

# Anglo American Platinum 2021 Annual Results

21 February 2022



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# 2021 annual results agenda

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# 2021 overview

Mogalakwena remote operated drill rig



# Safe production, record operational & financial results

## Safety

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Zero fatalities

at own-managed operations  
& Modikwa

## Mining EBITDA margin

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↑ 65%

## Record refined PGM production

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↑ 5.1m

## EBITDA

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↑ R108bn

## Economic contribution to society

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↑ R148bn

## 2021 dividend declared

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↑ R80bn

100% of headline earnings

# We are delivering our Purpose through the four priorities of our strategy

Our Purpose is: “Reimagining mining to improve people’s lives”

## Four priorities of strategy delivery

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A leader in ESG



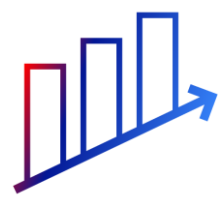
Going beyond resilience,  
thrive through change



Maximize value from  
our core



Stimulate new markets and  
leverage new capabilities





# ESG performance



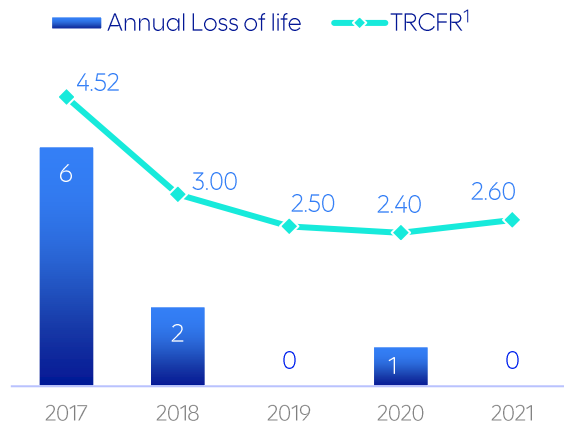
Water sampling at Mototolo / Der Brochen



A leader in ESG

# Zero fatalities achieved - continuous efforts to move to zero harm

## Safety

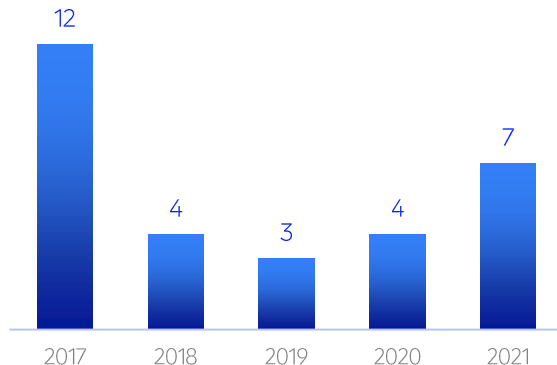


Focus on behaviours, particularly during period of disruption and change.

Technology and modernisation will drive sustainable long term improvement.

## Health

New occupational health cases<sup>2</sup>



Continue to manage Covid-19 across the business and roll-out the vaccination programme.

Actively manage TB and HIV cases.

## Elimination-of-fatalities (EoF)



EoF is focussed on eliminating the most common causes of fatalities across Anglo American.

The purpose is to use the accumulated learnings from a wide range of fatalities, to adopt a more pro-active approach, to prevent loss of life incidents.

The work streams are a combination of engineered solutions as well as humanistic solutions.

The majority of the workstreams have been incorporated, and focus us on ensuring they remain sustainable.

Our aim is embed zero fatalities and reduce injuries to ensure zero harm.





A leader in ESG

# Economic contribution of R148 billion

Taxes and royalties

R35bn

Salaries and wages

R14bn

Capital investment

R14bn

Local BEE procurement

R28bn

Social investment & Covid-19

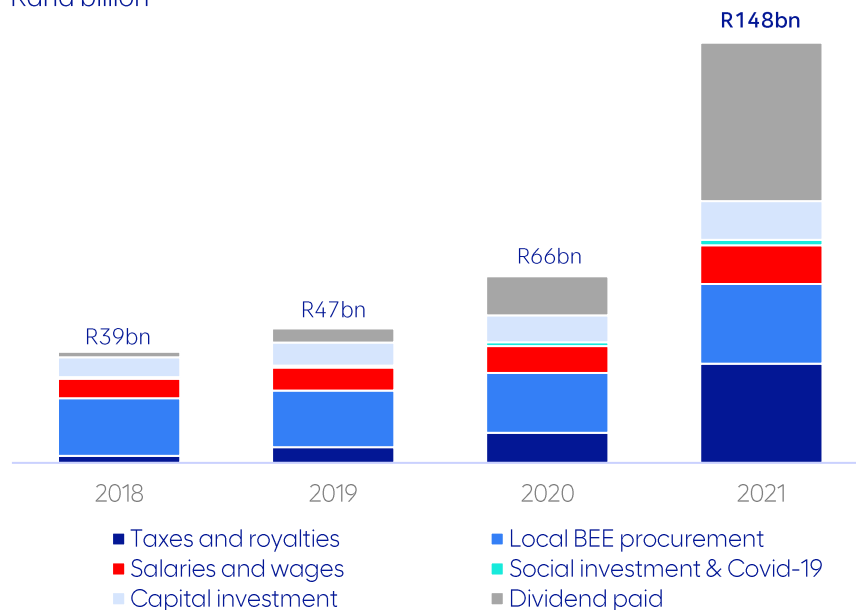
R2bn

Dividends

R56bn

Increasing contribution to stakeholders and society

Rand billion





A leader in ESG

# Supporting our colleagues and our communities

## Supporting colleagues

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Supporting mental health & wellbeing.

Facilitating vaccination roll-out.

Financial education through indebtedness programme 'Nkululeko'.

Promote prevention of gender based violence and support for victims.

Increasing diversity and inclusion.

## Supporting communities

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Continuing food support and access to clean water programmes.

Social investment of R1.3 billion in 2021.

Successful Alchemy equity share scheme and supporting Trusts to ensure success.

Community health support including Covid-19 testing, vaccination roll-out and emergency health services.

Supporting school and bursaries.

## Culture in Action

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Taking a leader-led stand to reinforce our commitment to stopping gender-based violence and bullying, harassment and victimisation.

Aware of many societal challenges and targeting to address these issues.

Implementing an intentional change in culture across the business.



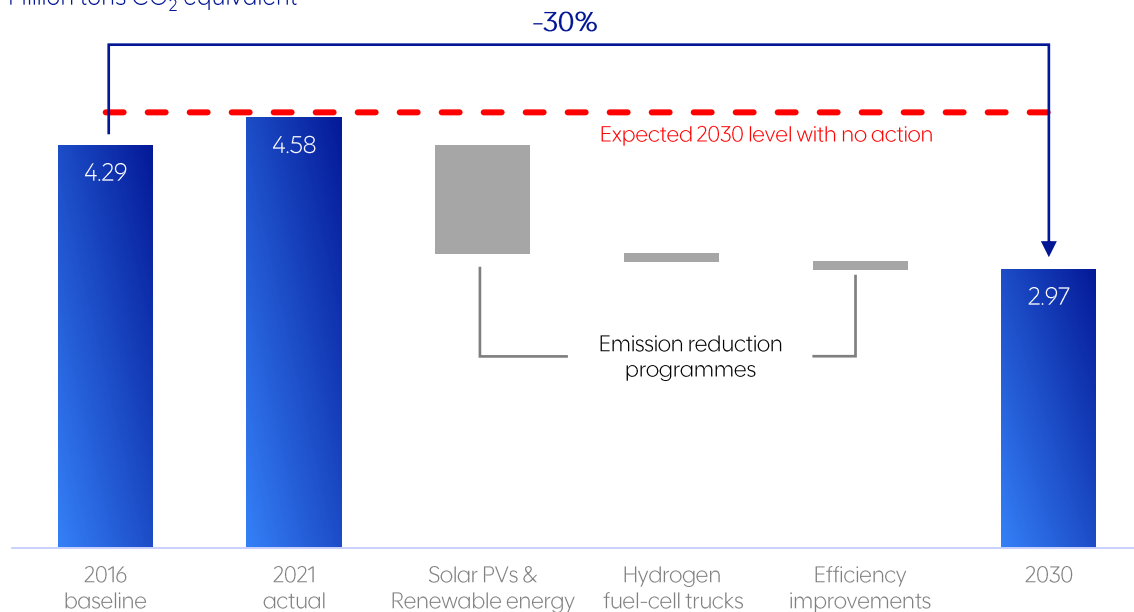


A leader in ESG

# Roadmap to reduce emissions established – positive impact from environment targets

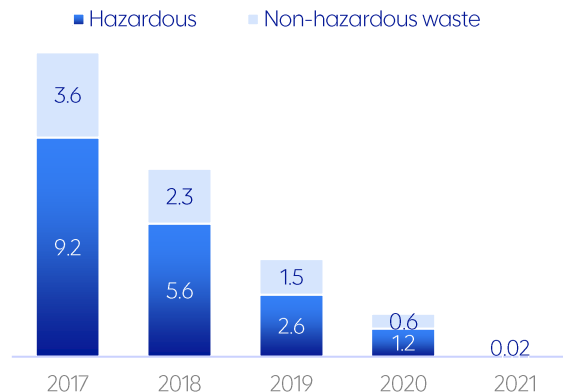
## Roadmap to reduce Scope 1 & 2 emissions<sup>3</sup> by 2030

Million tons CO<sub>2</sub> equivalent<sup>4</sup>



## Environment

Waste tonnes to landfill (kt)



Zero environmental incidents – since 2013, categorised as level 4 or 5 incidents<sup>5</sup>.

2030 water balance targets – 50% reduction in abstraction from stressed catchment areas<sup>6</sup>.

# Operational performance

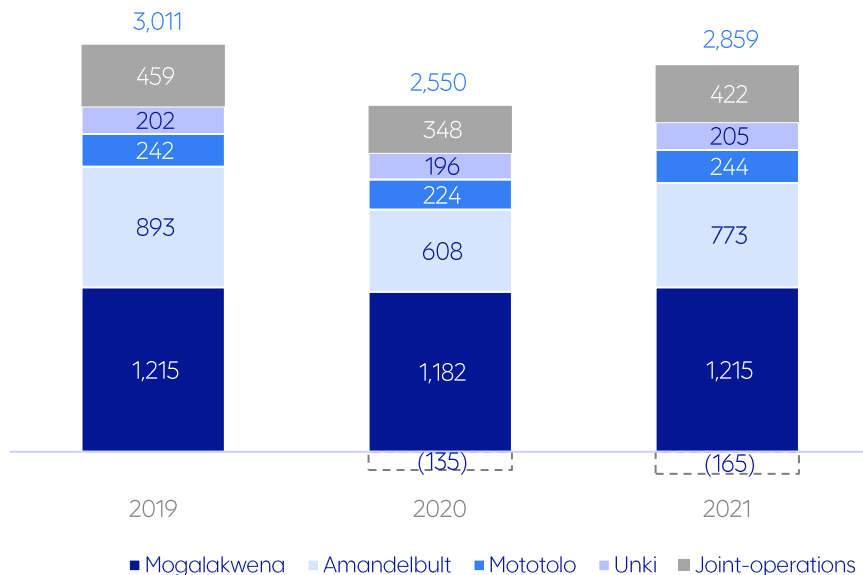


Dishaba colleagues

# Benefit of a diversified portfolio contributing to EBITDA and strong margins

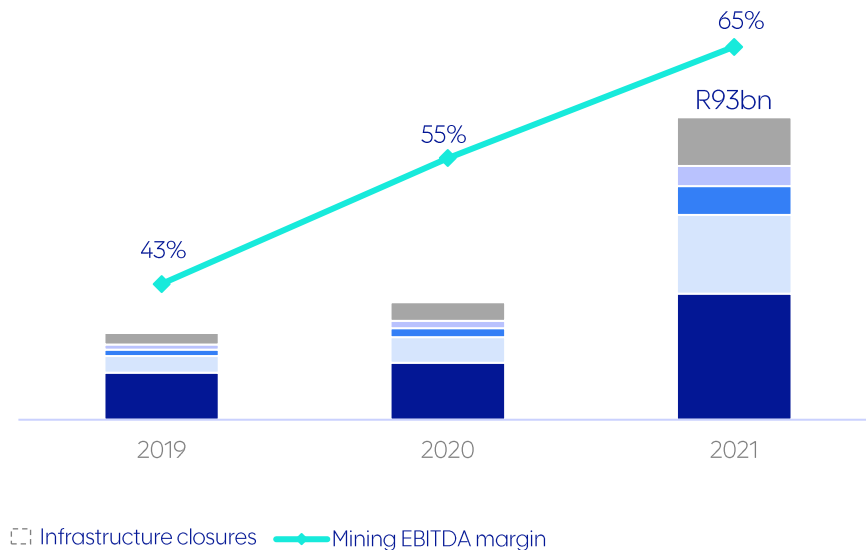
Own-mine PGM production

000 ounces



EBITDA contribution per own-mine operation

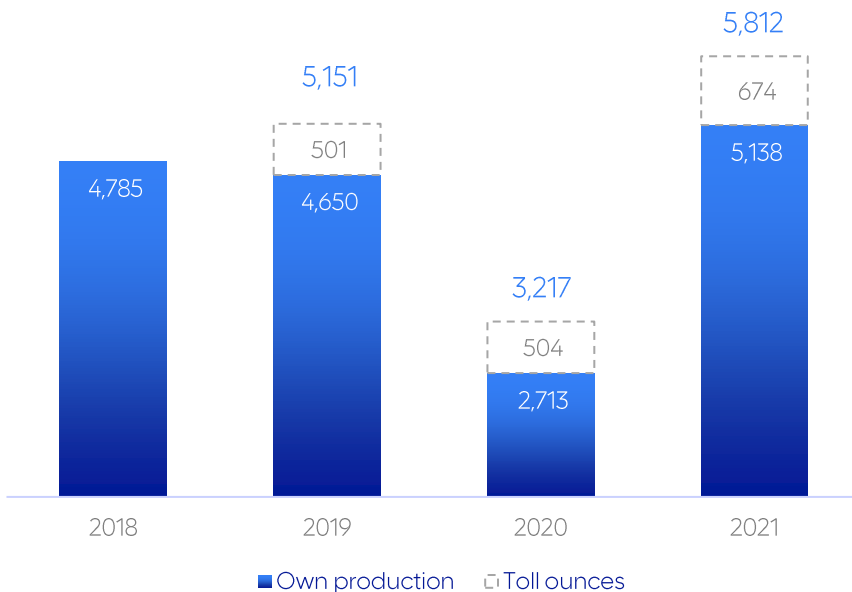
Rand billion



# Record refined production driven by ACP performance, leading to strong sales volumes

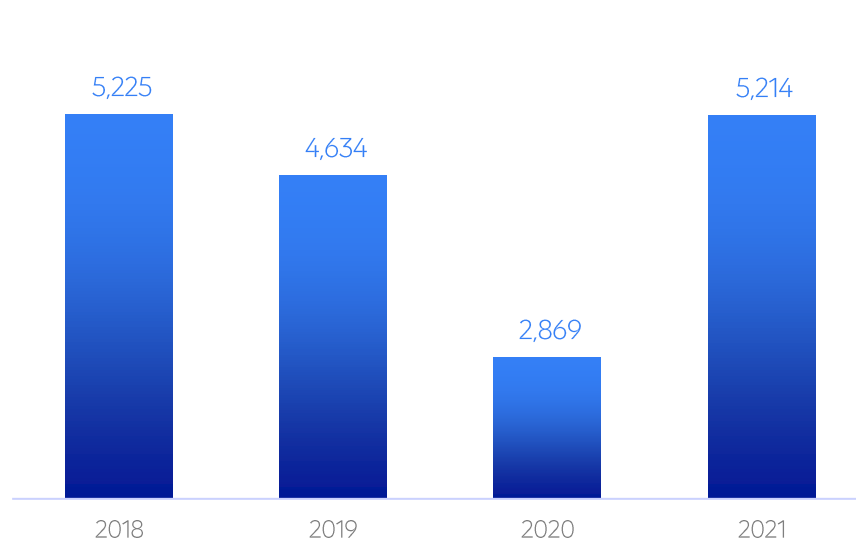
Refined PGM production

000 ounces



PGMs sales volumes (excluding trading)

000 ounces







# Mogalakwena driving new technology for operational efficiencies and sustainability

## Bulk ore sorting



Bulk ore sorter is fully operational at North Concentrator.

Pilot testing work is underway and rejection rates >5% achieved.

Target to reject >10% low-grade material to increase the feed grade downstream.

## Coarse particle rejection



Coarse particle rejection plant under construction – commissioning in Q3 2022.

Trialling and demonstration to take place and full time production by year end.

Target to increase North Concentrator capacity by >5%.

## Hydrogen fuel-cell truck



Power plant module arrived on site – full integration with truck expected by Q1 2022.

Continuously delivered over 830kW of power from fuel cell assembly.

Hydrogen production plant to be online by Q2 2022.



Going beyond resilience,  
thrive through change

# Advancing modernisation and mechanisation at Amandelbult

## Modernisation



Modernisation journey to address inherent safety and health risks – leading to productivity benefits.

Fully rolled out rock-stop nets, rock movement detection and Dishaba is now converted to a timberless mine.

## Cycle mining



Transitioning from a conventional shift-cycle to a cycle-mining shift-cycle.

Results in better co-ordination and planning of mining activities and improved labour efficiencies.

Embedded with full benefits by 2023.

## Mechanisation



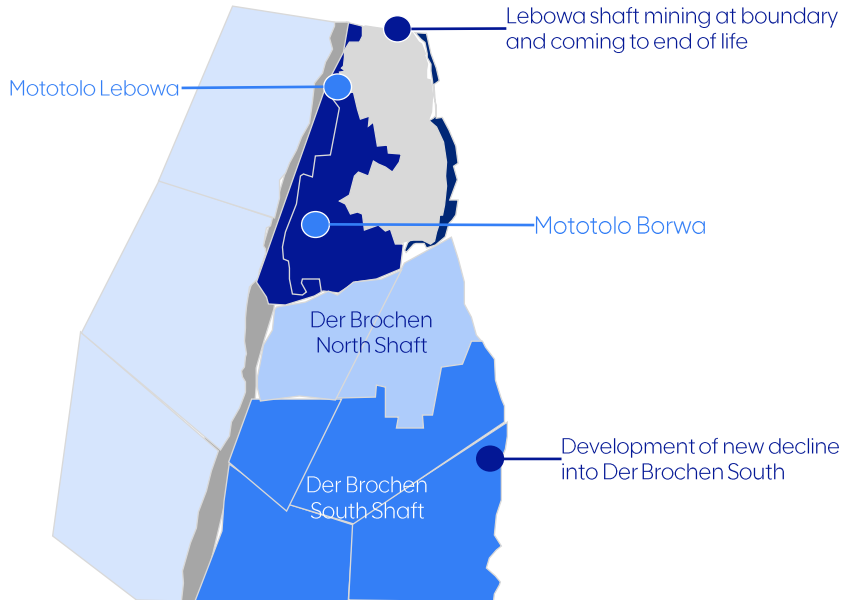
Mechanisation advancing at Tumela 15E dropdown - multiple technologies trialed.

Incorporating learnings to continuously improve mechanised mining equipment.

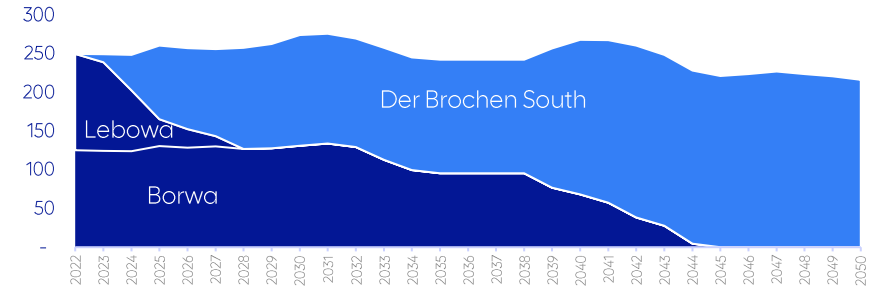


# Mototolo life extension approved – construction to start in H1 2022

## Life extension plan – new decline at Der Brochen South

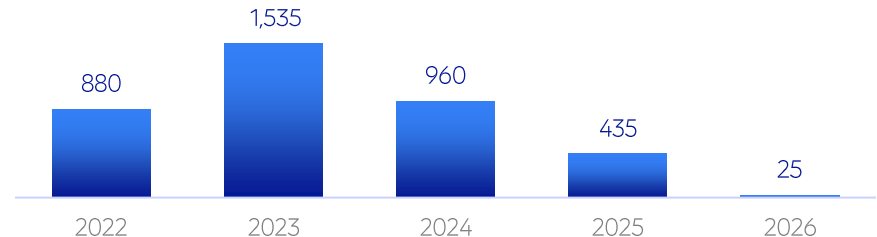


## PGM production profile (000 ounces per annum)



## Life extension capital profile

Rand million (nominal terms)





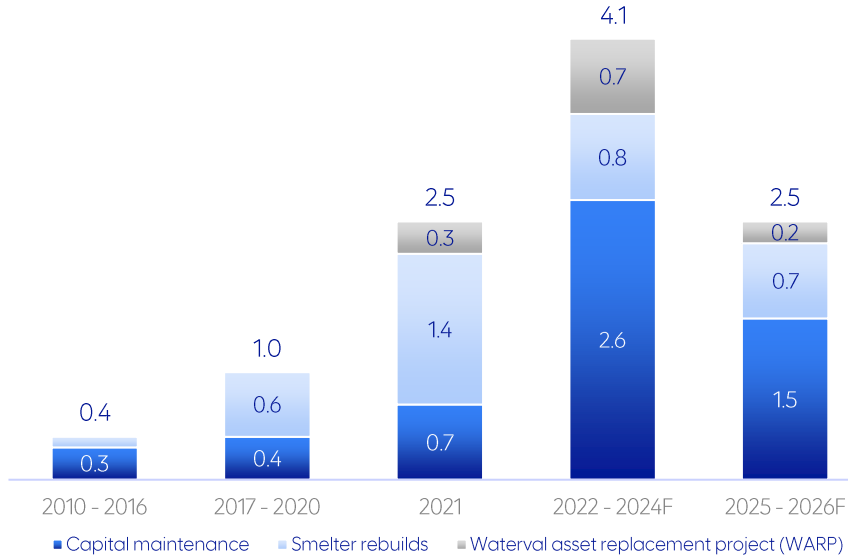
Going beyond resilience,  
thrive through change

# Increasing capital on asset reliability at processing assets – ACP shows delivery

## Capital investment in asset reliability in processing



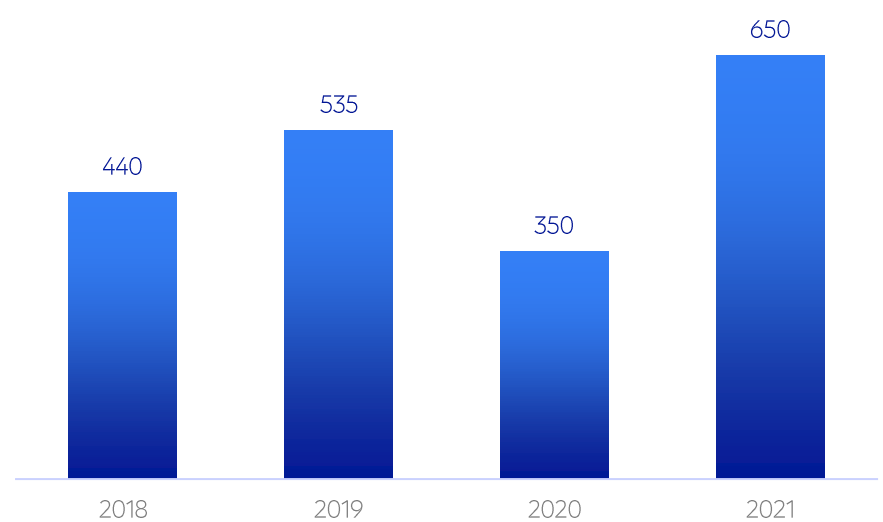
Annual average spend on asset reliability – Rand billion



## Average daily ACP feed



Tonnes



# Financial performance



ACP Phase A – Furnace matte tap

# Record 2021 financial performance

Revenue

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↑ R215bn

EBITDA

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↑ R108bn

Headline earnings

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↑ R79bn

Return on capital employed (ROCE)

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↑ 183%

Net cash

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↑ R49bn

2021 dividend declared

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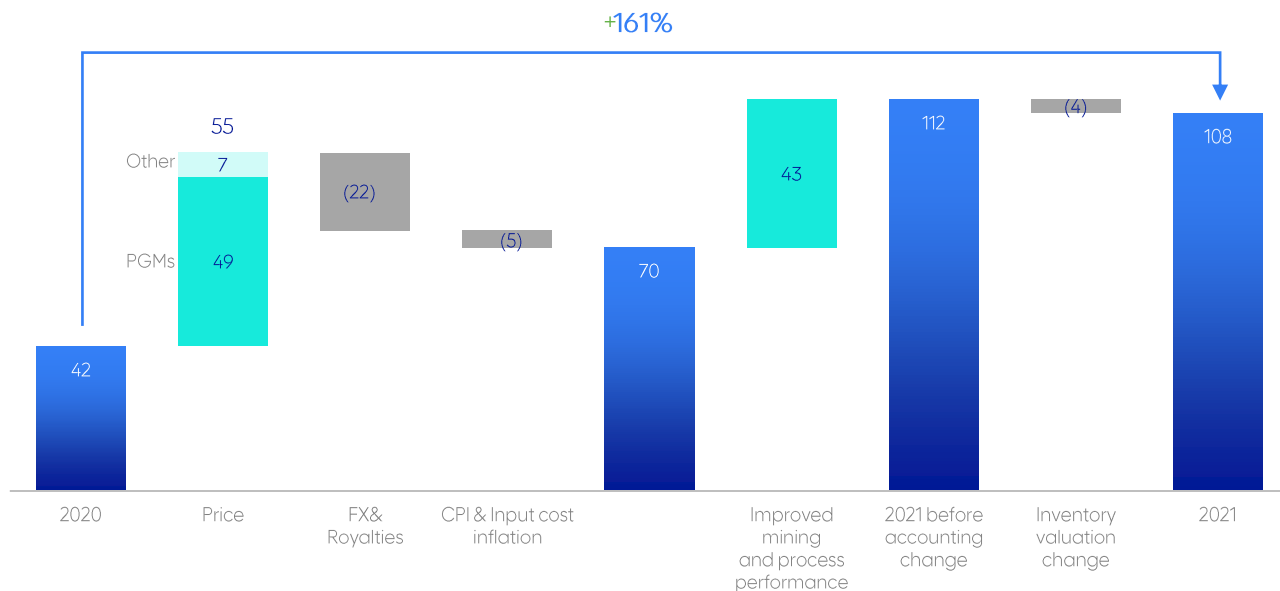
↑ R300/share  
H2 2021: R125/share



# Record EBITDA: Higher PGM prices and volumes

## EBITDA

Rand billion



## PGM rand basket price

↑ 22%

## PGM sales volumes

↑ 82%

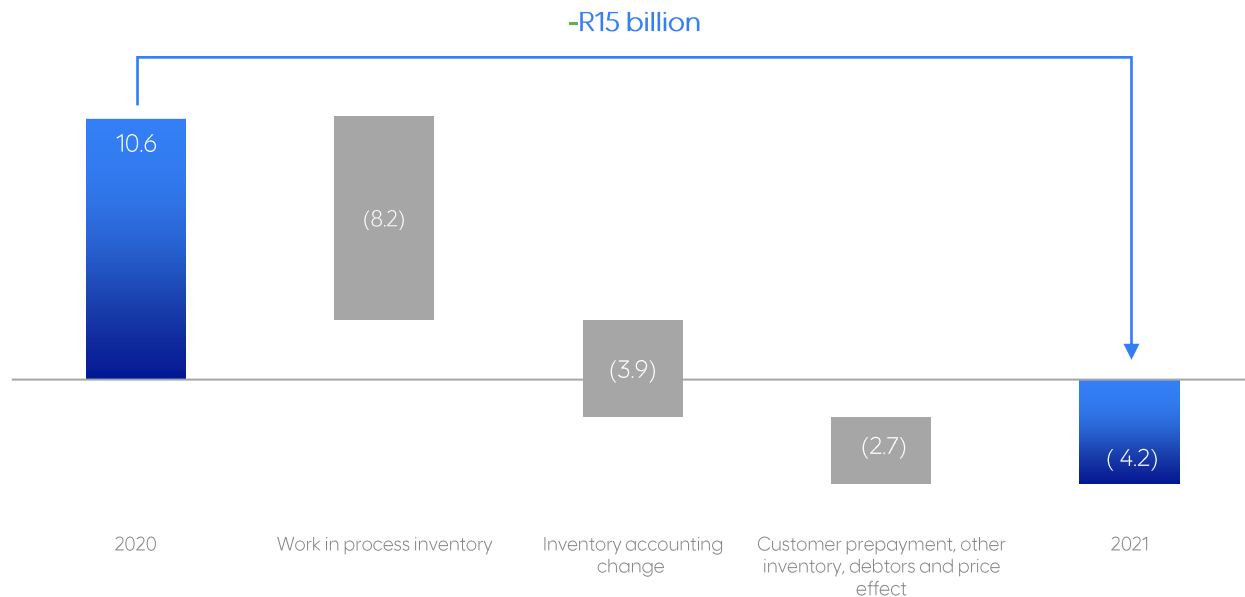
## Mining EBITDA margin

65%

# Working capital reduction

## Trade working capital movements

Rand billion



## WIP inventory release

↓ R8.2bn

## Inventory accounting change

↓ R3.9bn

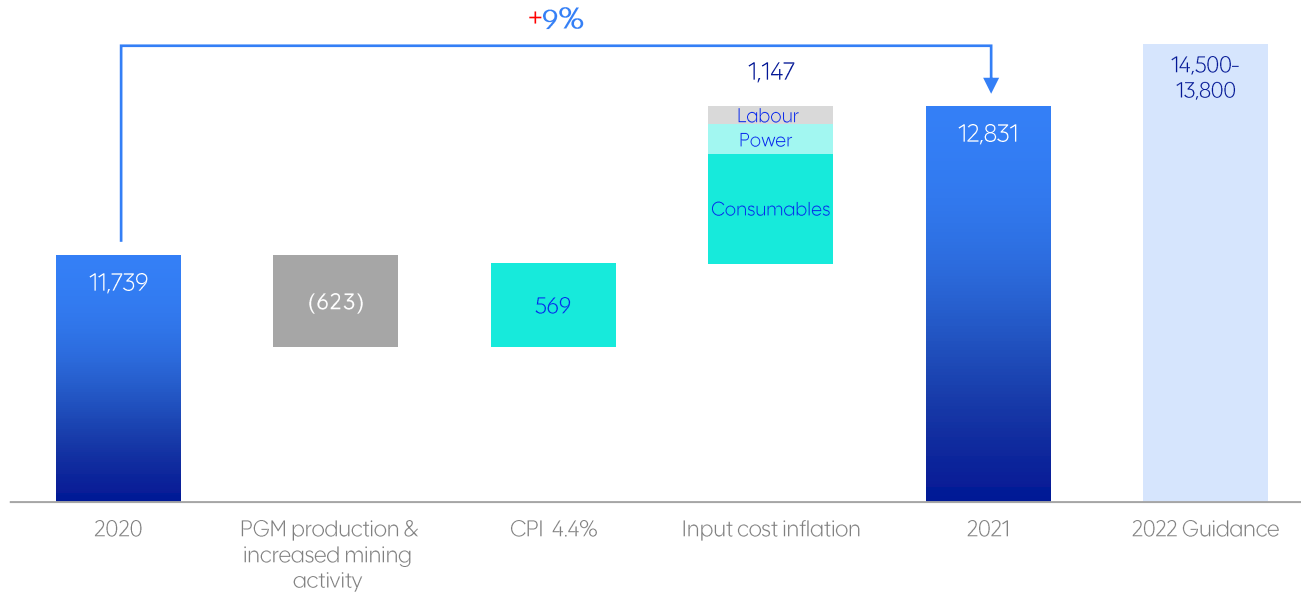
## Customer prepayment

↓ R7.7bn

# Unit cost impacted by steep rise in input cost inflation

Unit cost per PGM ounce

Rand per PGM ounce



Mining production

↑ 13%

Input inflation

↑ 14%

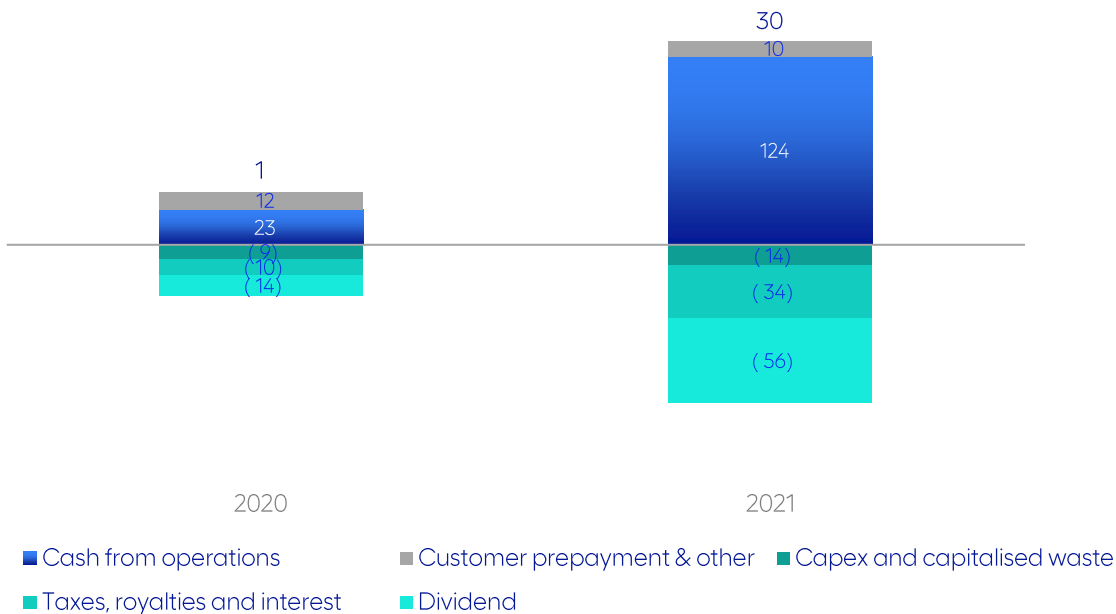
2022 Unit cost increase

↑ 8 - 13%

# Strong net cash position

## Net cash evolution

Rand billion



## Cash from operations

↑ R124bn

## Customer prepayment extension

5 years

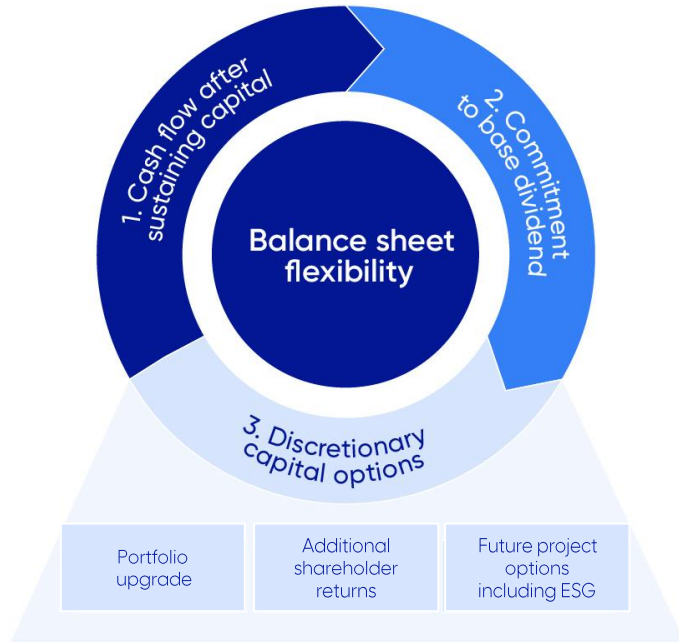
## Net cash position

↑ R49bn

# Balanced and disciplined capital allocation

## Capital allocation framework

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Generate strong free cash flow from operations

Maintain balance sheet flexibility whilst prioritising:

- Sustaining capital
- Commitment to base dividend of 40% payout ratio of headline earnings

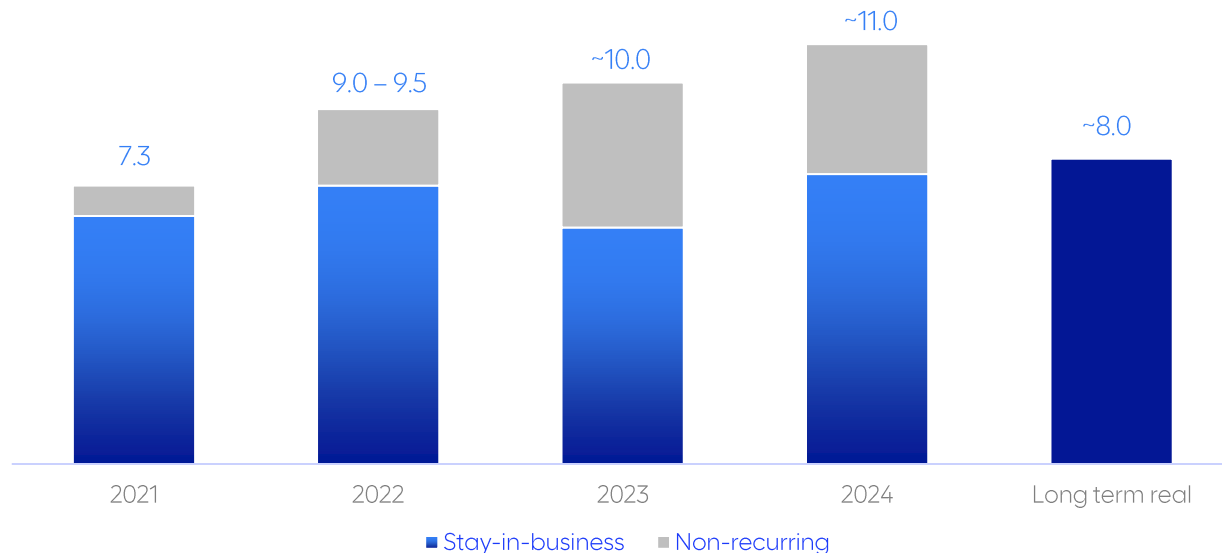
Then assess discretionary capital options including:

- Portfolio upgrades
- Additional shareholder returns (special dividends)
- Breakthrough and growth capital options including ESG project options

# SIB capital focused on asset reliability

## Stay-in-business capital

Rand billion



## Total SIB capital

R7.3bn

## Life extension capital

R0.4bn

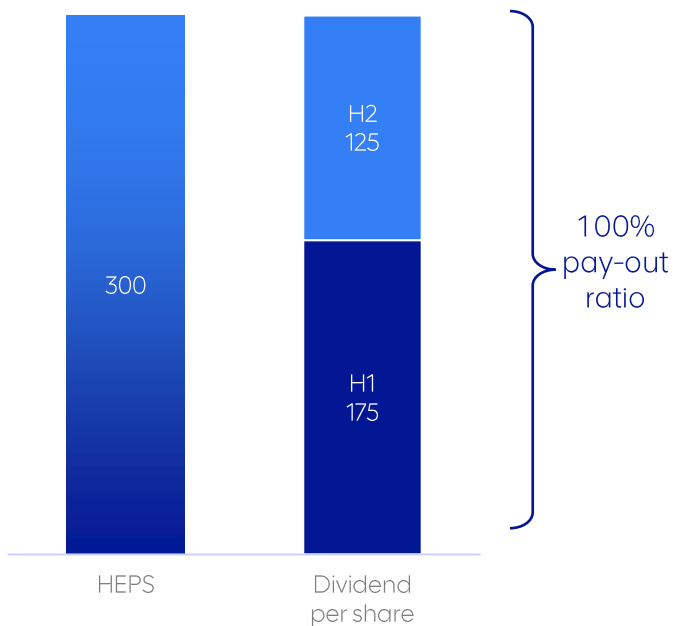
## Breakthrough & growth capital

R2.8bn



# Industry-leading returns to shareholders

2021 dividend per share



2021 dividend declared

R80bn

H2 2021: R33 bn

Dividend per share

R300/share

H2 2021 R125/ share

Dividend pay-out ratio

100%

Dividend yield<sup>7</sup>

17%



A leader in ESG

# A leader in ESG – embedding ESG into our capital allocation framework

## What we have done



## Example of changes we have made

Annual targets identified from the capital portfolio for each priority ESG dimensions

Shadow price introduced

800+ projects quantified for estimated carbon emissions, water usage & livelihoods (jobs) impact

25+ dedicated ESG projects (e.g., energy efficiency and water reduction projects) have been prioritised and have now been allocated funding

Ongoing training for all capital project managers to calculate and mitigate adverse impacts of capital projects

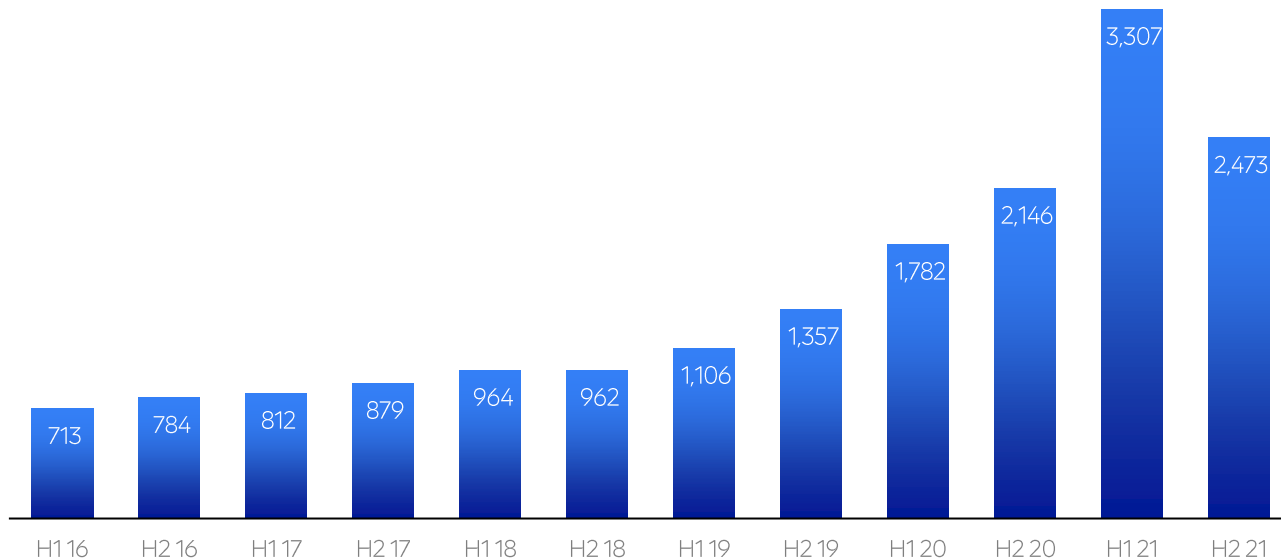
# Market review



PMR: Palladium good delivery bar with grain

# PGM basket price reached new highs in 2021

US\$ basket price – half year average market price<sup>8</sup>



PGM basket price reached a record high in H1 2021.

Despite a fall in H2 2021, prices remain elevated against previous periods.

Rhodium market price increased 79% contributing most to the gains

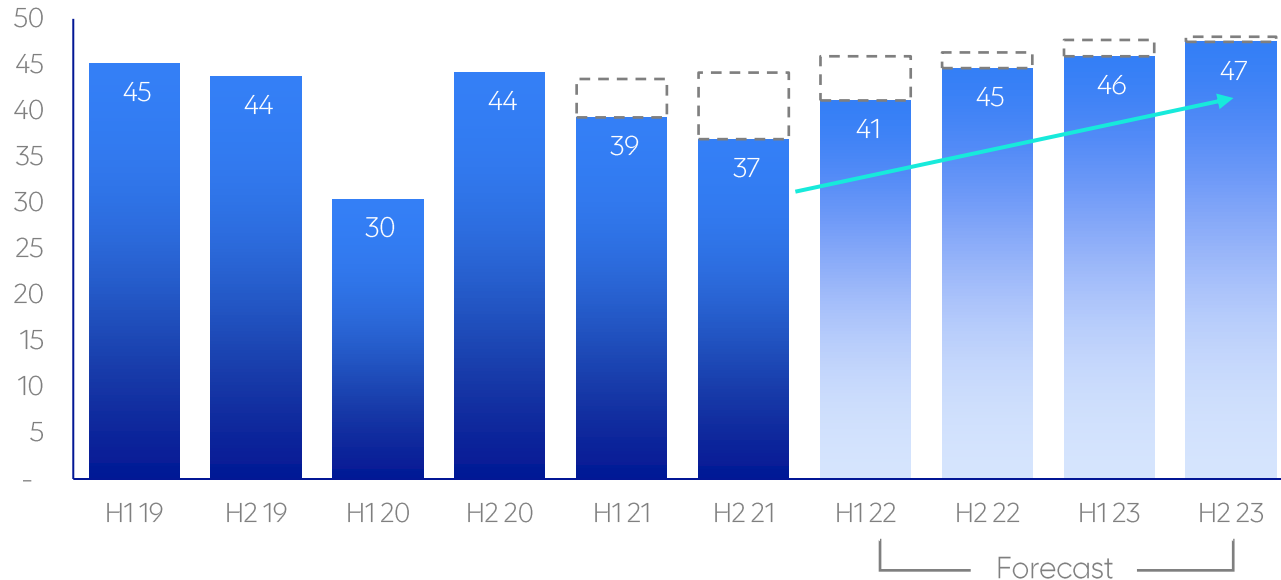
Minor PGMs – iridium and ruthenium – also made sizeable contributions.

# Short term: easing chip shortage allows rising auto production

Semiconductor shortage impacts 2021 light duty vehicle output<sup>9</sup>

Million vehicles

Impact of semiconductor chip shortage on auto production



Semiconductor shortages reduced auto production in 2021 by 11m vehicles compared to starting-year forecasts.

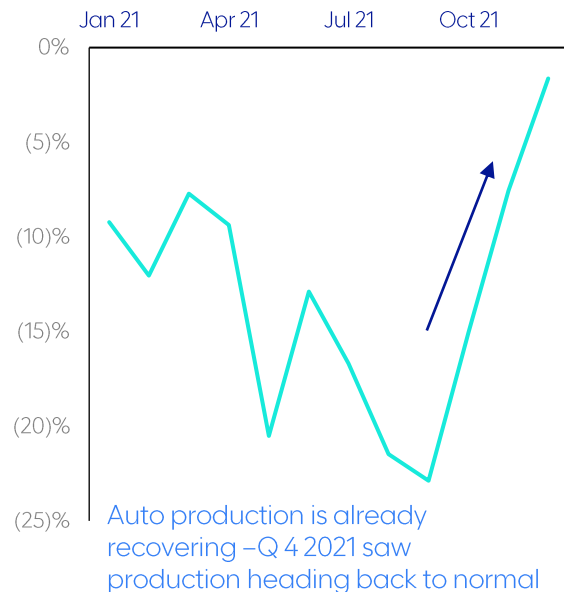
Largest impact was H2 2021 - resulting in only a 3% increase over Covid-19 impacted 2020.

Industry forecasts semiconductor shortage is easing.

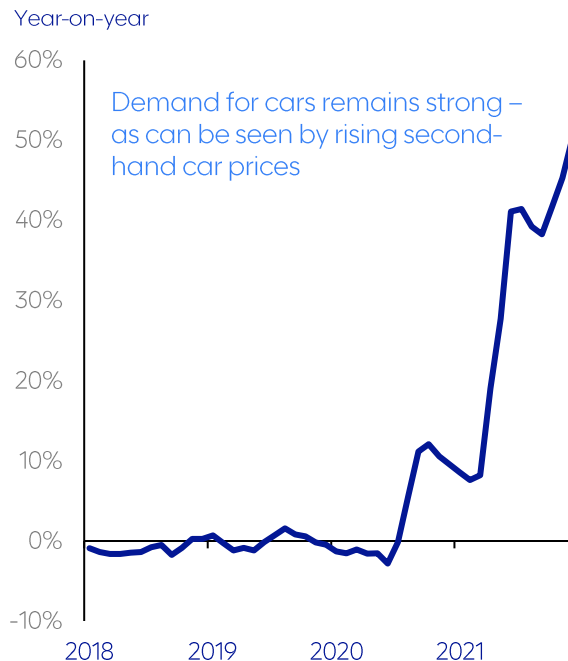
Auto production in 2023 is expected to be above pre-Covid-19 levels.

# Reasons to be positive

Global vehicle production vs 2019<sup>10</sup>

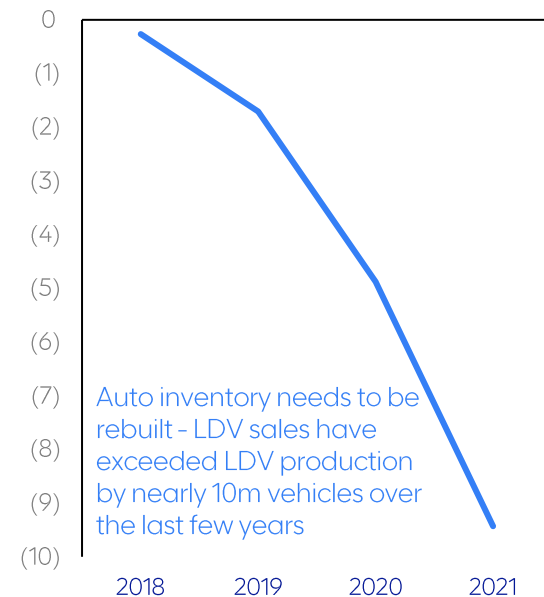


US second-hand car prices<sup>11</sup>



Global vehicle inventory levels<sup>12</sup>

Light vehicle inventory reduction (million vehicles)

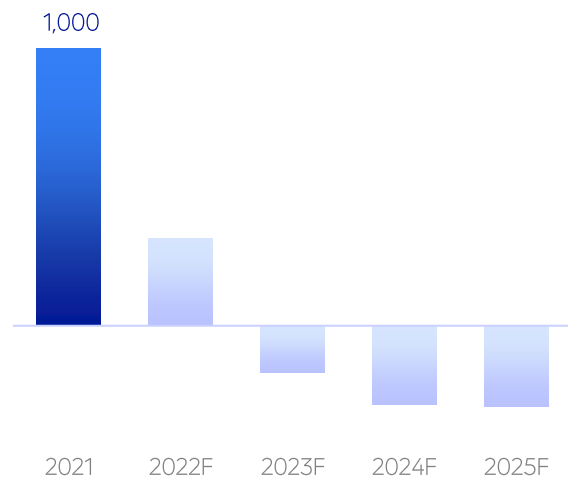




# 3E metals heading back into deficits

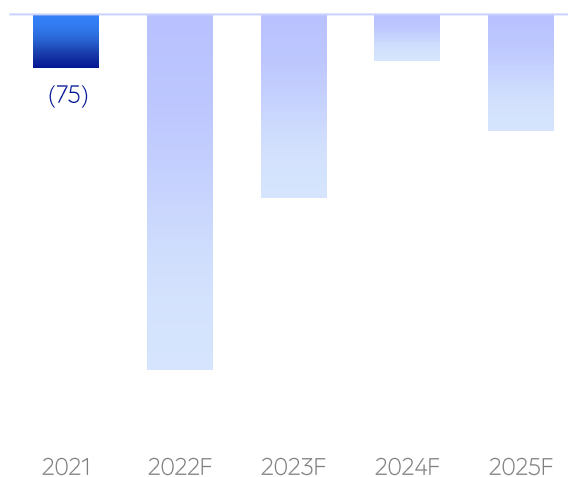
## Platinum<sup>13</sup>

Future demand from gasoline substitution & hydrogen economy drives deficit



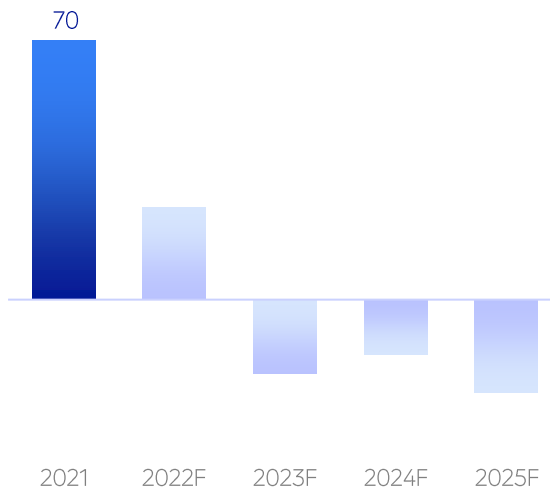
## Palladium<sup>13</sup>

Ongoing deficit driven by auto demand and tighter emissions legislation



## Rhodium<sup>13</sup>

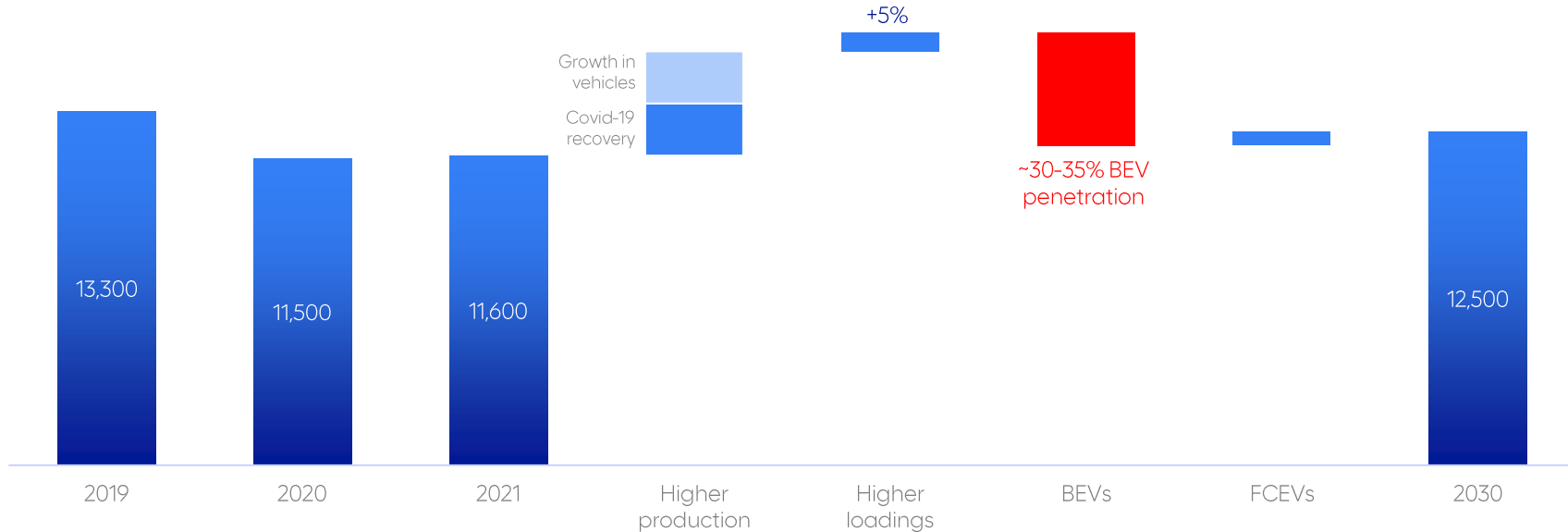
Unique NOx reduction qualities drive auto demand and continuing deficits



# Medium-term: higher production and loadings help offset rise of BEVs

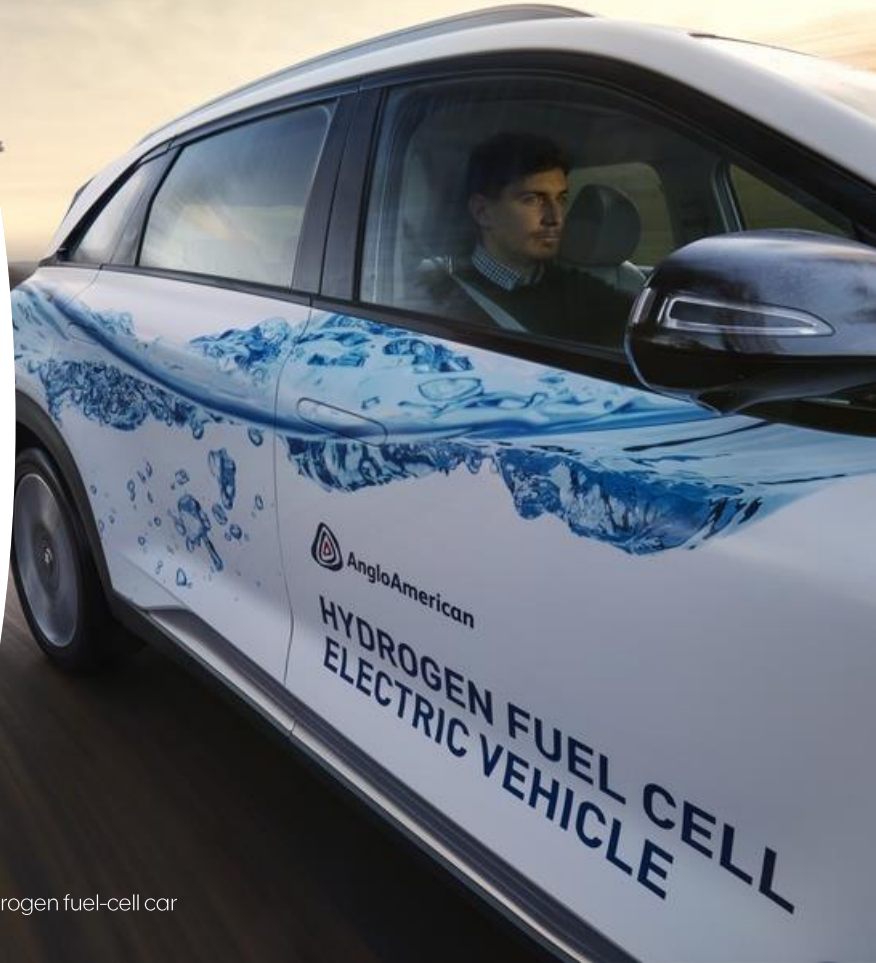
Global autocatalyst PGM demand<sup>14</sup>

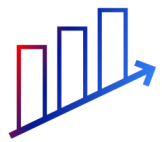
000 ounces



# Market development

Hydrogen fuel-cell car



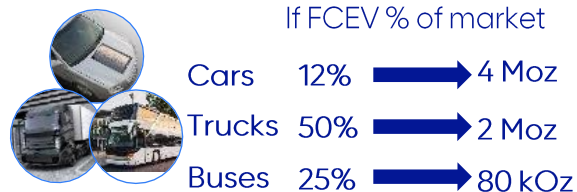


Stimulate new markets & leverage new capabilities

# Hydrogen economy to create new PGM demand

## Fuel-cell vehicles

Potential PGM ounces<sup>15</sup>:



### The traction:

- Toyota & Hyundai have introduced next iteration of their FCEV models
- BMW began road testing
- SAIC Motor (China) to roll out at least 10 new FCEV models in the next 5 years

## PEM electrolyzers

Potential PGM ounces<sup>16</sup>:



If 5 GW → 40 kOz  
If 25 GW → 200 kOz

### The traction<sup>17</sup>:

- Electrolyser shipments in 2021 are estimated to double from 2020's level
- Further quadrupling is forecasted for 2022 (over 2020)

## Market development



### Vehicle user-group aggregations

- Vehicle consortiums in SA, UK. Now looking at China & US
- Establish freight corridors



### Support ground level FCEV demonstrations

- E.g. city cluster initiatives of FCEV globally, including China



### Lowering delivered cost of green hydrogen at the nozzle

- Continue to invest in PEM & fuel cell growth companies



### Neutral technology stance

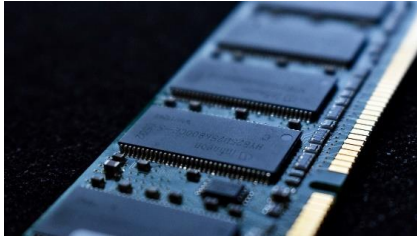
- Continue advocate in key jurisdictions



# Driving innovation in new applications for palladium demand

## In computing

R&D on using palladium in memory devices e.g. magnetic and resistive random-access memories



Creating opportunity for uptake across high-tech applications such as data centres and consumer electronics such as mobile phones

## In batteries (and BEVs)

R&D and commercial efforts on using Pd to improve performance of all types of lithium-battery technologies



Supporting multiple applications from green mobility to stationary power

## In food preservation

Progressing the commercialisation of product containing palladium to prolong food freshness



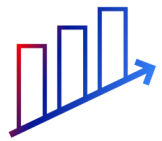
Supporting logistics application throughout the B2B and B2C food chain

## In new materials

Creating a physical & digital platform using big data to explore new materials incorporating Pd to new potential applications



Widening the possibility of palladium applications



Stimulate new markets &  
leverage new capabilities

# Increasing our market development activities in platinum jewellery

## Better materials

Collaborating to explore and  
create superior alloys

### Alloyed

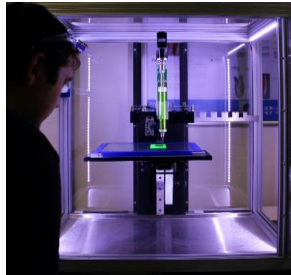


Addressing the challenges from  
manufacturing to product  
design

## New technology

Collaborating on additive  
manufacturing of Pt jewellery  
components

### Alloyed



Unlocking new commercial  
opportunities and even novel  
jewellery design

## Facilitating transactions

Collaborating on business  
creation opportunities e.g.:

- Jewellery-FinTech

### RAINMAKING



New target consumers, new  
commercial opportunities and  
creating fluidity of supply

## New consumers

PGI continuing to build  
consumer-focused brands and  
grow awareness of Pt as the  
jewellery metal of choice

— MEN OF —  
PLATINUM

— eVARA —  
PLATINUM BLESSINGS

PLATINUM  
DAYS OF LOVE

platinum born

Sustain and grow established  
market segments



# Quality of the portfolio

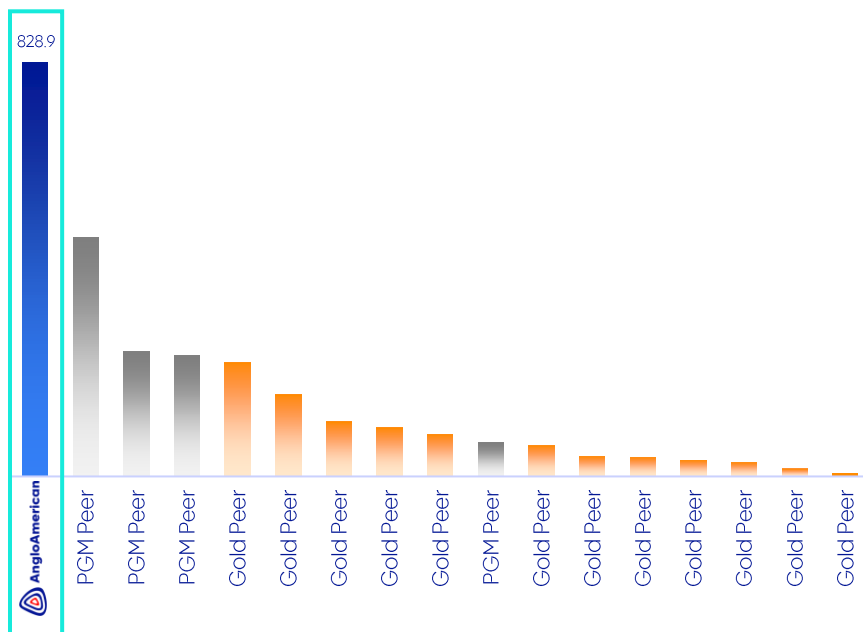


Unki smelter



# Tier 1 assets with optionality delivering high value proposition

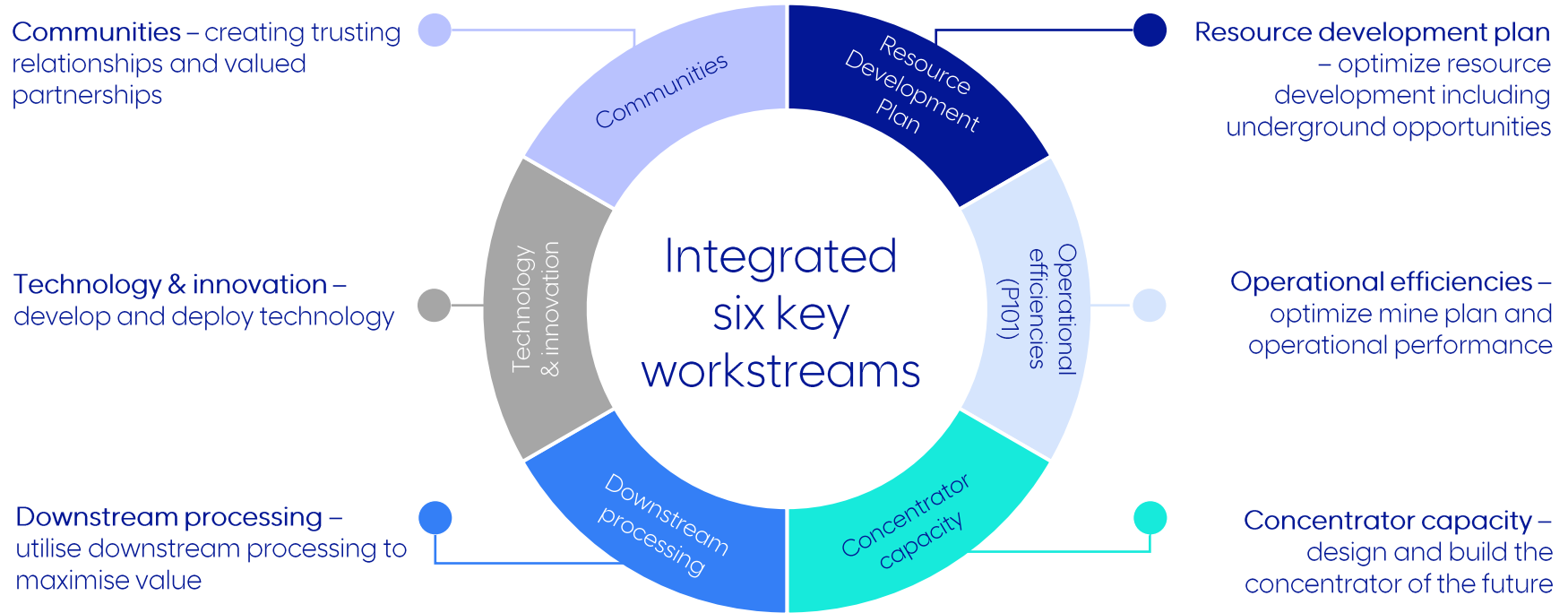
Resources inclusive of reserves (million ounces 3E+ gold)<sup>18</sup>



	Reserve life	Resource life	2021 Revenue
			<div> <div>Platinum</div> <div>Rhodium</div> <div>Base metals</div> <div>Palladium</div> <div>Other PGMs + gold</div> <div>Chrome</div> </div>
Mogalakwena	+30 years	+150 years	<div> <div>Platinum</div> <div>Palladium</div> <div>Rhodium</div> <div>Other PGMs + gold</div> <div>Base metals</div> <div>Chrome</div> </div>
Amandelbult	+20 years	+75 years	<div> <div>Platinum</div> <div>Palladium</div> <div>Rhodium</div> <div>Other PGMs + gold</div> <div>Base metals</div> <div>Chrome</div> </div>
Mototolo / Der Brochen	+30 years	+95 years	<div> <div>Platinum</div> <div>Palladium</div> <div>Rhodium</div> <div>Other PGMs + gold</div> <div>Base metals</div> <div>Chrome</div> </div>
Unki	+20 years	+20 years	<div> <div>Platinum</div> <div>Palladium</div> <div>Rhodium</div> <div>Other PGMs + gold</div> <div>Base metals</div> <div>Chrome</div> </div>



# Developing the Future of Mogalakwena





Maximize value  
from our core

# Maximising value from our integrated value chain



Leading capabilities, achieving operational excellence and deploying technology

Our network scale...



10+

Ore inputs from 4 reef types



7

Components in processing network



13

End-products with changing demand and customer needs

>50%

of integrated producer capacity

# Strategy delivering strong financial returns and value to our stakeholders

## Four priorities of strategy

A leader in ESG



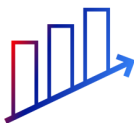
Going beyond resilience, thrive through change



Maximize value from our core



Stimulate new markets and leverage new capabilities



## Targeting value creation for all our stakeholders

	2020 baseline	2025	2030
Mechanised and modernised operations, % of PGM production	88%	100%	→
Cost curve position	3 of 4 own-mines in H1	All mines in H1	→
Mining EBITDA margin, %	35% <sup>19</sup>	~40% <sup>20</sup>	~35 - 40% <sup>20,21</sup>
ROCE, %	35% <sup>19</sup>	>30% <sup>20</sup>	~25 - 35% <sup>20</sup>
Communities, jobs support	1,400	→	5 jobs off site for every 1 on site
Net reduction in CO <sub>2</sub> emissions, % off 2016 baseline	8%	→	30%

Thank you



Mogalakwena drilling and exploration

# 2022 guidance

PGM production (M&C)

---

4.1–4.5

million ounces

PGM sales volume

---

4.2–4.6

million ounces

Refined PGM production

---

4.2–4.6

million ounces

Unit cost per PGM ounce

---

13,800–14,500

Rand per PGM ounce

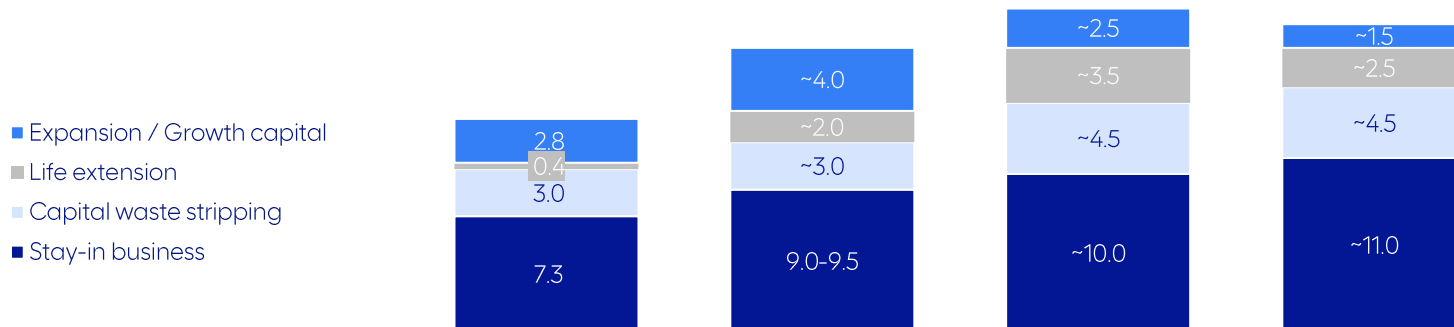


Polokwane smelter

# Three-year guidance

	Unit	2022E	2023E	2024E
Metal in concentrate				
Total PGMs	(m ounces)	4.1 – 4.5	4.1 – 4.5	4.1 – 4.5
Platinum	(m ounces)	1.9 – 2.1	1.9 – 2.1	1.9 – 2.1
Palladium	(m ounces)	1.3 – 1.4	1.3 – 1.4	1.3 – 1.4
Other PGMs and gold	(m ounces)	0.9 – 1.0	0.9 – 1.0	0.9 – 1.0
Refined production				
Total PGMs	(m ounces)	4.2 – 4.6	3.8 – 4.2	4.1 – 4.5

# Capital expenditure guidance



Capital expenditure		2021	2022E	2023E	2024-2025E
Total capital expenditure	(R billion)	13.6	~18.0 - 18.5	~20.5	~19.5
Total Sustaining capital	(R billion)	10.8	14.0-14.5	~18.0	~18.0
Stay-in-business	(R billion)	7.3	9.0-9.5	~10.0	~11.0
Capitalised waste stripping	(R billion)	3.0	~3.0	~4.5	~4.5
Life extension capital	(R billion)	0.4	~2.0	~3.5	~2.5
Expansion / breakthrough capital	(R billion)	2.8	~4.0	~2.5	~1.5

# Exiting Bokoni and Kroondal – creating value uplift for stakeholders and shareholders

## Bokoni

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Concluded an agreement for the disposal of Bokoni Mine to African Rainbow Minerals for R3.5 billion.

Important that Bokoni Mine was sold to an operator with the technical and operational capability and access to funding.

The restart should support sustainable future for host communities and regional economy.

Purchase-of-concentrate terms agreed on the basis of the current mine plan.

## Kroondal

---

Signed an agreement to exit the Kroondal and Marikana pool-and-share agreements to Sibanye-Stillwater.

Marikana operation is on care and maintenance, the Kroondal operation has a short mine life under the current PSA terms.

Kroondal will be able to mine through the boundary at Sibanye-Stillwater's Rustenburg operations.

This enables us to extract our remaining 4E ounces from Kroondal more quickly and efficiently than under the previous mine plan.

Anglo American Platinum will transfer environmental liabilities and closure costs of c.R420m to Sibanye-Stillwater.



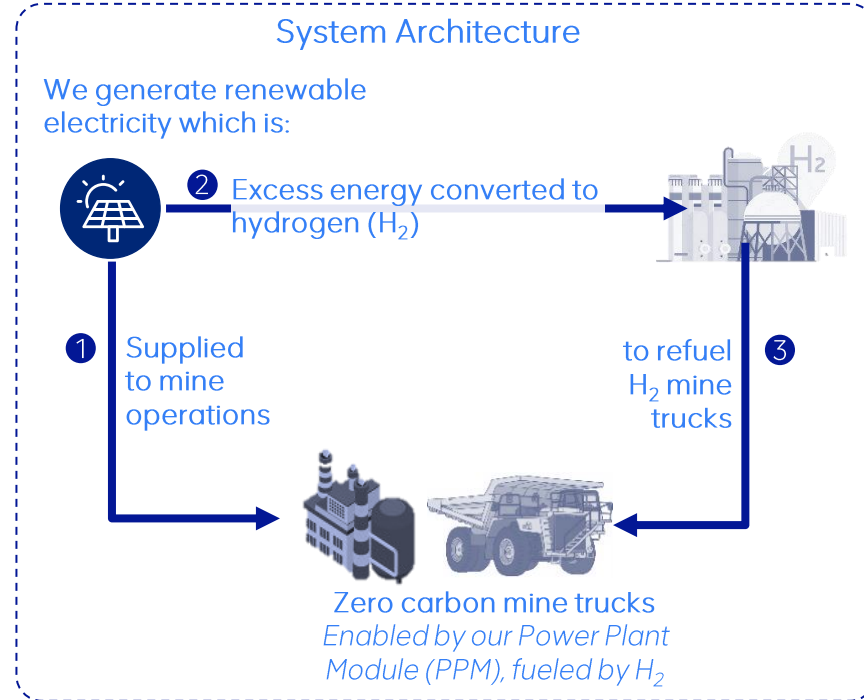
# Progress on zero-emissions mine solution at Mogalakwena



Completed design and build of infrastructure for electrolyzers, storage & refuelling.



Integration of fuel cell power module and integrated drive train – on site in South Africa



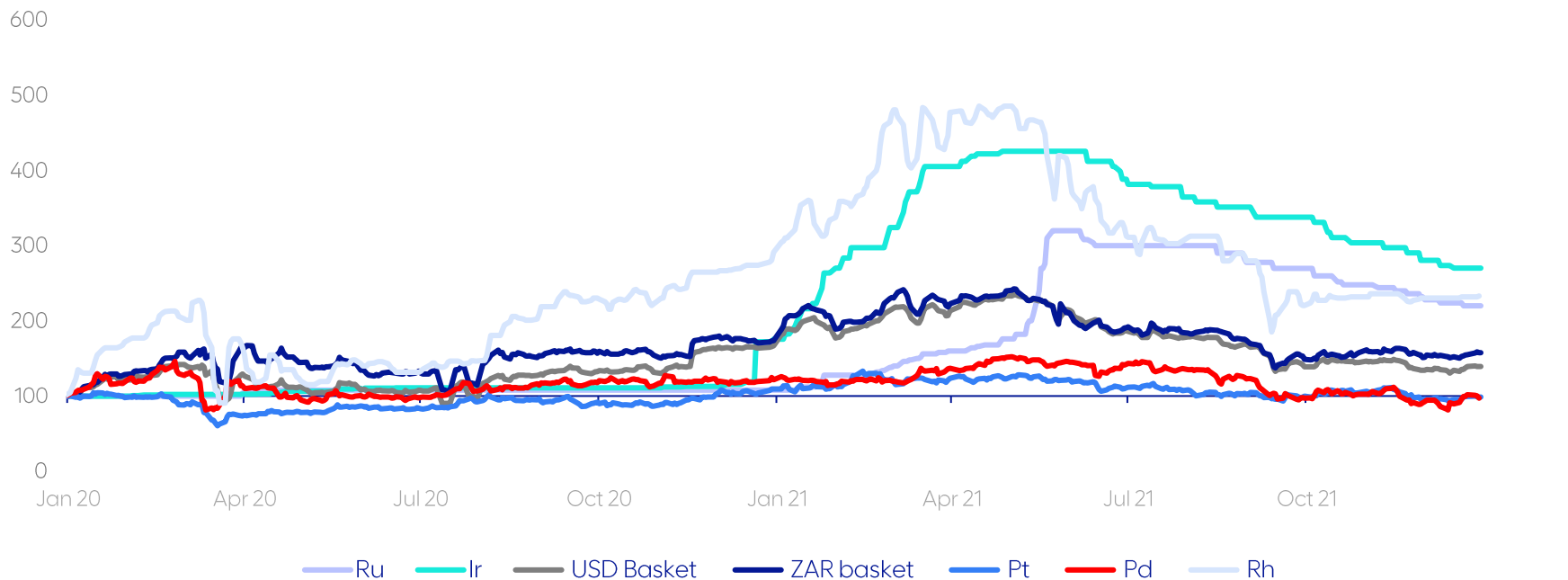
Performed high speed hydrogen refuelling tests and hydrogen storage installed .



Installation of hydrogen production equipment in progress

# Strong basket price – led by rhodium and minor PGMs

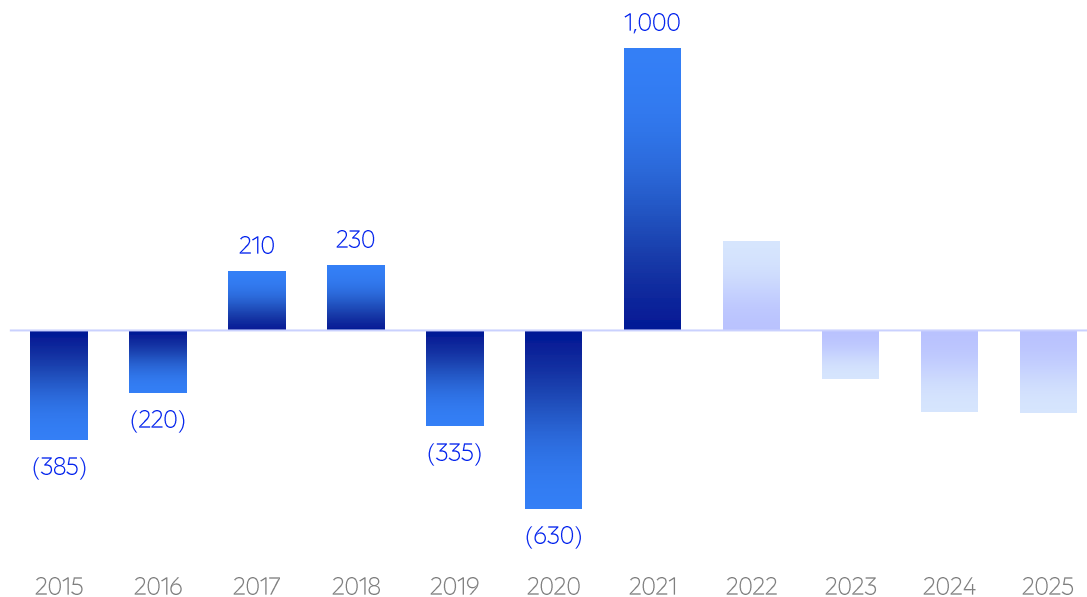
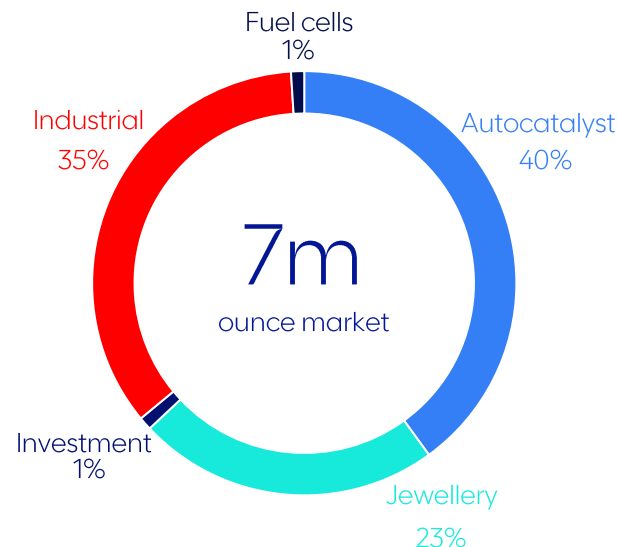
Indexed market prices log scale (1 Jan 2019=100)<sup>22</sup>



# Platinum – future demand from gasoline substitution & hydrogen economy drives deficit

Supply and demand balance<sup>13</sup>

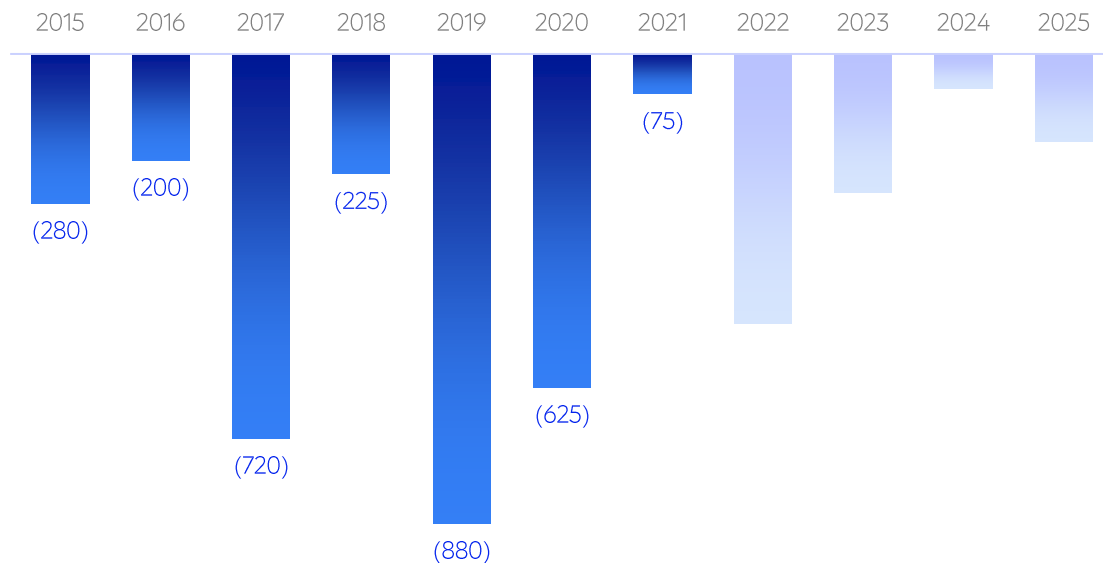
000 ounces

2021 gross demand by segment<sup>23</sup>

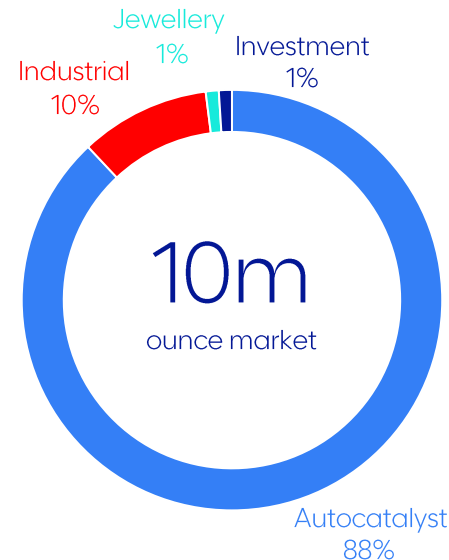
# Palladium – ongoing deficit driven by auto demand and tighter emissions legislation

Supply and demand balance<sup>13</sup>

000 ounces



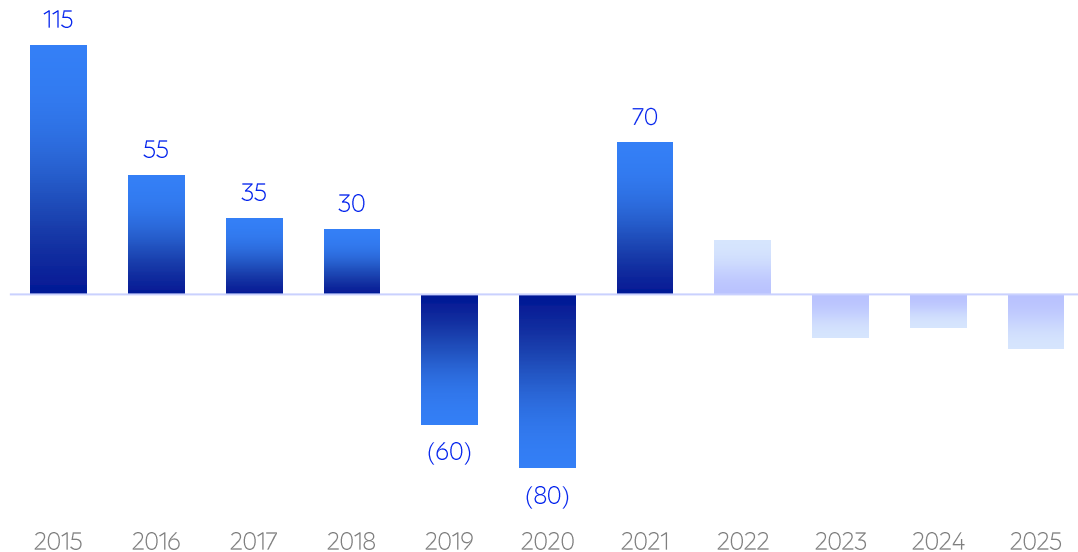
2021 gross demand by segment<sup>23</sup>



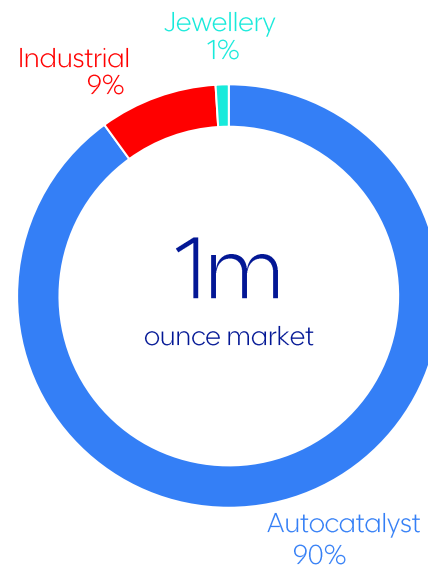
# Rhodium – unique NOx reduction qualities drive auto demand and continuing deficits

Supply and demand balance<sup>13</sup>

000 ounces



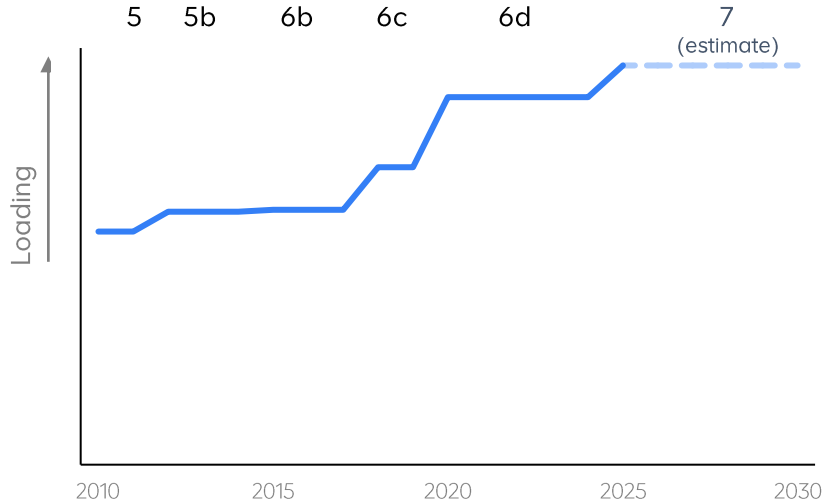
2021 gross demand by segment<sup>23</sup>



# Medium term: auto PGM demand driven by tighter emissions legislation

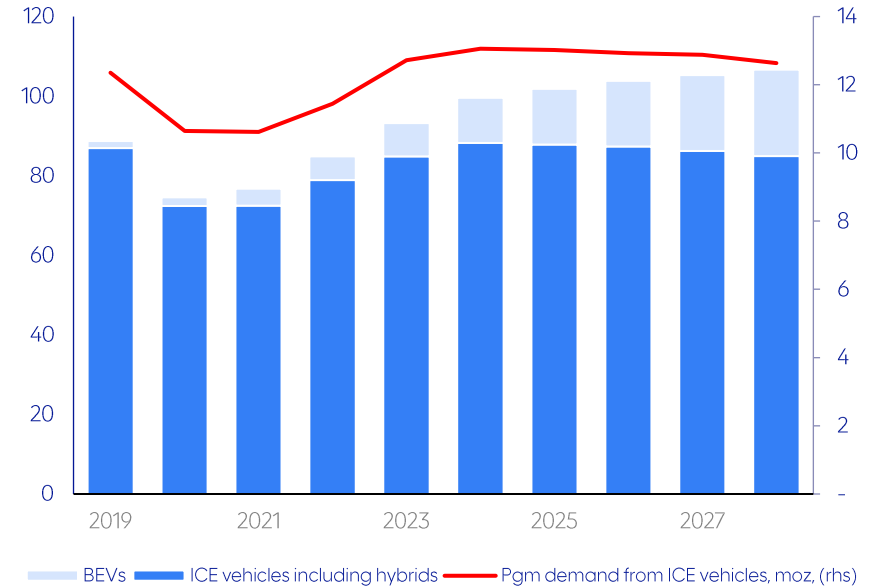
## Rising PGM loadings – example Euro gasoline LDV

Euro emissions standards <sup>24</sup>



## Robust PGM demand from LDV globally

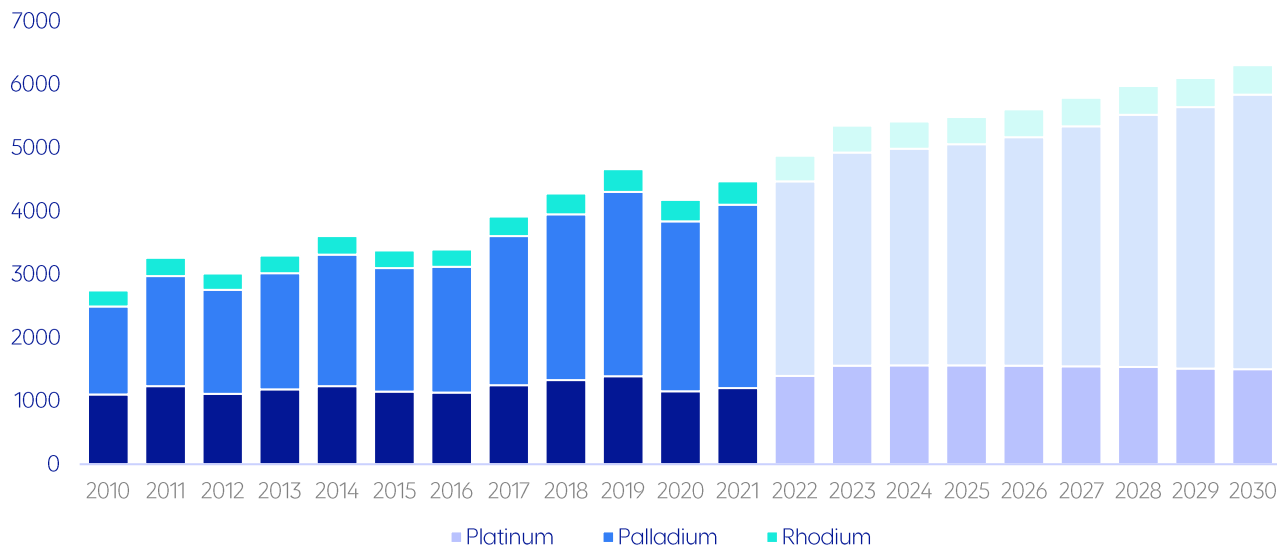
Million vehicles (LHS), million ounces (RHS) <sup>25</sup>



# Secondary supply – rising trend mainly from palladium

## Projected autocatalyst recycling volume<sup>26</sup>

(000 ounces per annum)



Autocatalyst recycling volumes set to increase as scrapped cars have higher loadings.

Well-established trends expected to continue - mature autocat recycling market.

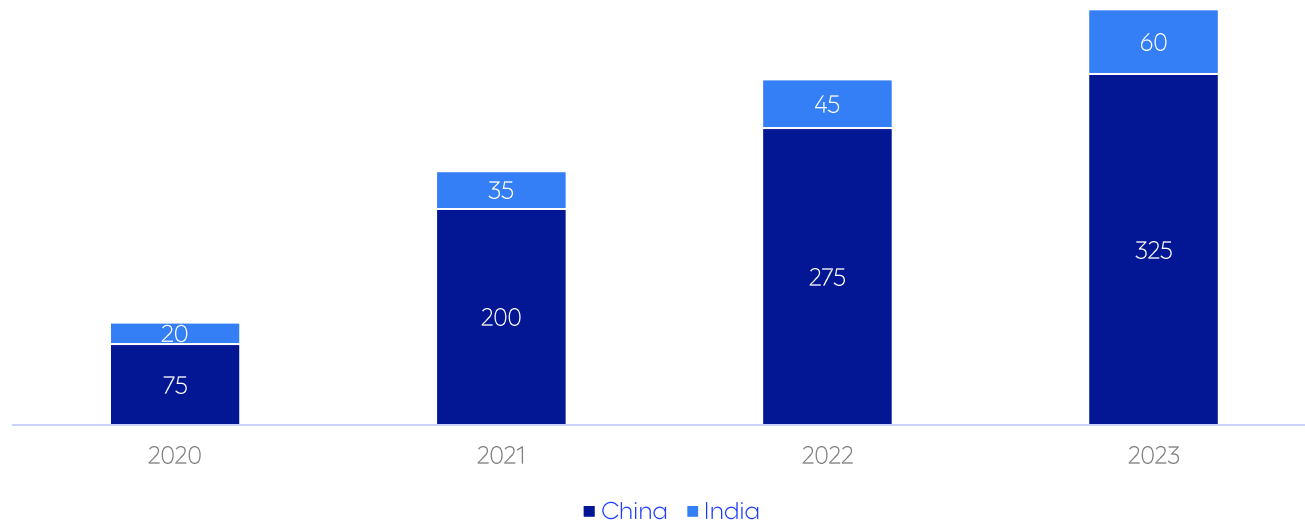
Palladium volumes will grow fastest, reflecting demand patterns in mid-2000s.

Covid-19 and chips shortage led to fewer cars scrapped in 2020/2021 than might be expected.

# Truck demand – a platinum growth area

Heavy-duty platinum automotive demand in China and India<sup>27</sup>

000 ounces per annum



All Chinese trucks sold by 2023 will need platinum-based catalysts due to tightening emissions.

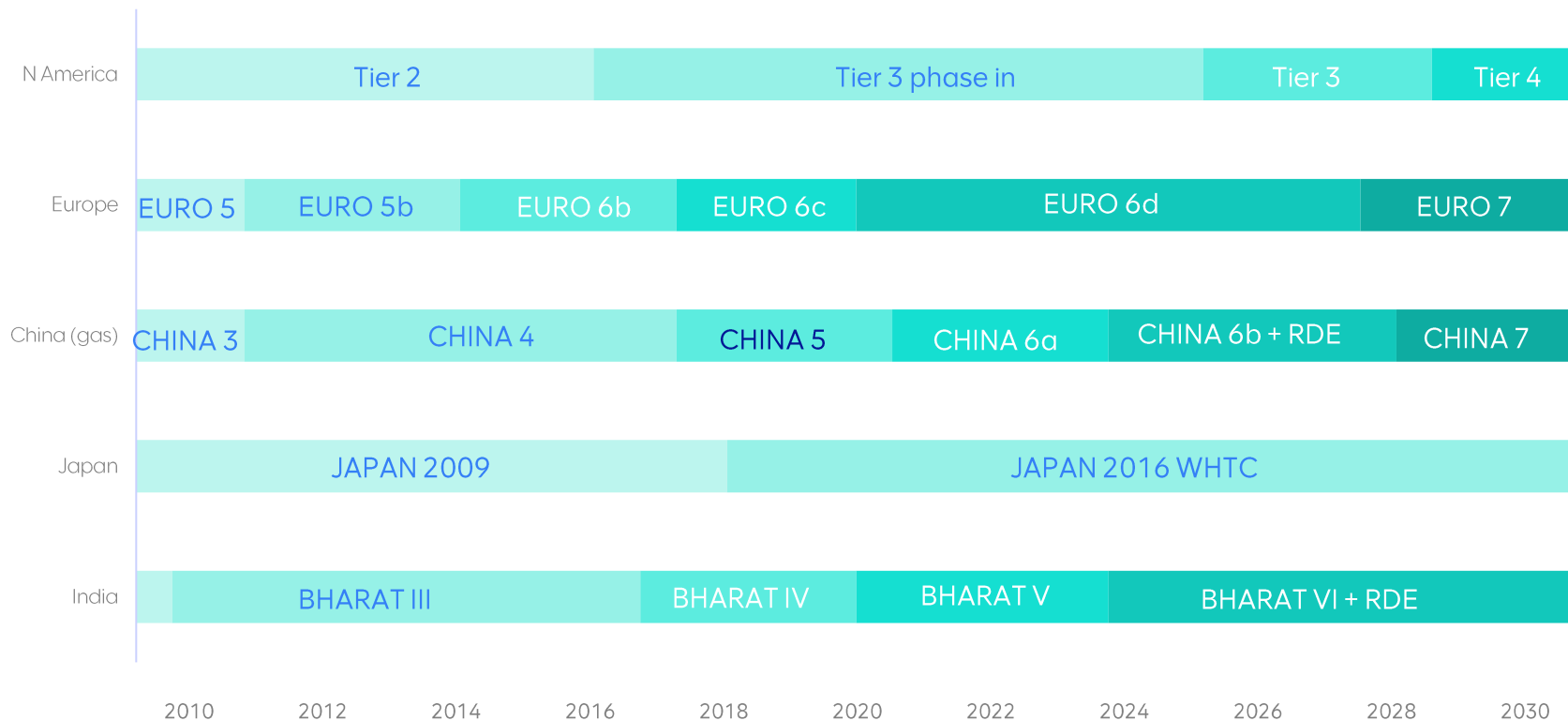
Many manufacturers implementing systems earlier to meet legislation.

Demand to be ~4x higher in 2023 than 2020.

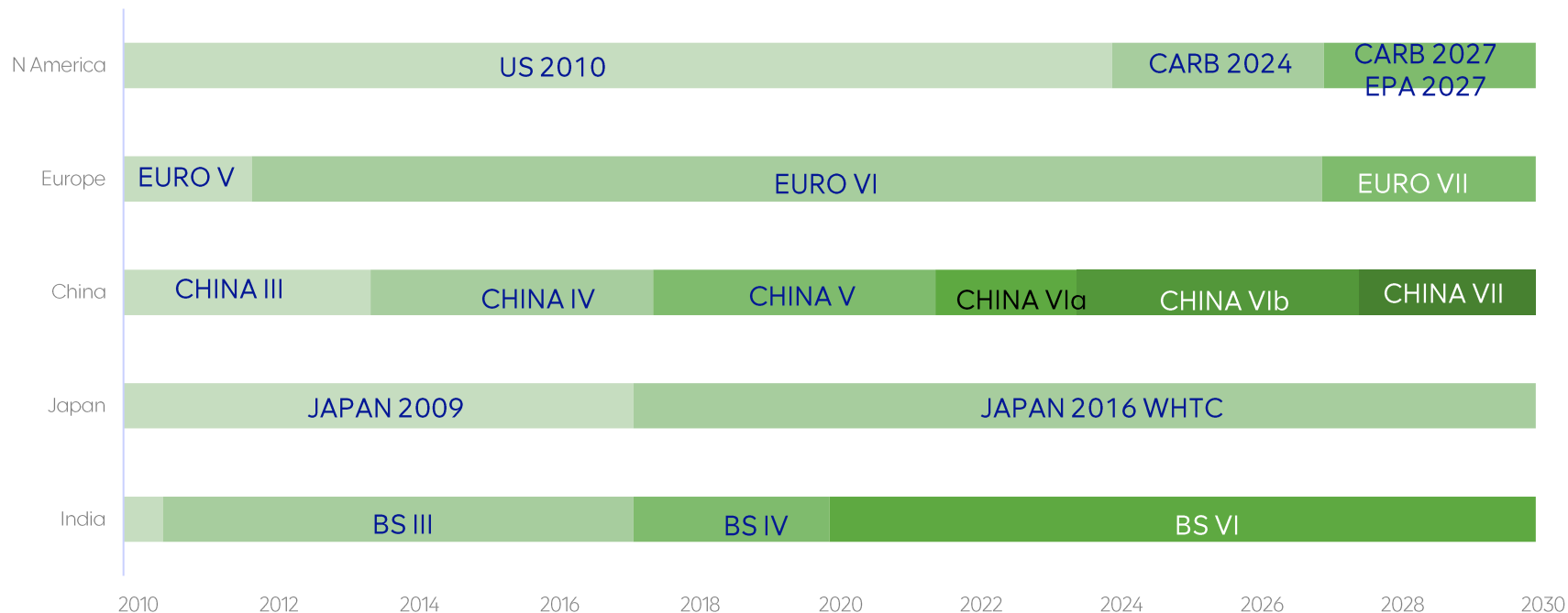
Indian heavy-duty trucks see similar uplift from Bharat V legislation in 2020 and real-world testing from 2023.



# Outlook for global emissions regulation – light duty<sup>28</sup>





# Outlook for global emissions regulation – heavy duty<sup>28</sup>



# Market development of all PGMs

## End use sector diversity

### Opportunity Areas

Hydrogen & mobility	
Low-Loss Computing	
Battery & Storage	
New Materials	
Carbon-Neutral Feedstock	
FoodTech	
MedTech	
Waste & Pollution Control	

## Full PGM basket resilience





### Creating possibilities and options for

Pt	Ir								
Pt	Pd	Ru	Ir						
Pt	Pd								
Pt	Pd	Rh	Ru	Ir					
Pt	Ru								
Pt	Pd								
Pt	Os								
Pt									



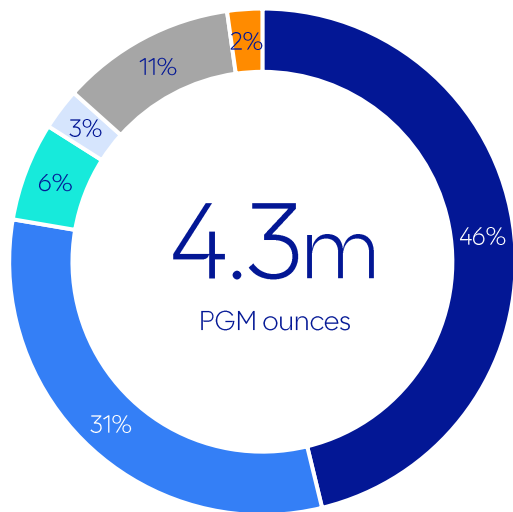
## Possibilities for meaningful incremental demand.

### For example

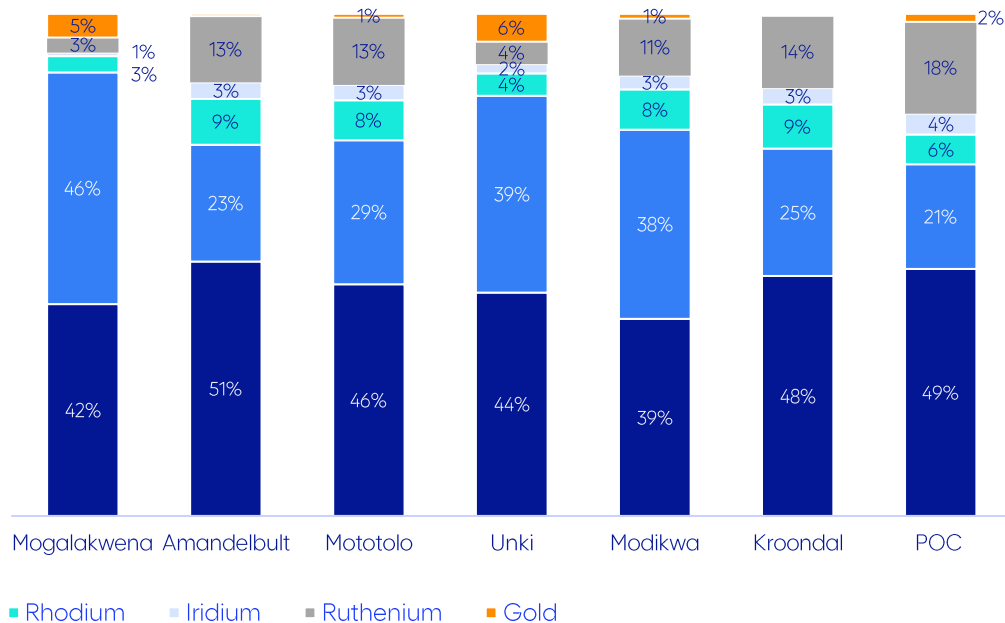
- **Hydrogen & mobility** if 6-7% of global car sales is FCEV, that could equate to ~2 to 4.5+ Moz a year, equivalent or even exceed peak Pt autocat in Europe throughout 2005-08 
- **Battery & Storage** could be equivalent to half or nearly the same consumption seen in automotive sector today 
- **Low-Loss Computing** could create PGM demand in the millions of oz a year 
- **FoodTech** could be equivalent to an average platinum mining shaft 

# PGM prill split by own-mined assets

## Metal-in-concentrate production by PGM



## Revenue contribution by PGM per asset

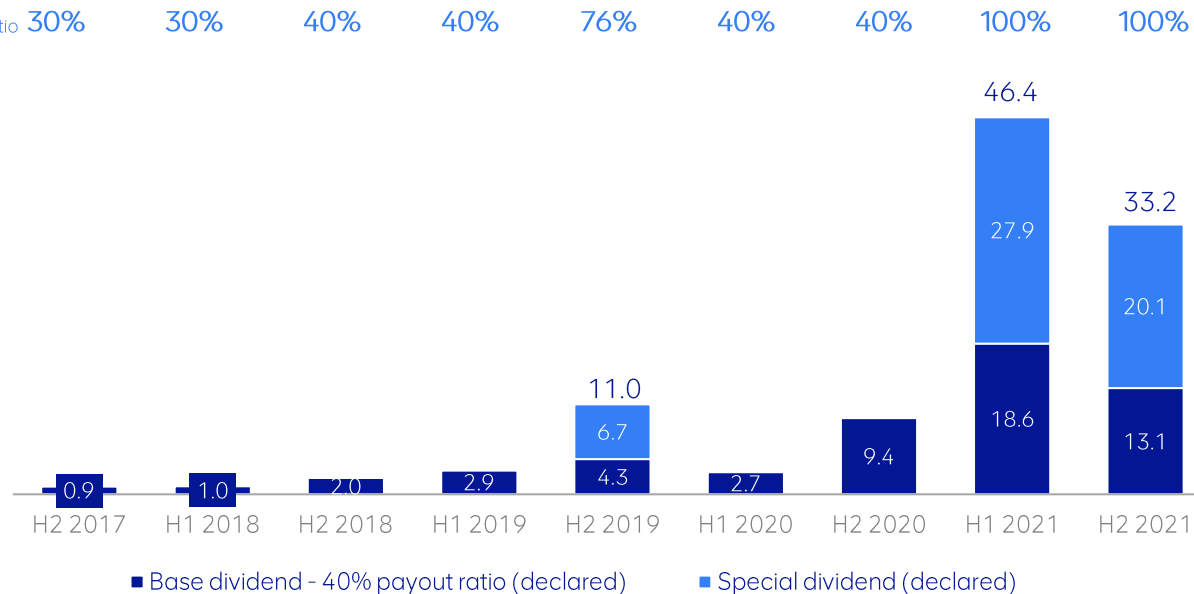


# Returning excess cash to shareholders

Dividend declared – base and special dividends

Rand billion

Pay-out ratio 30%



Total 2021 dividend declared

R80bn

Dividend pay-out ratio

100%

Dividend yield

17%

Based on 31 December 2021 closing share price

# EBITDA sensitivity

Sensitivity analysis –2021	31 December spot	Average realised	Impact of 10% change in price/FX
<b>Commodity / unit</b>			
Platinum (\$/oz)	965	1,083	3,527
Palladium (\$/oz)	1,967	2,439	5,872
Rhodium (\$/oz)	14,100	19,613	7,962
Gold (\$/oz)	1,818	1,788	242
Nickel (\$/ton)	20,498	18,472	455
Copper (\$/ton)	9,726	9,248	138
Chrome (\$/ton)	175	155	130
<b>Currency</b>			
South African rand/dollar	15.89	14.71	16,824

# Net cash flow by mine

Assets	Net cash 31 Dec 2020	Cash generated	SIB capital and capitalised waste	Economic free cash flow	Project capital + capitalised interest	Customer prepayment	Deferred consideration	Income tax paid	Effect of FX changes on cash	Dividends paid	Net cash 31 Dec 2021
Mogalakwena		39,294	(6,642)	32,652	(1,440)	--	--	--	--	--	
Amandelbult		24,766	(744)	24,022	(857)	--	--	--	--	--	
Mototolo		8,941	(553)	8,388	(92)	--	(1,710)	--	--	--	
Unki		6,076	(545)	5,531	(526)	--	15	--	--	--	
Joint operations (mined)		15,593	(650)	14,943	(100)	--	--	--	--	--	
Third party POC		20,577	(1,018)	19,559	(128)	--	3,480	--	--	--	
Other		348	(213)	132	(123)	7,704	--	(27,902)	2,653	(55,718)	
	18,650	115,595	(10,365)	105,228	(3,265)	7,704	1,785	(27,902)	2,653	(55,718)	49,137

# Cost breakdown

Costs reflective of AAP own mined and joint operations share of production and costs at operations (excludes all purchase of concentrate costs and volume, overhead and marketing expenses).

2021	Cost base (Rbn)	Volume %	PGMs (koz)	Labour	Contractors	Materials	Utilities	Sundries
Opencast Mining	7.0	44%	1,247	17%	7%	43%	2%	30%
Conventional Mining	10.9	29%	843	55%	4%	18%	8%	16%
Mechanised Mining	7.4	27%	768	37%	9%	33%	7%	14%
Concentrating	7.3			15%	0%	36%	22%	27%
Processing	10.6			22%	1%	23%	25%	29%
Total	43.2	100%	2,858	31%	4%	29%	13%	23%

2020	Cost base (Rbn)	Volume %	PGMs (koz)	Labour	Contractors	Materials	Utilities	Sundries
Opencast Mining	6.1	47%	1,190	17%	8%	43%	2%	30%
Conventional Mining	10.4	26%	675	57%	3%	17%	9%	14%
Mechanised Mining	6.3	27%	692	39%	8%	32%	6%	14%
Concentrating	4.9			14%	0%	38%	23%	26%
Processing	8.3			25%	2%	22%	25%	27%
Total	36.0	100%	2,557	34%	4%	28%	13%	21%



# All in sustaining cost (AISC)

		Mogalakwena	Amandelbult	Mototolo	Unki	Modikwa	Kroondal	Other	Mining
	Costs (US\$ million)								
	Cash operating costs (excl. stock piles)	829	875	226	190	145	229		2,493
	Other costs and marketing	324	280	74	80	27	67	19	872
	Capitalised waste costs	207							207
	Sustaining capital	245	57	38	37	20	24	15	435
a	Total Cost	1,605	1,212	337	308	192	320	33	4,007
	Total revenue excluding PGMs revenue (US\$m)								
b	Base and other metals	324	113	11	63	7	7		524
c = a- b	All-in sustaining costs	1,281	1,100	327	245	185	313	33	3,484
d	PGM ounces sold	1,479	907	307	243	164	342		3,442
e = c x 1,000 ÷ d	US\$ AISC / PGM oz sold	866	1,213	1,062	1,007	1,130	917		1,012
	Average PGM price achieved (\$)	2,356	3,001	2,904	2,542	2,982	2,981		2,680
	Realised \$ cash margin/PGM ounce sold	1,489	1,788	1,842	1,535	1,852	2,064		1,667

# Rand basket price

		Mogalakwena	Amandelbult	Mototolo	Unki	Joint operations	Total Mining	POC and Other	Company (ex-trading)
	<b>Net sales revenue (US\$ million)</b>								
	from platinum	690	482	151	119	239	1,682	893	2,575
	from palladium	1,653	486	207	230	342	2,917	945	3,863
	from rhodium	967	1,573	476	225	827	4,068	2,249	6,317
	from other metals	498	292	69	106	113	1,079	585	1,610
a	Total revenue	3,808	2,833	904	681	1,521	9,747	4,671	14,364
	<b>Sales volume (000 ounces)</b>								
b	platinum ounces sold	633	444	139	110	220	1,546	821	2,367
	other PGMs sold	846	462	168	133	286	1,896	951	2,847
c	Total PGMs sold	1,479	907	307	243	506	3,442	1,773	5,214
	<b>US\$ Basket prices</b>								
d = a ÷ c x 1,000	US\$ basket price per PGM ounce <sup>1</sup>	2,575	3,125	2,939	2,801	3,008	2,832	2,635	2,761
e = a ÷ b x 1,000	US\$ basket price per platinum ounce	6,018	6,375	6,498	6,214	6,915	6,305	5,687	6,082
f	US Dollar/ZAR exchange rate	14.71	14.71	14.71	14.71	14.71	14.71	14.71	14.71
	<b>Rand Basket prices</b>								
g = d x f	Rand basket price per PGM ounce <sup>2</sup>	37,862	45,958	43,226	41,198	44,231	41,645	38,756	40,511
g = e x f	Rand basket price per platinum ounce <sup>2</sup>	88,500	93,745	95,567	91,391	101,694	92,726	83,627	89,233

<sup>1</sup>\$6 variance from Rand basket price conversion due to monthly metal Prices in dollar

<sup>2</sup>Company Ex trading calculated as ((a x f) / c x 1000)

# Simplified EBITDA per PGM ounce

(R million)		Mogalakwena	Amandelbult	Mototolo	Unki	Attributable joint operations	Exit and C&M mines	Mined	POC & toll	Trading	Other	Company	Company (ex trading)
a = (b x c)/1000 + d	Net revenue	56,001	41,662	13,290	10,008	22,372		143,334	70,098	1,137		214,568	213,431
b	Basket price per PGM ounce	37,862	45,958	43,226	41,198	44,231		41,645	38,756	1,475			
c	PGM ounces sold	1,479	907	307	243	506		3,442	1,773	771		5,985	5,214
d	Other revenue								1,399			1,399	1,399
e = (f x g)/1000 + h	Cash operating costs	12,469	12,884	3,336	2,741	5,491	(244)	36,676	48,990	11		85,677	85,666
f	Cash operating cost / PGM oz	10,266	16,665	13,651	13,392	13,026		12,831					
g	PGM ounces produced	1,215	773	244	205	422		2,858	1,440				
h	POC and toll costs								48,990				
i = (j + k + l + m + n)	Other costs	4,921	4,627	1,081	1,063	1,956	(433)	13,214	5,126	299	1,813	20,453	20,154
j	- Metal inventory	429	706	56	(71)	685		1,806	4,840			6,646	6,646
k	- Other costs	1,679	1,171	365	844	153	(433)	3,779	286	299	847	5,211	4,912
l	- Royalties	2,812	2,003	660	290	1,108		6,874				6,874	6,874
m	- Chrome		746			10		756				756	756
n	- Market and development costs										966	966	966
o = (e + i)	Total costs	17,390	17,511	4,417	3,803	7,447	(678)	49,890	54,116	310	1,813	106,130	105,820
p = (a - o)	EBITDA	38,612	24,151	8,873	6,204	14,925	678	93,443	15,982	827	(1,813)	108,438	107,611
q = (p ÷ a)	EBITDA margin	69%	58%	67%	62%	67%	0%	65%	23%	73%	0%	51%	50%

# Footnotes

- 1) Total recordable case injury frequency rate (TRCFR) is a measure of all injuries requiring treatment above first aid per 1,000,000 hours worked
- 2) New case of Occupational Disease defined as: A case of disease (diagnosed by a physician and counted from the date of diagnosis) where an employee has been exposed to an agent/hazard with a known causative association to the disease being reported and, where the period of exposure – while employed by Anglo American Platinum – has been sufficient (from both a dose and time perspective) to have caused the disease.
- 3) Scope 1 covers direct emissions from owned or controlled sources. Scope 2 covers indirect emissions from the generation of purchased electricity, steam, heating and cooling sources
- 4) CO<sub>2</sub>e (carbon dioxide equivalent) compares the emissions from various greenhouse gases on the basis of their global warming potential by converting other gases to the equivalent amount of CO<sub>2</sub> with the same global warming potential
- 5) A level 4 environmental incident is defined whereby the size/scale of the impact is high relative to the receiving environment, the receiving environment has high sensitivity to the impact and the containment, remediation and/or clean up of the impact requires high intervention and time. A level 5 environmental incident is defined whereby the size/scale of the impact is major relative to the receiving environment, the receiving environment has major sensitivity to the impact and containment, remediation and/or clean up of the impact requires major intervention and impacts may be irreversible.
- 6) Water abstraction from stressed catchments is defined as: all the water received by the site/operation from the environment or a 3rd party supplier in a catchment where the demand/use is greater than the resource availability or the water available is of poor quality.
- 7) Dividend yield based on 20-21 dividend declared as at share price on 31 December 2021 of R1,816 per share.
- 8) Calculated using 5E production share of South African mined output during 2017-2019.
- 9) Source: LMC Automotive, Light Vehicle Production Forecast.
- 10) Own calculations based on publicly available national light vehicle production data.
- 11) US Bureau of Labor Statistics.
- 12) Calculated by Anglo American Platinum as difference between light vehicle sales and light vehicle production using LMC historical data.
- 13) Source: JM historical data to 2020, JM 2021 data modified by Anglo American Platinum in 2021, Anglo American Platinum forecasts thereafter
- 14) JM historical data to 2021. Production assumptions: LMC long-term forecasts, loadings: Anglo American Platinum estimates, BEV: high-end of industry forecasts, FCEVs: Anglo American Platinum estimates.
- 15) Based on assumed PGM loading of 0.125 g/kW, and fuel cell vehicle market shares of 15% in medium/light duty passenger vehicles, 50% of heavy-duty trucks, 5% of small passenger vehicles, and 25% of buses.
- 16) Based on 0.15 g/kW for iridium and 0.1 g/kW for platinum.
- 17) Source = Bloomberg New Energy Finance (BNEF), "Hydrogen – 10 predictions for 2022"
- 18) Mineral Resources classified as Measured, Indicated and Inferred, inclusive of Ore Reserves based on latest available information from Company sources and Company analysis
- 19) Restated using long term consensus averages prices
- 20) Based on long-term consensus average pricing
- 21) 2026-2035 average
- 22) Source: Bloomberg, Johnson Matthey, Anglo American Platinum
- 23) Source: Johnson Matthey adapted by Anglo American Platinum.
- 24) Source: Johnson Matthey, Anglo American Platinum. Note, loadings averaged over period legislation was in force
- 25) Source: LMC Automotive (ICE & BEV production), Anglo American Platinum (PGM demand from ICE vehicles)
- 26) Source: Anglo American Platinum from historical JM demand data and Anglo American Platinum future projected demand data
- 27) Source: Anglo American Platinum
- 28) Source: Johnson Matthey, May 2021 Platinum Survey