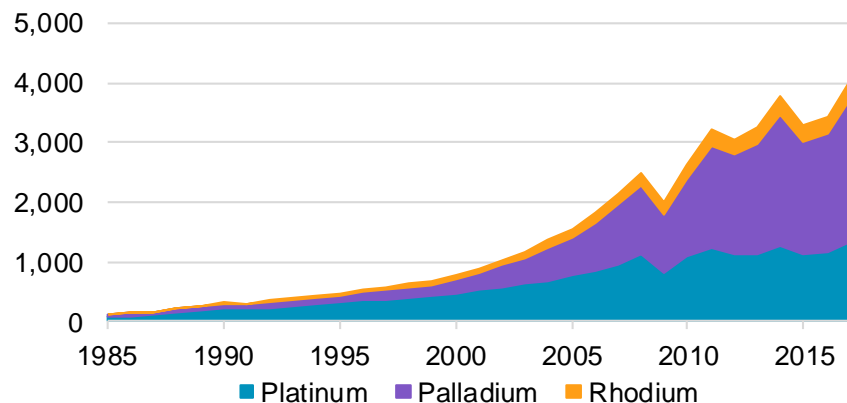
RECYCLING SUPPLY: SURPRISE INCREASE IN AUTOCATALYST RECYCLING

Autocatalyst and jewellery recycling

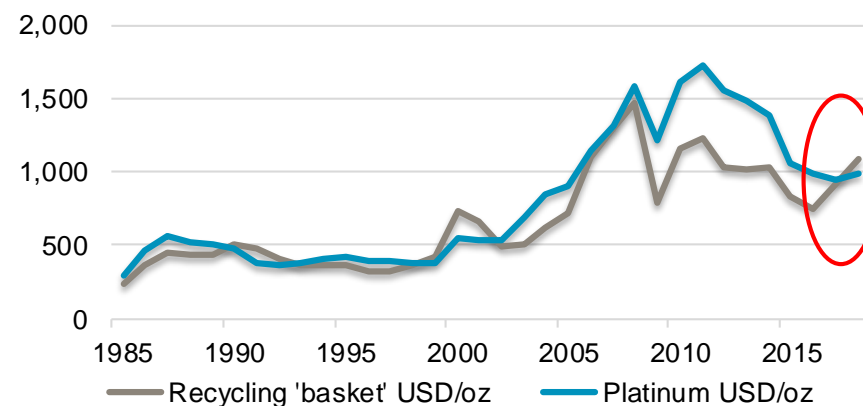


- Autocatalyst recycling +50 koz
- High palladium, rhodium (and scrap steel) prices leading to increased collection rates and processing of spent autocatalysts
- Jewellery recycling -10 koz QoQ

Autocatalyst PGM recycling (koz)



Autocatalyst PGM 'basket'



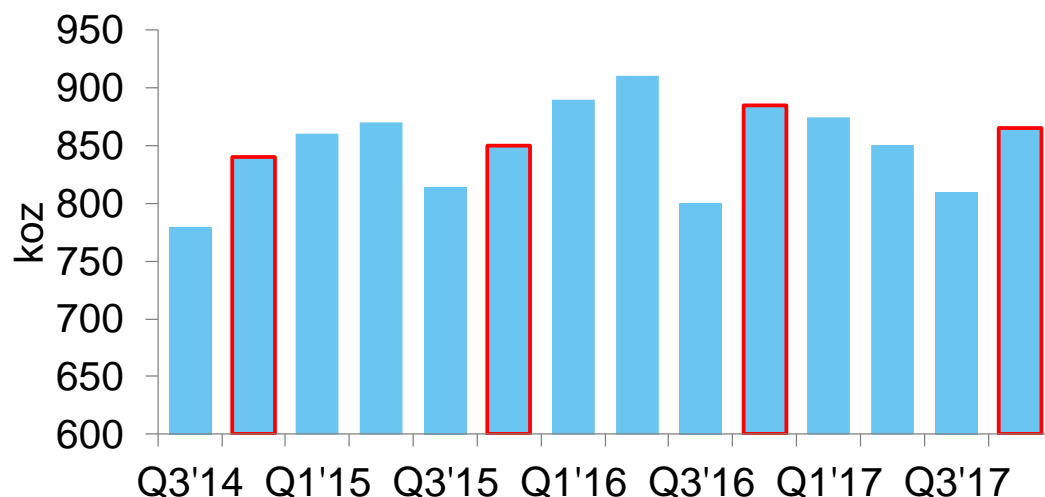
Q4 2017 DEMAND: FLAT AUTO & INDUSTRIAL

DEMAND	Q4 2016 // Q3 2017	Q4 2017	
Automotive	885	810	865
Autocatalyst	850	770	830
Non-road	35	35	35
Jewellery	700	585	675
Industrial	410	415	405
Chemical	130	165	135
Petroleum	55	25	25
Electrical	40	40	40
Glass	5	50	20
Medical & Biomedical	75	45	75
Other	105	90	110
Investment	225	-10	95
Change in Bars, Coins	115	45	65
Change in ETF Holdings	115	-40	50
Change in Stocks Held by Exchanges	-5	-15	-20
Total Demand	2,220	1,800	2,040
Balance	-335	240	50

- Automotive demand -2% YoY, but recovering from a seasonally weak Q3
- Jewellery demand +15% QoQ, helped by China resurgence and restocking
- Investment demand +105 koz QoQ

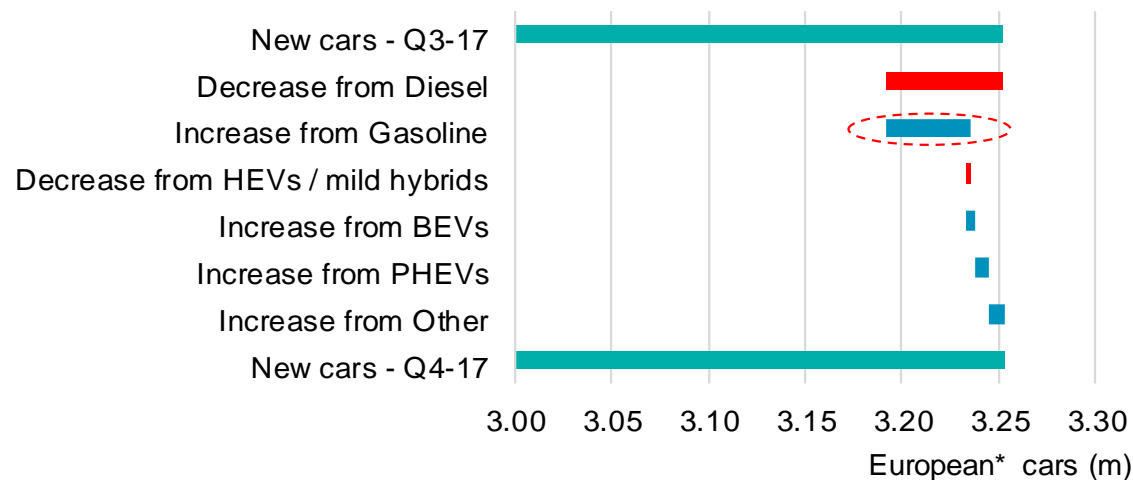
Q4 2017 DEMAND: AUTOCATALYST DEMAND REBOUNDS SEASONALLY

Autocatalyst demand, quarterly



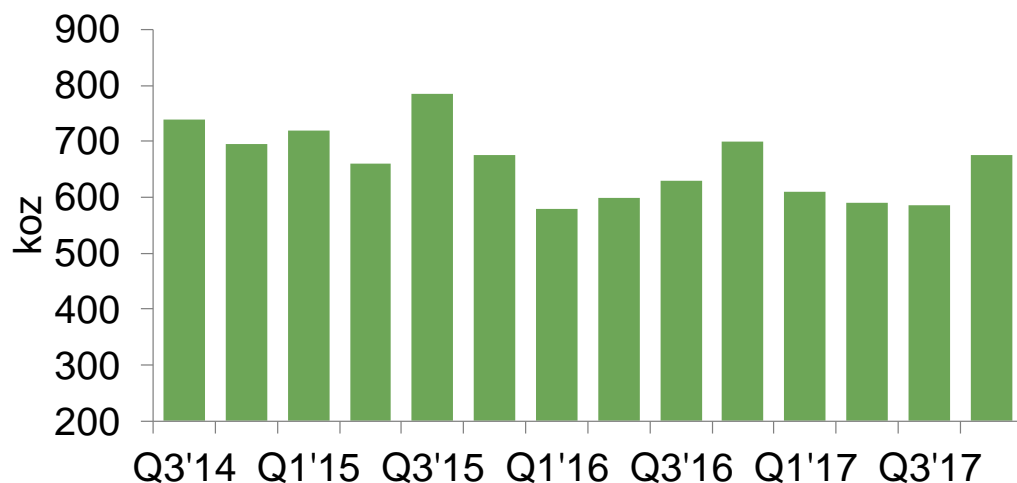
- Automotive demand down 20 koz YoY
- Falling European diesel share continues to be a headwind for platinum demand
- Diesel share not expected to continue to fall as quickly

Change in European cars Q4 2017 vs Q3 2017

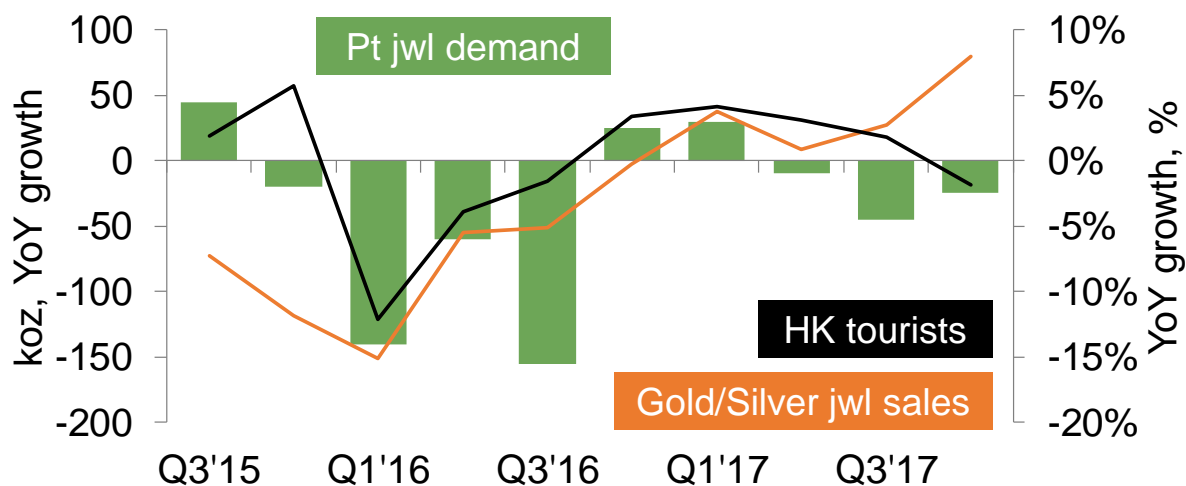


Q4 2017 DEMAND: JEWELLERY DEMAND REBOUNDS

Jewellery demand



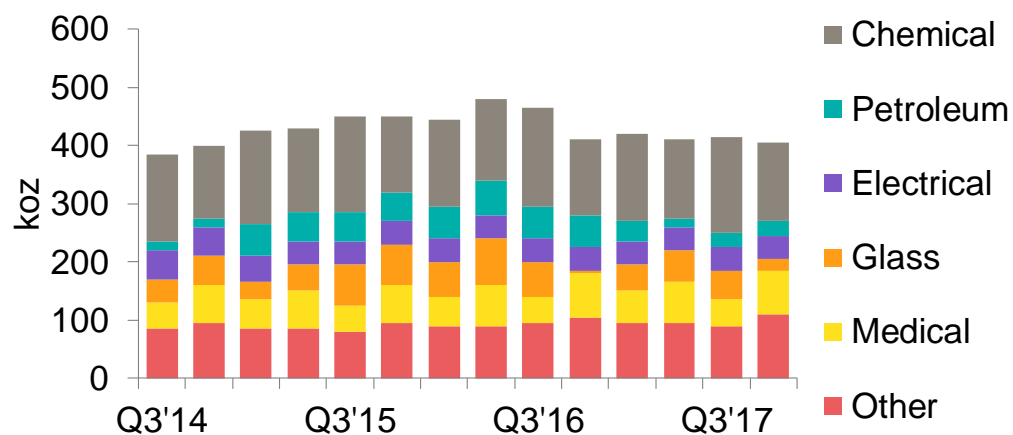
Jewellery demand growth and economic drivers



- China – sequential increase but still underperforming gold (Q4 2017 gold jewellery demand +6% YoY)
- India – double-digit growth in platinum outperforms gold (Q4 2017 gold jewellery demand +4% YoY)

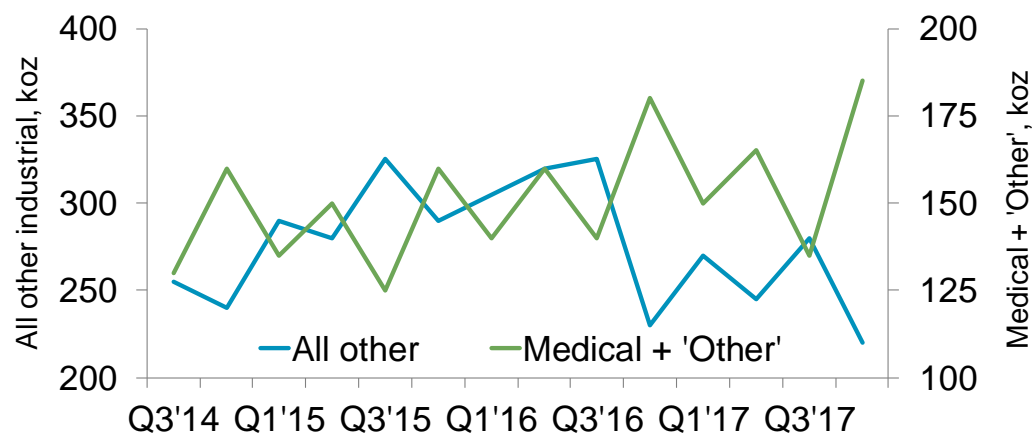
Q4 2017 DEMAND: INDUSTRIAL DEMAND FLAT

Industrial demand



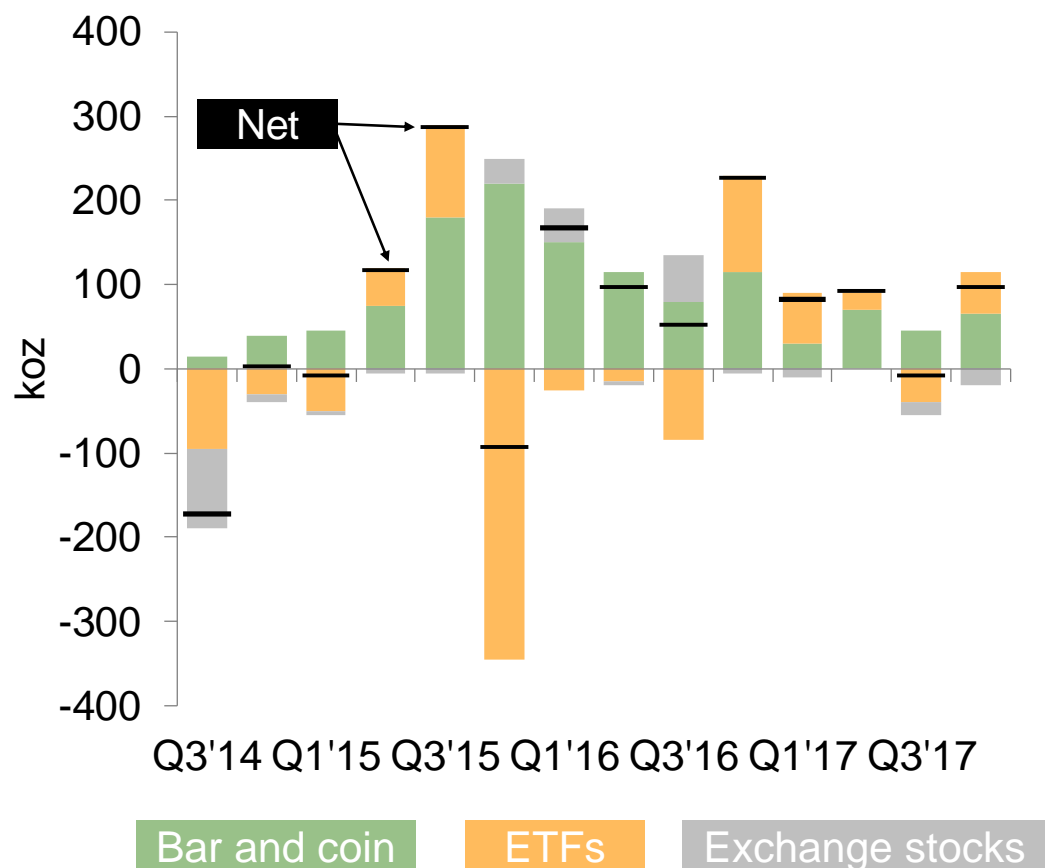
- Net demand -10 koz QoQ
- Chemical demand -30 koz QoQ
- Positive momentum in Medical (+30 koz QoQ) and Other (includes fuel cells, +20 koz QoQ)

Industrial demand - split



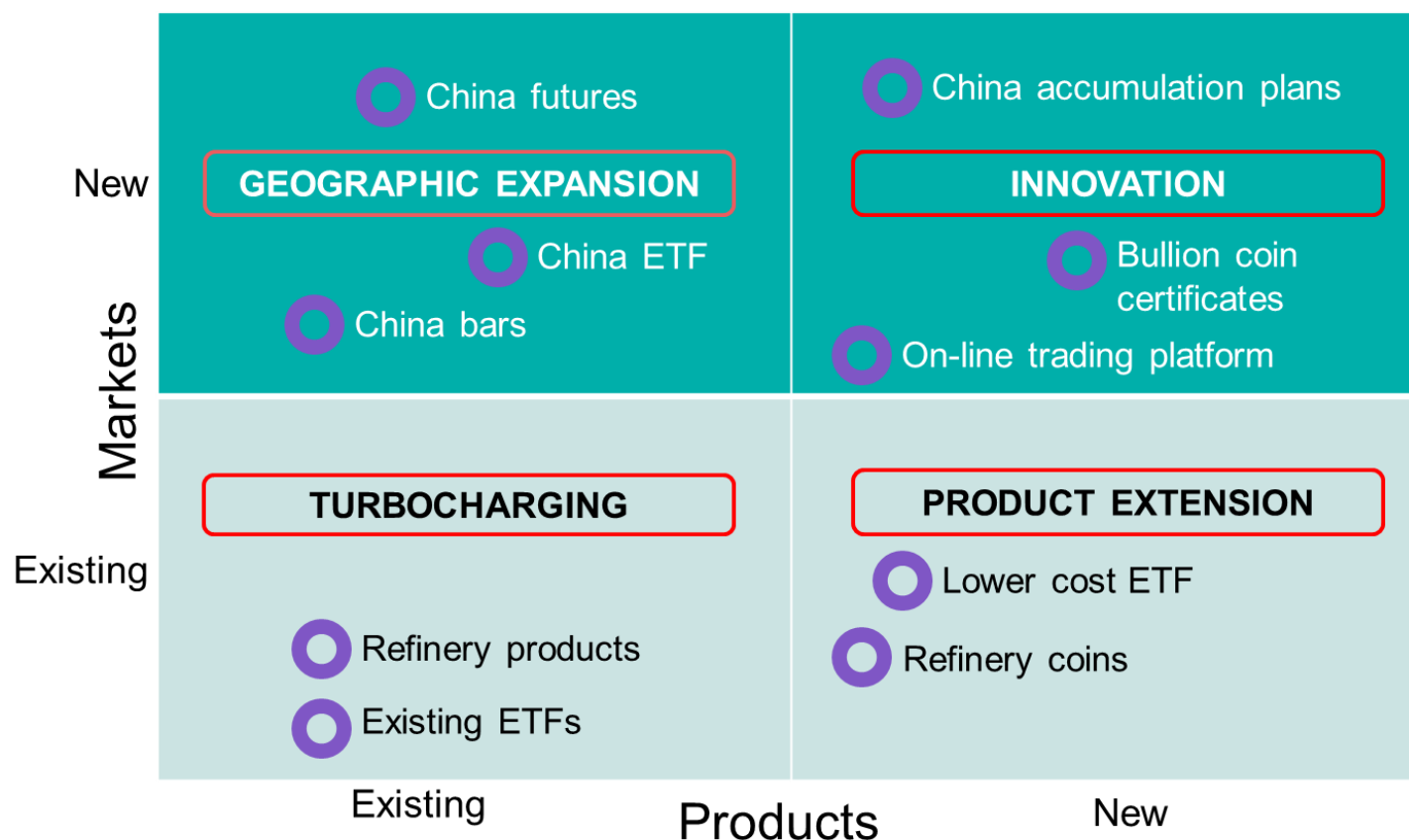
Q4 2017 DEMAND: ETFs, BAR/COIN DEMAND POSITIVE

Investment demand by category



- Japan bar buying stimulated as prices fell to ¥3,400/g
- 105 koz QoQ increase in ETF buying activity

MARKET DEVELOPMENT – INCREASING PRODUCT CHOICE & APPEAL TO WIDER RANGE OF INVESTORS



- US retail market potential
- New low-cost ETF launched in the US – January 2018
- Multiple opportunities in China
- Shanghai office developing investor allocation and product partners
- Multi-channel investor outreach in Japan

2018 FORECAST: SUPPLY FALLING, DEMAND GROWING, MARKET IN BALANCE

SUPPLY	2017	2018f	YoY, oz	YoY, %
Refined Production	6,075	5,850	-225	-4%
South Africa	4,370	4,175	-195	-4%
Zimbabwe	445	450	5	1%
North America	365	370	5	1%
Russia	715	685	-30	-4%
Other	180	170	-10	-6%
Inc (-)/Dec (+) in Producer Inventory	+35	+0	-35	-100%
Total Mining Supply	6,110	5,850	-260	-4%
Recycling	1,905	1,965	60	3%
Autocatalyst	1,340	1,405	65	5%
Jewellery	560	555	-5	-1%
Industrial	5	5	0	0%
Total Supply	8,015	7,815	-200	-2%
DEMAND				
Automotive	3,395	3,285	-110	-3%
Jewellery	2,460	2,505	45	2%
Industrial	1,650	1,750	100	6%
Investment	260	250	-10	-4%
Total Demand	7,765	7,790	25	0%
Balance	250	25	-	-
Above Ground Stocks	2,155	2,180	25	1%

- Broad-based decline in mine supply expected
- Automotive decline to be offset by strong Industrial and recovering Jewellery
- Market moving from a surplus in 2017 to balanced in 2018

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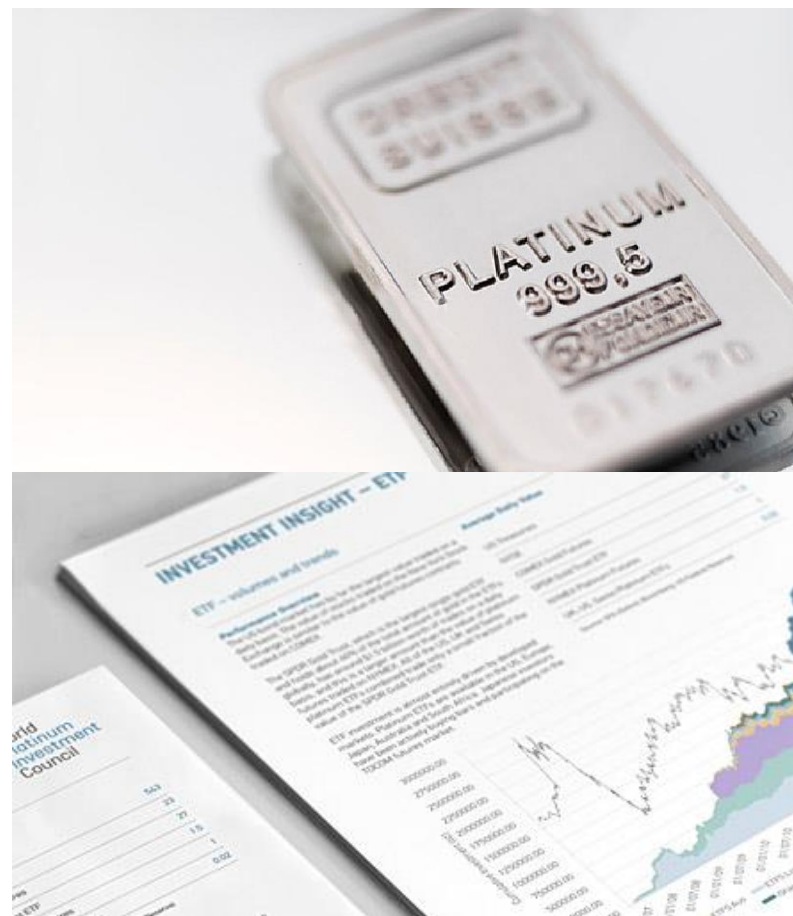
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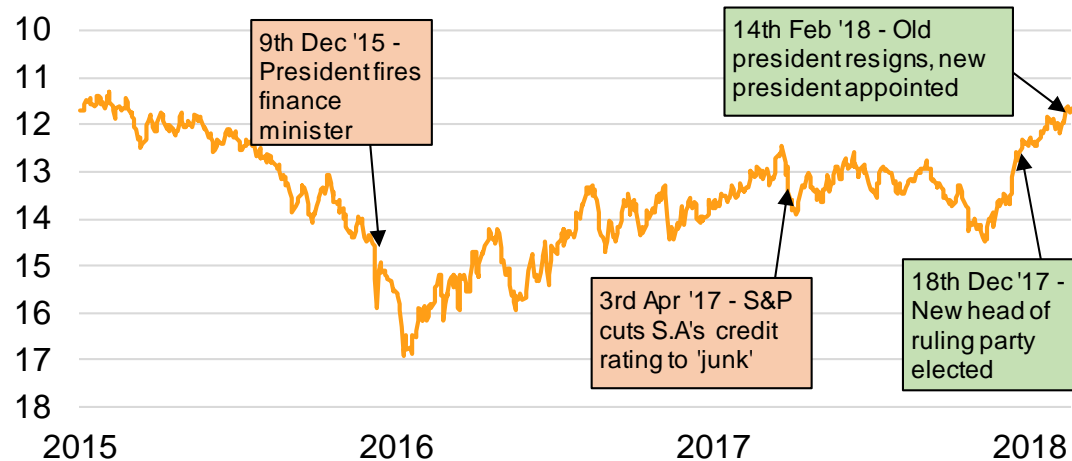
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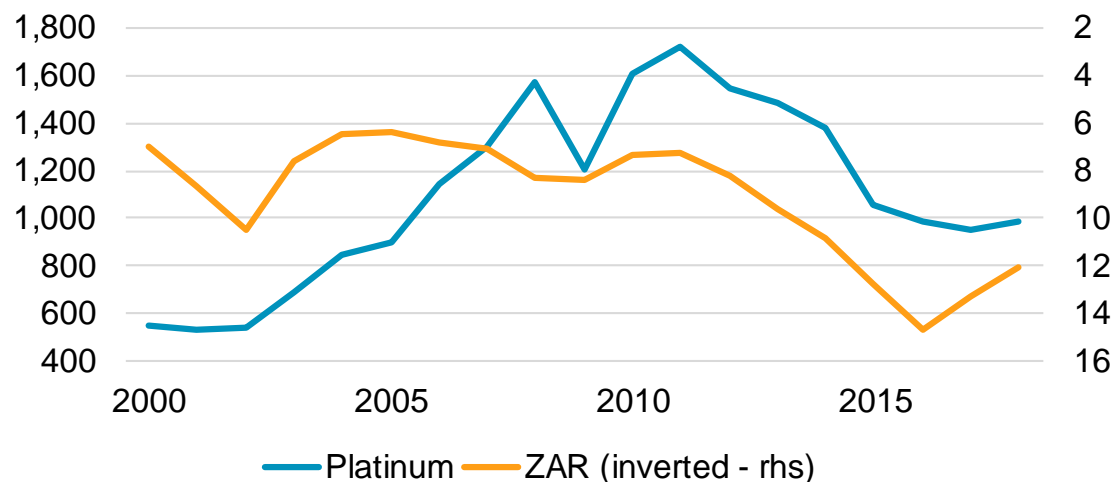


SOUTH AFRICA – POLITICAL BACKDROP IMPROVING

USDZAR (inverted)



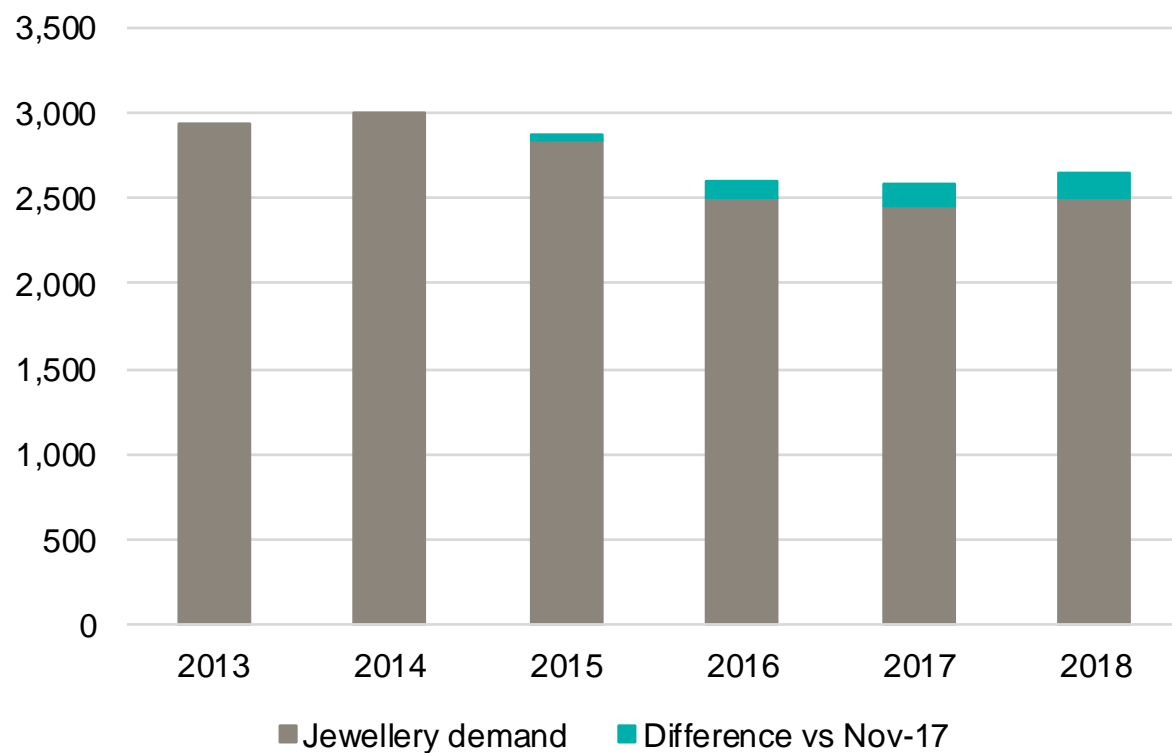
Platinum (USD/oz) & USDZAR



- Several positive political changes (new S.A. President, new Minister of Mineral Resources)
- S.A. producers will likely have to adapt to a strong ZAR environment
- Usually, positive correlation between strength of ZAR and USD platinum price

JEWELLERY – CHINA REVIVING, INDIA REBASED

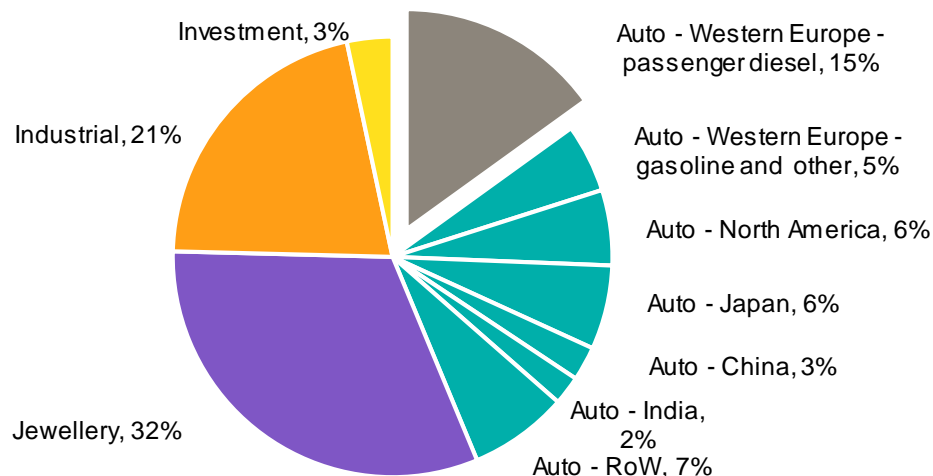
Jewellery demand (koz)



- China jewellery market improving
- India jewellery demand growing strongly, PGI partners +46% in Q4 2017
- Despite downward revision to India, jewellery still expected to grow YoY in 2018

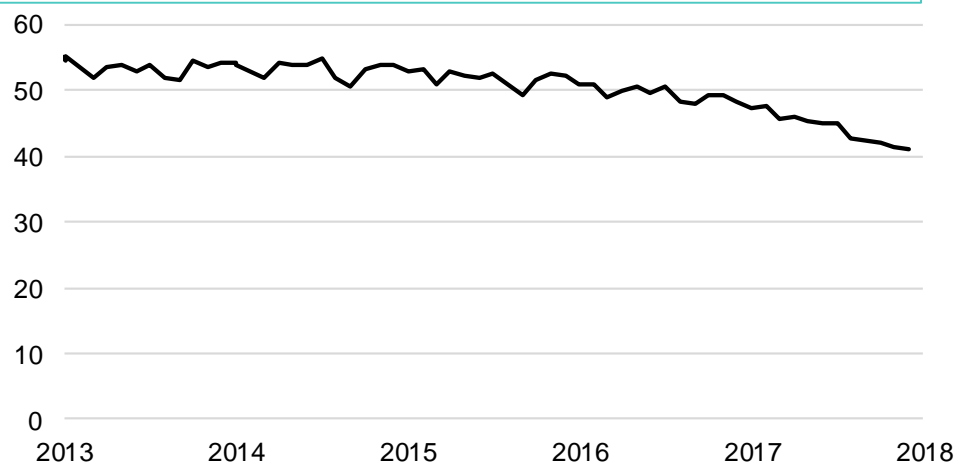
AUTOMOTIVE DEMAND – EUROPE DIESEL IN CONTEXT

Platinum demand – automotive in context



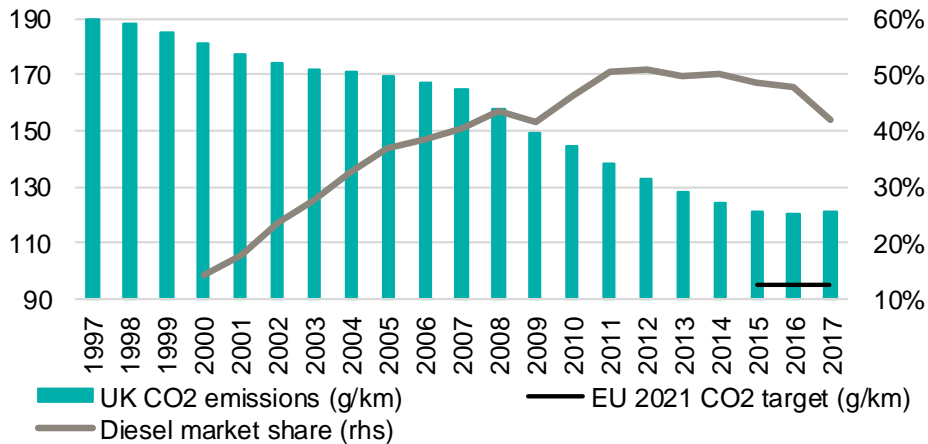
- European passenger diesel decline affects c15% of platinum demand
- Recent declines due to consumer fears –policy uncertain
- Diesel car resale values under threat

European diesel market share (%)

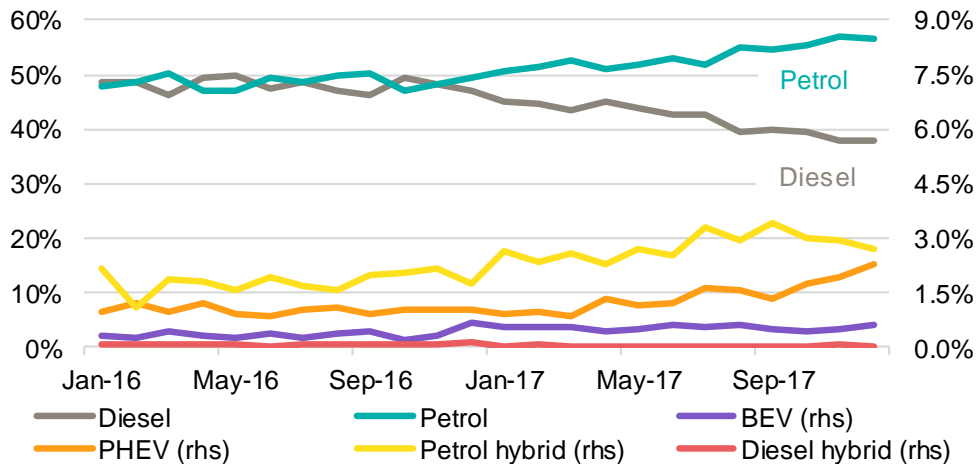


EUROPE DIESEL – WHAT’S HAPPENING?

UK CO₂ emissions vs UK diesel market share



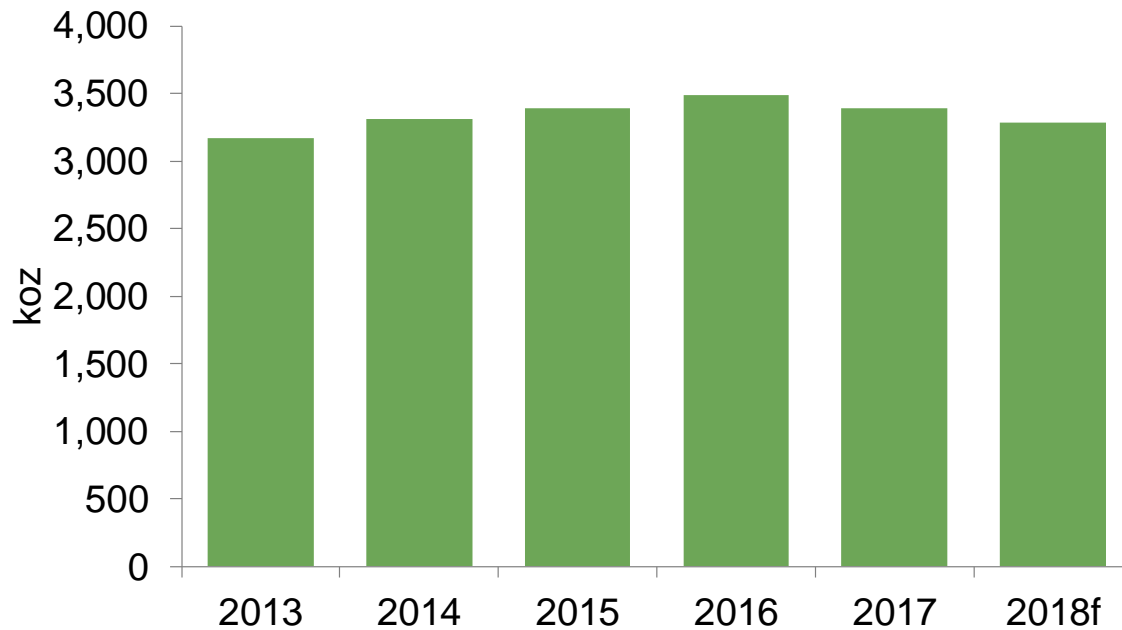
UK powertrain market share



- German cities allowed to implement diesel bans
- Reduction in diesel share leading to demonstrably higher CO₂ (EVs not “saving the day”)
- CO₂ fines increasingly likely (€8bn - €13bn)
- Steps needed to flatten / increase diesel share

AUTOMOTIVE DEMAND – EUROPE WEAKNESS, REST OF WORLD STRENGTH

Automotive demand



W. Europe diesel headwinds expected to be mostly offset by:

- Upside from U.S. passenger diesel share, China heavy duty
- Growth in RoW

AUTOMOTIVE DEMAND – MEDIUM TERM UPSIDE FROM FUEL CELLS



Fuel cell demand (c50 koz) growing strongly:

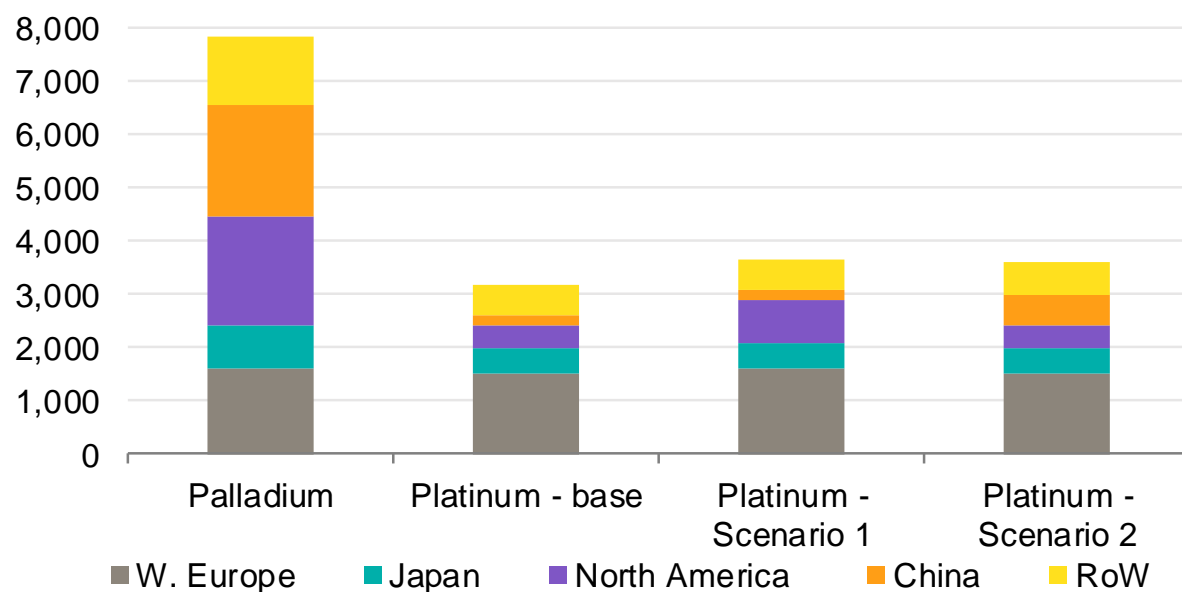
- China “New Energy Vehicle” (NEV) incentives favour FCEVs over BEVs (range benefit)
- Larger applications gaining traction
- Non-road applications being adopted

China NEV credits

New Energy Vehicle	NEV	Electric range (km)	Per-vehicle manufacturer credit*
Battery Electric Vehicle	BEV	80-150	2
Plug-in Hybrid Electric Vehicle	PHEV	>50km	2
Fuel Cell Electric Vehicle	FCEV	>350km	5

AUTOMOTIVE DEMAND – MEDIUM TERM UPSIDE FROM SWITCHING

Switching scenarios (koz) - Pt replacing Pd in gasoline cars



Longer term, switching upside (900 koz)

Scenario 1

- 20% from N. America -> +c410 koz
- 5% from Europe -> +c80 koz

Scenario 2

- 20% from China -> +c410 koz

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