



**Johnson Matthey**  
Inspiring science, enhancing life

# Presentation of results for the full year ended 31<sup>st</sup> March 2021

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27<sup>th</sup> May 2021

# Cautionary statement

This presentation contains forward-looking statements that are subject to risk factors associated with, amongst other things, the economic and business circumstances occurring from time to time in the countries and sectors in which Johnson Matthey operates. It is believed that the expectations reflected in these statements are reasonable but they may be affected by a wide range of variables which could cause actual results to differ materially from those currently anticipated and you should therefore not place reliance on any forward-looking statements made. Johnson Matthey will not update forward-looking statements contained in this document or any other forward-looking statement it may make.





**Robert MacLeod**  
Chief Executive

JM

# Robust performance and growth opportunities driven by sustainable solutions



**Robust performance with strong second half recovery**



**Investing at pace into sustainable technologies to drive growth**



**Promoting a focused, high performance culture**



**New and ambitious sustainability goals**



# Ambitious sustainability goals and net zero by 2040

**01.** A cleaner healthier world;  
today and for future generations

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**02.** Net zero by 2040

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**03.** Science based targets

- Absolute reduction in Scope 1 and Scope 2 GHG emissions of at least 33% by 2030<sup>1</sup>
  - Absolute reduction of Scope 3 GHG emissions of at least 20% by 2030<sup>1</sup>
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**04.** Recognised by stakeholders







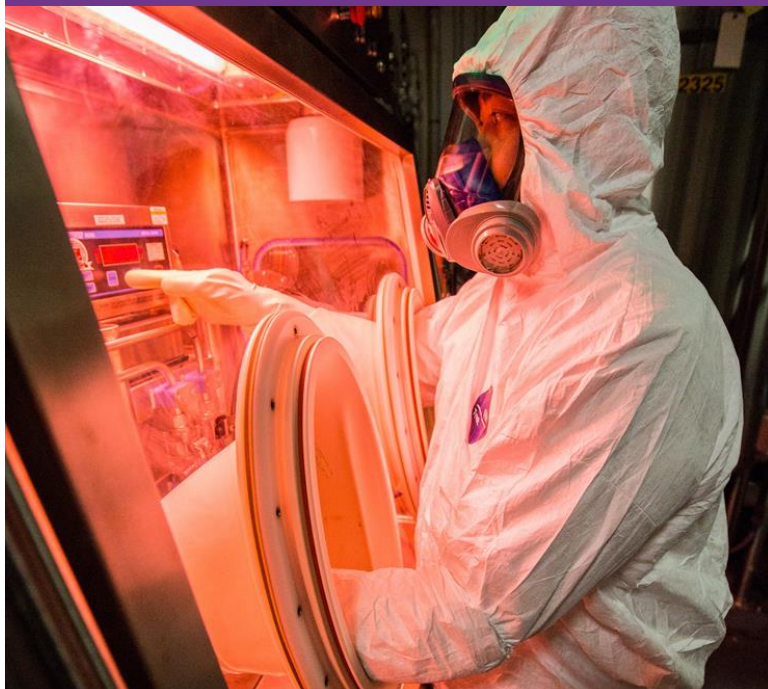
**Stephen Oxley**  
Chief Financial Officer

JM

# My priorities

01

**Execution**



02

**Growth**



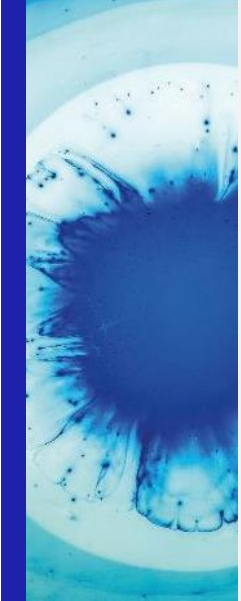
03

**Capital allocation**





# Performance highlights



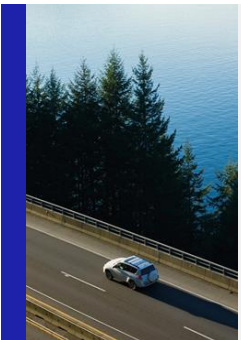
**Robust performance** with strong recovery

- 2H operating profit up 30% year-on-year
- Good momentum into 2021/22

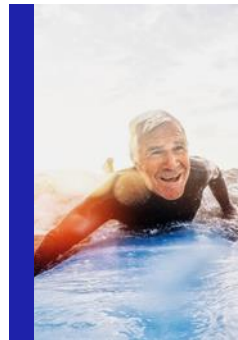


Tightly managed **working capital** and **cash flow**

- Free cash flow of £305m
- Net debt of £775m



Delivered £66m **efficiency savings**

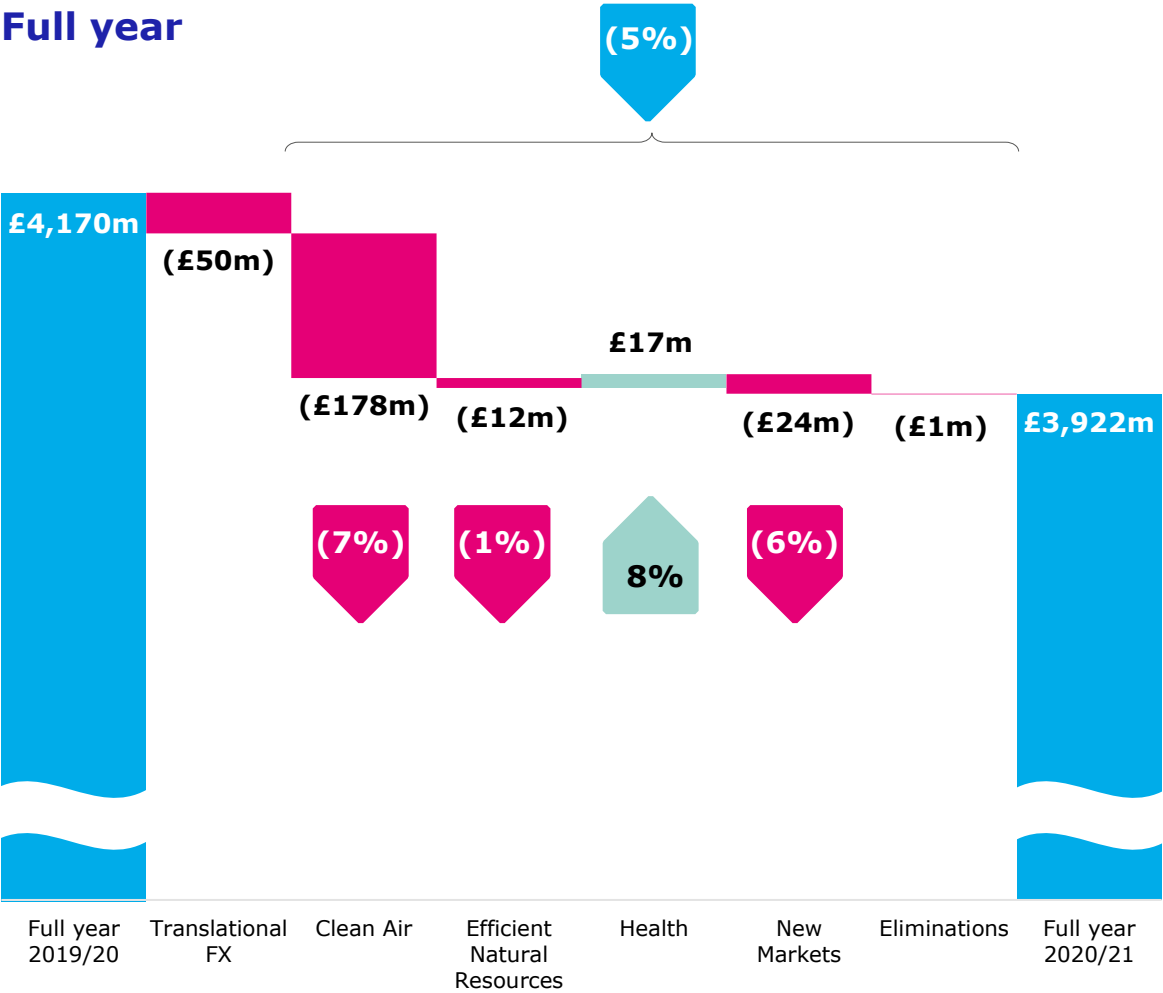


**Full year dividend of 70.0p per share**

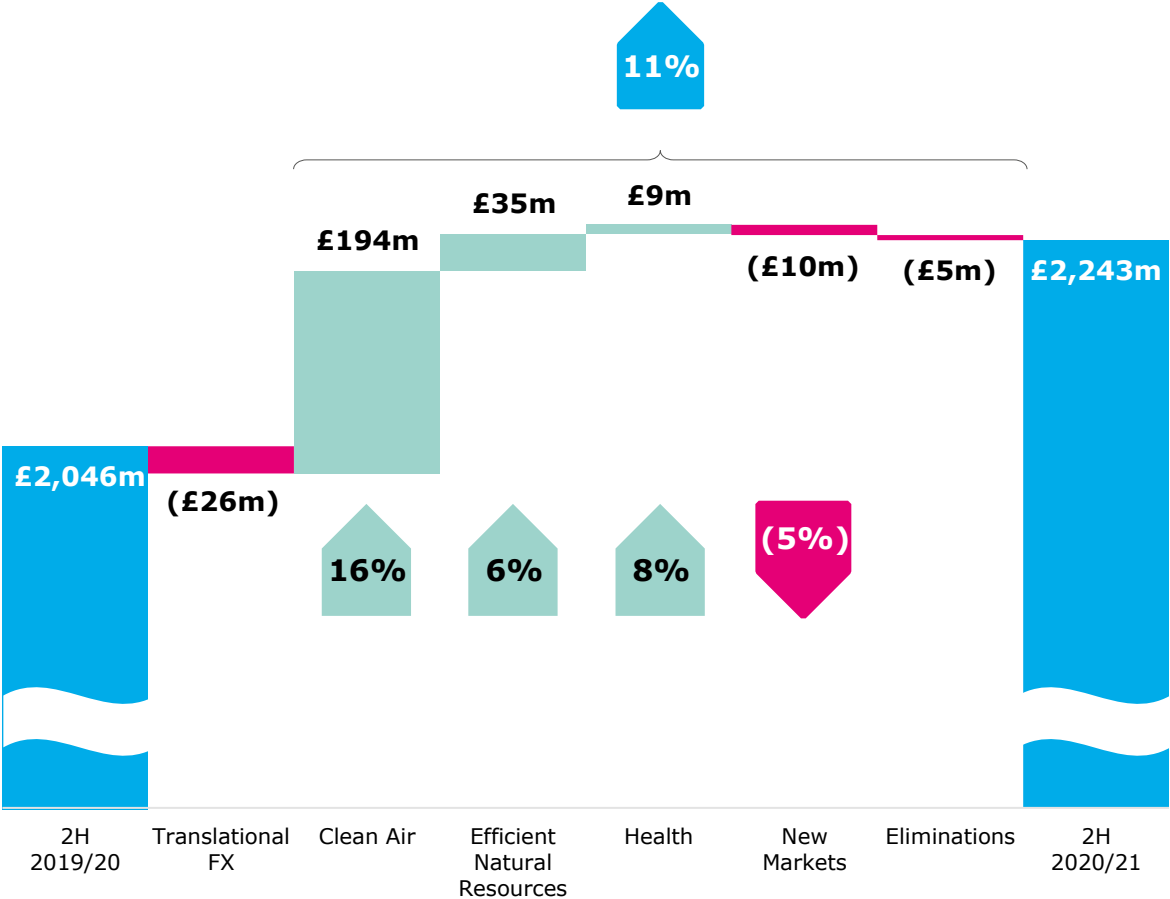


# Group sales robust and grew strongly in the second half

## Full year

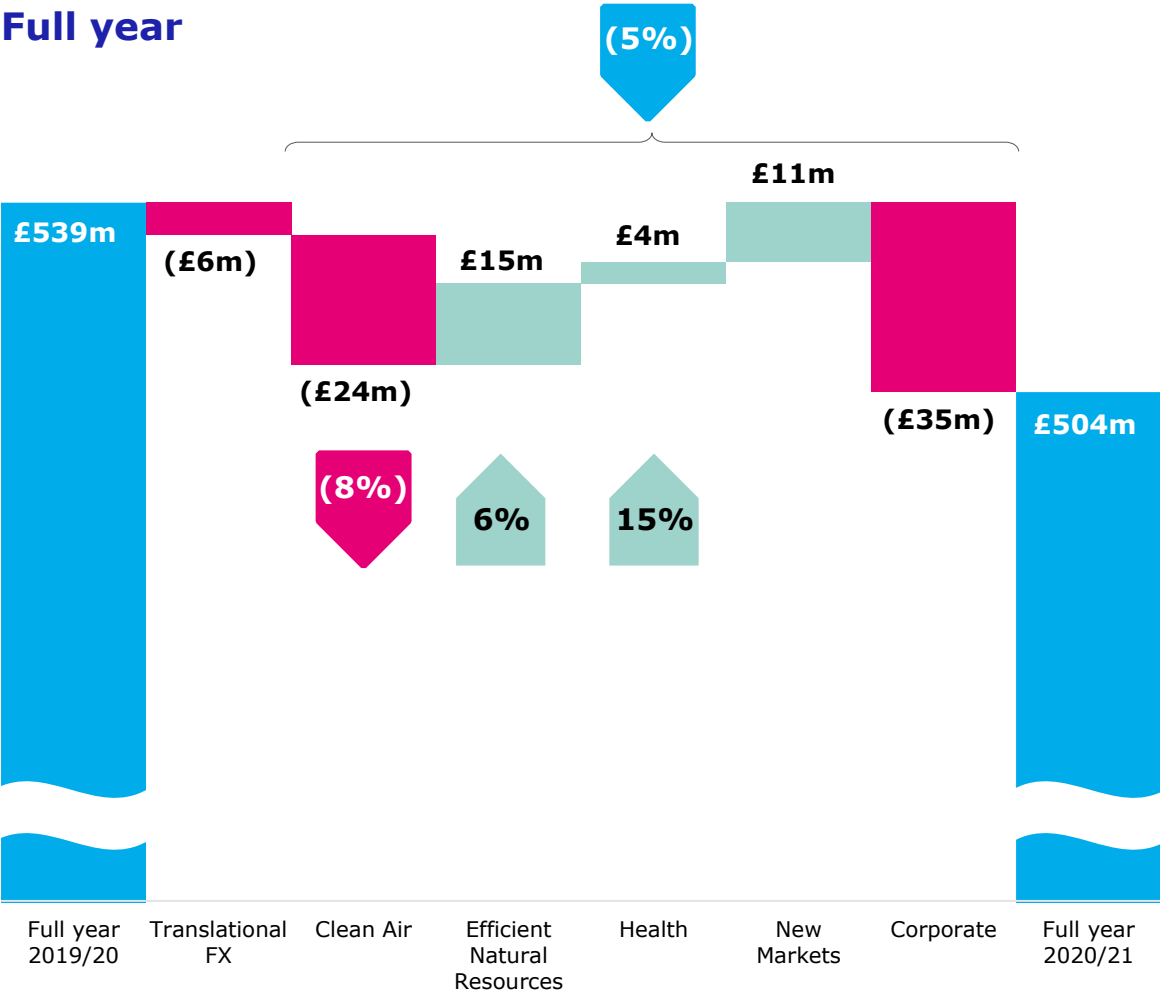


## Second half

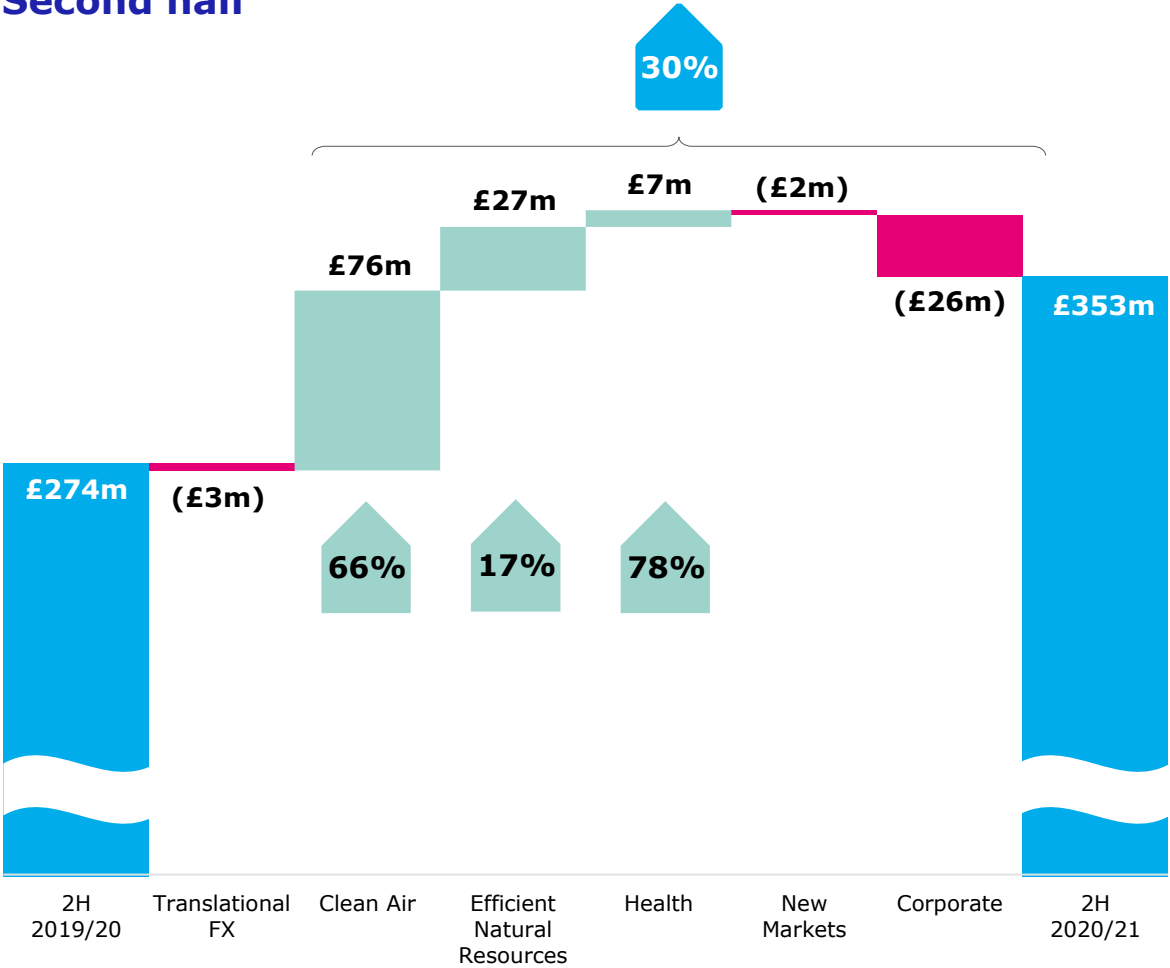


# Group underlying operating profit

## Full year



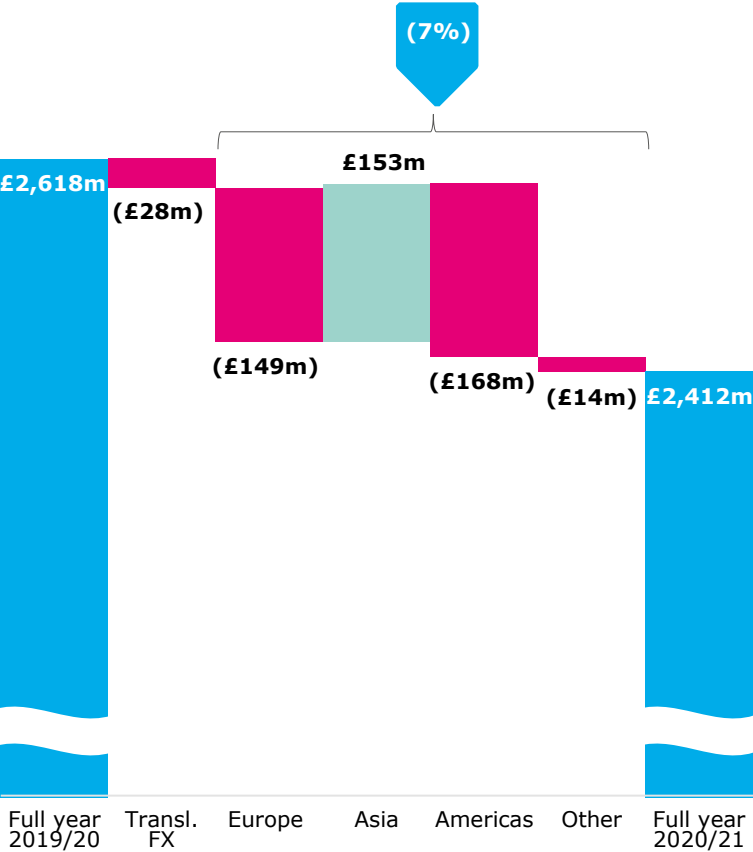
## Second half



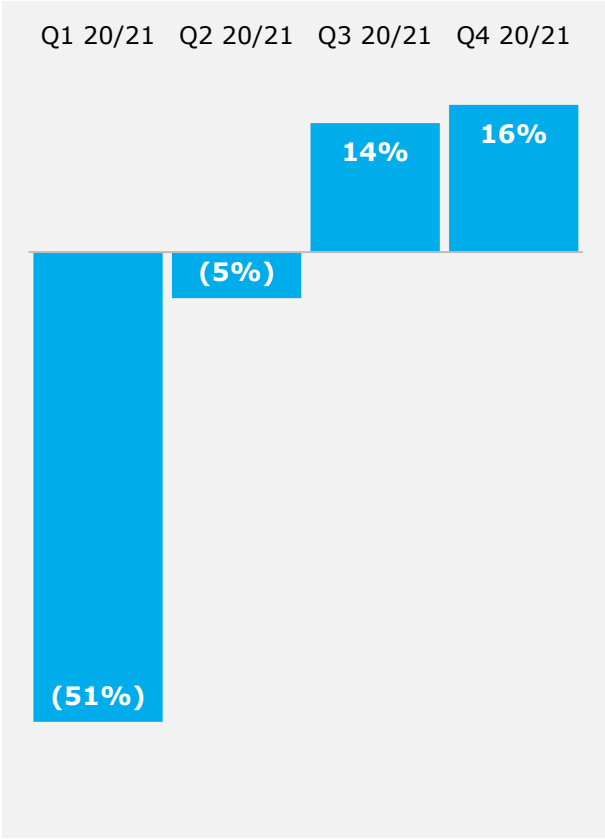


# Clean Air: strong recovery in demand through the second half

## Full year sales moderately down



## Quarterly sales growth year-on-year

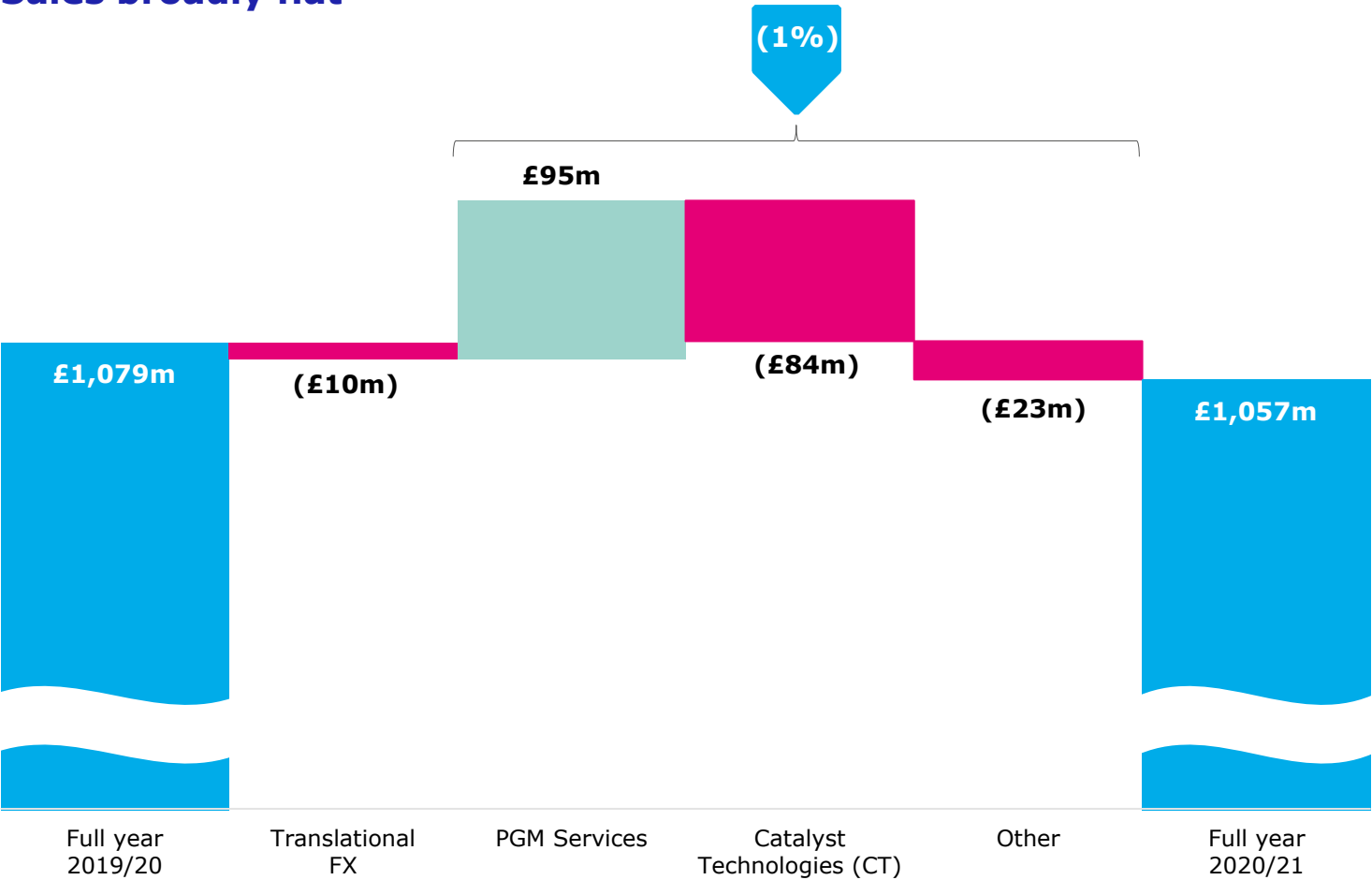


## Performance highlights

- Strong recovery in demand
- 2H sales up 16% year-on-year
- Asia benefited from tighter legislation in China and India
- Class 8 truck cycle turning and benefits expected in 2021/22
- Driving efficiency
  - Early benefits from transformation programme of £5m
  - 2H margin improved to 13.6%, towards pre-pandemic levels

# Efficient Natural Resources: operating profit and margin expansion

## Sales broadly flat



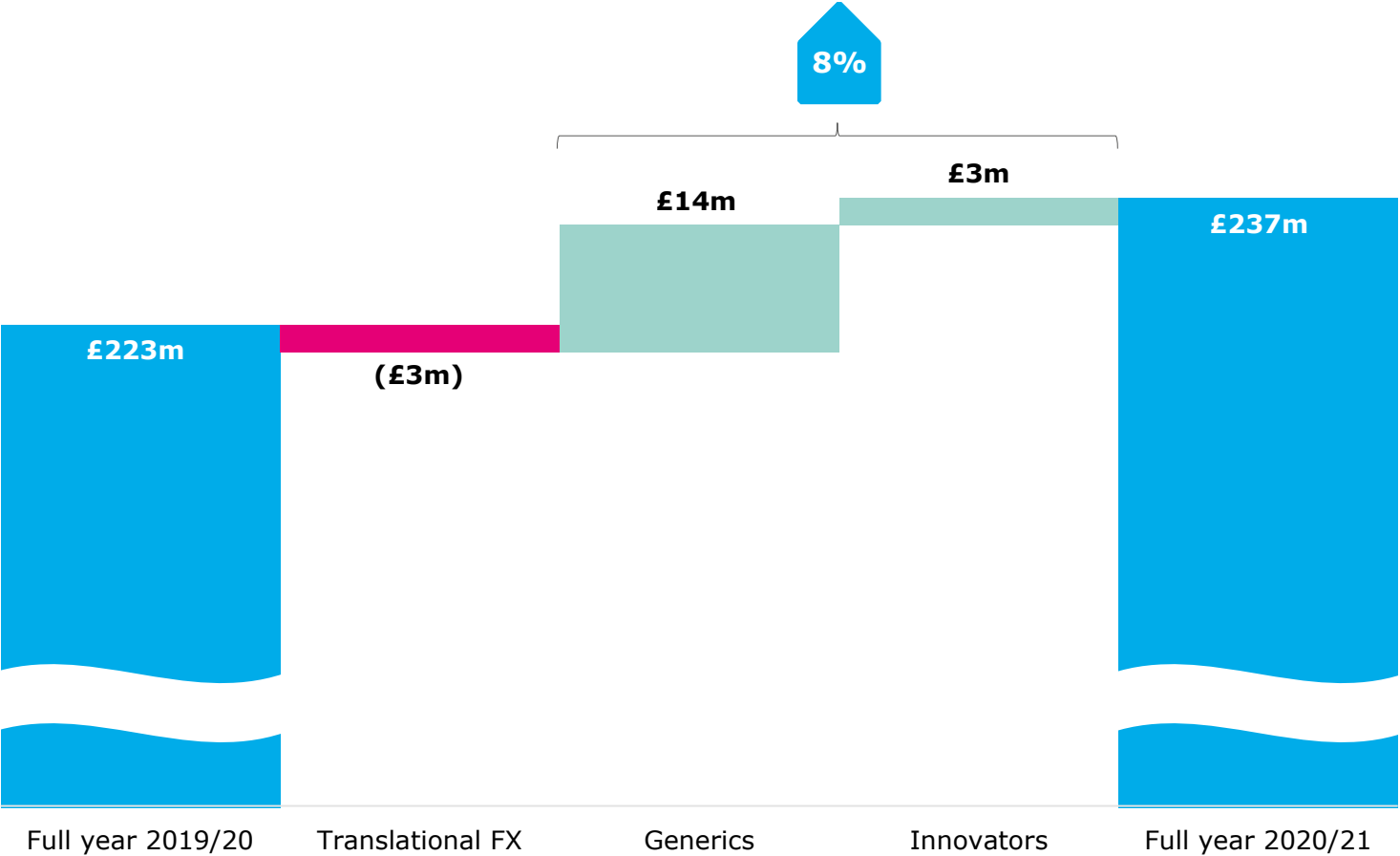
## Performance highlights

- Higher average pgm prices (c.+£80m)
- Strength in PGMS trading business from elevated volatility in pgm prices
- Weaker demand and phasing of customer changeouts in Catalyst Technologies
- Strong licensing pipeline
  - 10 new licences in the year
- Margin expanded 1.6ppts to 25.4%



# Health: sales growth driven by new product pipeline

Sales up 8%



## Performance highlights

Sales and operating profit growth

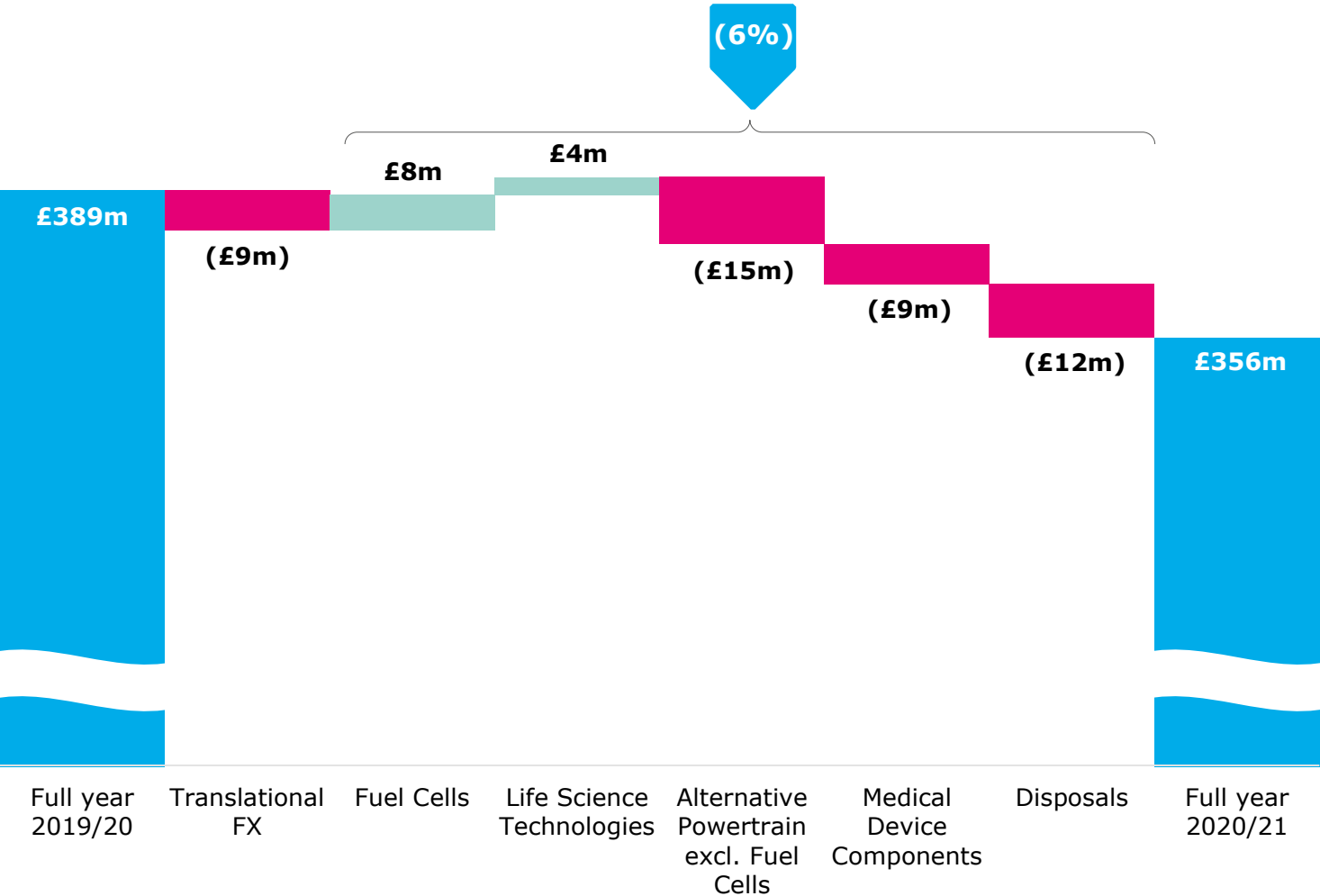
Benefiting from new customer contracts in opioid addiction therapies

Good progress with innovators, notably Gilead

Margin expanded 1.0ppts to 13.1%

# New Markets: strong growth in Fuel Cells

## Sales down



## Performance highlights

Fuel Cells grew strongly to £41m, up 24%

- Auto sales c.50% of fuel cells

Battery Systems and Medical Device Components affected by COVID-19

Continue to invest in the commercialisation of eLNO

Refined segment reporting in 2021/22<sup>1</sup>



# Operating performance

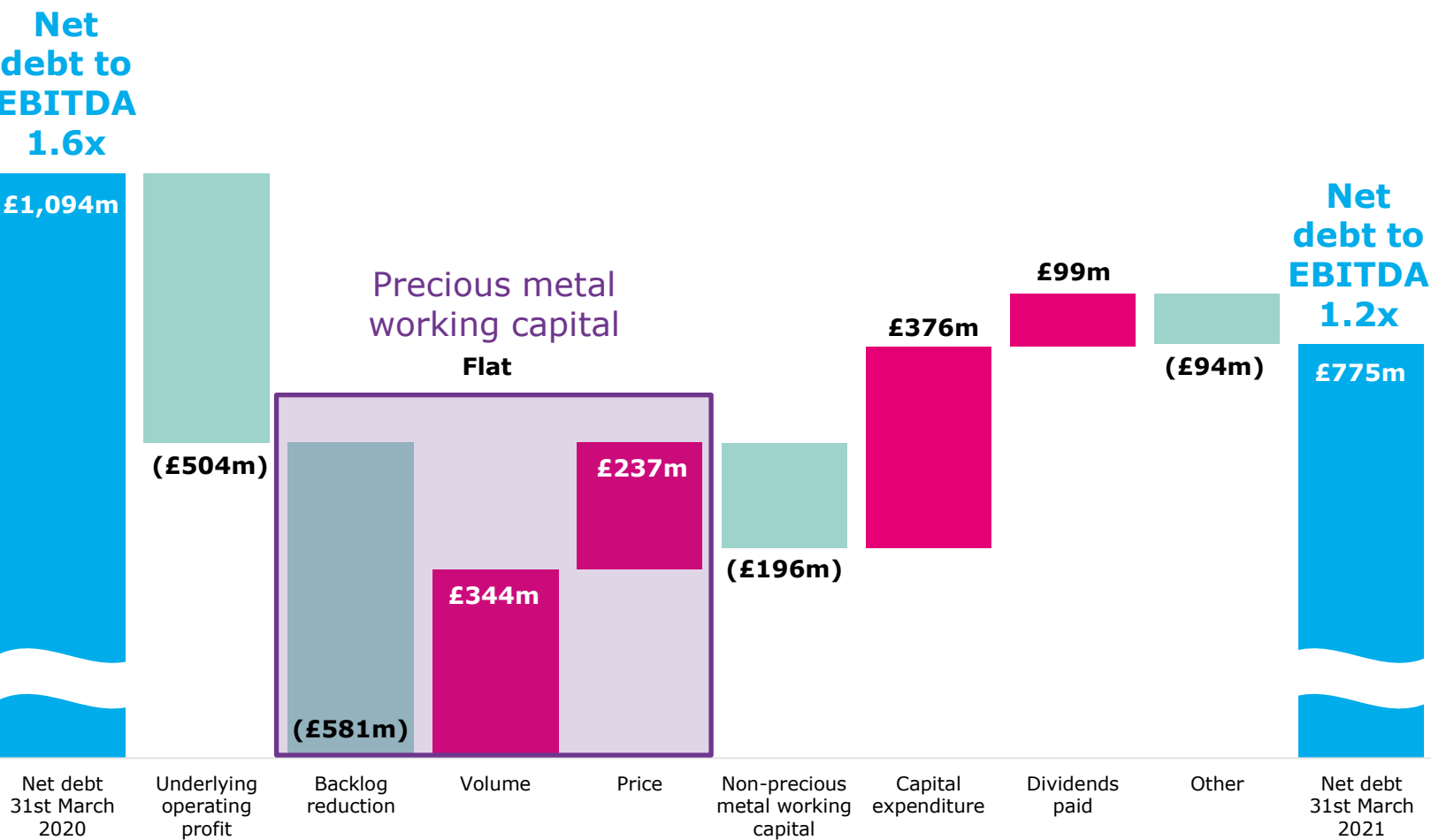
<b>Underlying results for year ended 31<sup>st</sup> March<sup>1</sup></b>	<b>2021 £m</b>	<b>2020 £m</b>	<b>% change</b>	<b>% change, constant rates</b>
Sales excluding precious metals (sales)	3,922	4,170	-6	-5
Operating profit	504	539	-6	-5
Finance charges	(85)	(86)		
Share of profits of joint ventures and associates	-	3		
Profit before tax	419	455	-8	-7
Taxation	(68)	(72)		
Profit after tax	351	383	-8	-8
<b>Underlying earnings per share</b>	<b>182.0p</b>	<b>199.2p</b>	<b>-9</b>	
<b>Ordinary dividend per share</b>	<b>70.0p</b>	<b>55.625p</b>	<b>+26</b>	

# Reported results impacted by exceptional items

Year ended 31 <sup>st</sup> March	2021 £m	2020 £m
<b>Underlying operating profit</b>	<b>504</b>	<b>539</b>
Profit on disposal of businesses	-	2
Amortisation of acquired intangibles	(10)	(13)
Major impairment and restructuring charges <sup>1</sup>	(171)	(140)
<b>Reported operating profit</b>	<b>323</b>	<b>388</b>
<b>Reported earnings per share</b>	<b>106.5p</b>	<b>132.3p</b>

# Strong cash flow and improved net debt despite higher metal prices

## Net debt



## Performance

Benefited from continued strong focus on reducing working capital

- Further backlog reduction
- Mitigated high pgm prices
- Good progress on non precious metal capital



# Outlook for year ended 31<sup>st</sup> March 2022

<b>Group</b>	Low to mid teens growth in underlying operating performance <sup>1</sup>
<b>Foreign exchange</b>	£25m adverse effect on underlying operating profit at current FX rates <sup>2</sup>
<b>Metal</b>	In addition, net metal price benefit of up to £120m to underlying operating profit if precious metal prices remain at current levels for the rest of the year <sup>3</sup>
<b>Capex</b>	Up to £600m, with main areas of investment being battery materials, pgm refineries and hydrogen growth activities

Investing for growth

**Capex spend  
in 2021/22  
up to £600m**

**Major projects include:**



**Continued investment into  
battery materials as planned**



**Increased resilience, efficiency  
and capacity of pgm refineries**



**Hydrogen expansion**



**Robert MacLeod**  
Chief Executive

JM



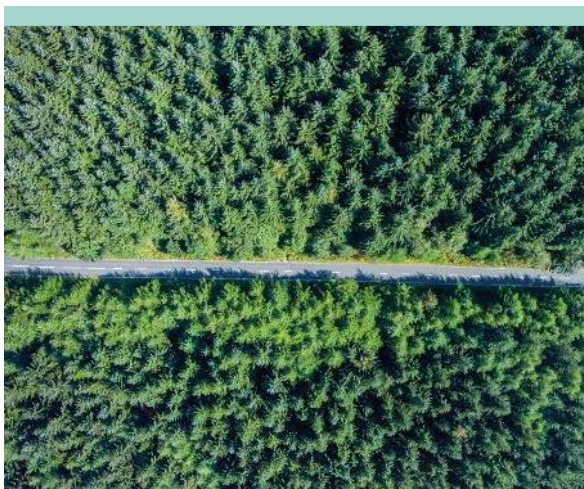
# A global leader in climate change solutions

## A cleaner, healthier world today and for future generations



### Clean Air

Medium term profit growth and sustained cash generation to support growth opportunities



### Efficient Natural Resources

Decarbonisation and circularity solutions



### Health

Confident in delivering pipeline



### Battery Materials and Hydrogen

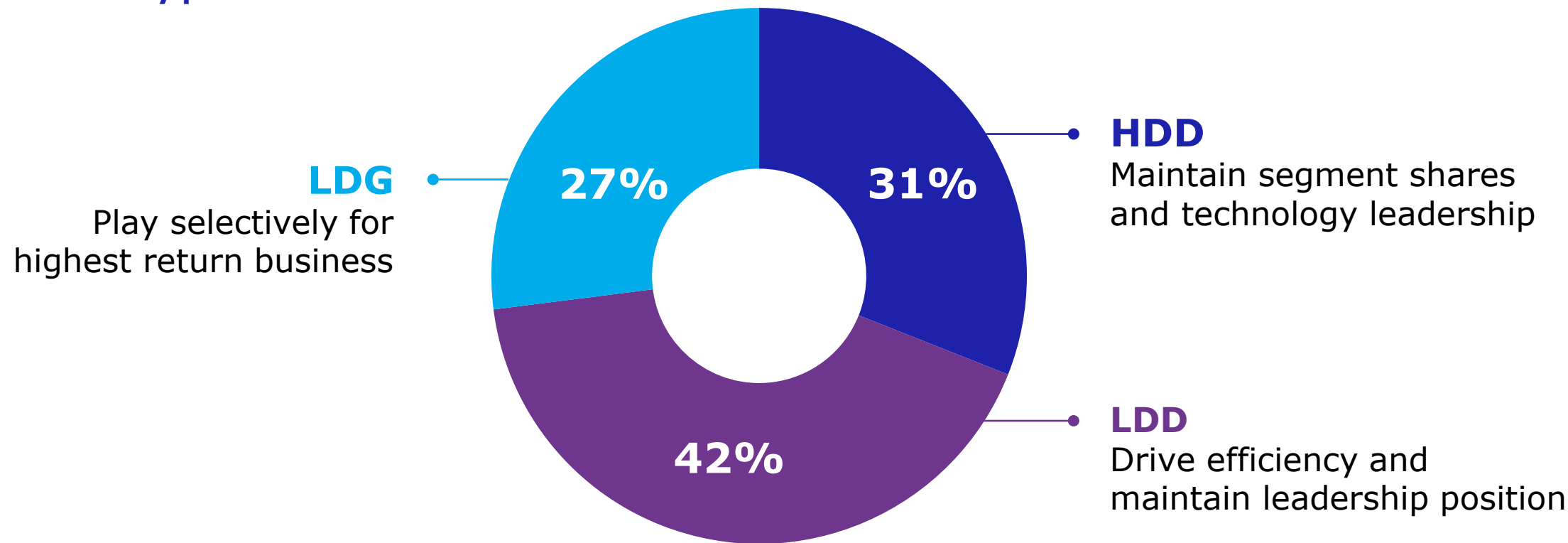
Exciting, high growth opportunities

**Underpinned by expertise in science and complex metal chemistry**



# Clean Air strategy is differentiated by segment

2020/21 sales by product



Clean Air is JM’s ambassador to the auto industry

# Various market scenarios for powertrain evolution

METRIC		Faster electrification	Base	Slower electrification
01	Size of auto industry globally (million vehicles) <sup>1</sup>	c.90m	c.100m	c.110m
02	LDD share Europe in 2030 <sup>1</sup>	c.5%	c.10%	c.15%
03	% BEV penetration globally in 2030 <sup>1</sup>	c.40%	c.30%	c.20%
04	Legislation <sup>2</sup>	2027	2026	2025

# Driving medium term growth and managing levers dynamically to generate sustainable cash

	Value uplift	Efficiency	Cashflow
Levers	<ul style="list-style-type: none"><li>• Value uplift coming from:<ul style="list-style-type: none"><li>– China VI 2022</li><li>– Euro 7 2026/27</li><li>– US EPA Tier 4 and CARB LEV IV</li></ul></li><li>• Leadership position in LDD and HDD</li><li>• Technology leadership in NOx abatement</li><li>• Gasoline investments to win the right business</li></ul>	<ul style="list-style-type: none"><li>• Excellence programmes to offset inflation and pricing<ul style="list-style-type: none"><li>– Procurement</li><li>– Manufacturing</li><li>– Commercial</li></ul></li><li>• Footprint consolidation drives further benefit</li><li>• Rigorous management of overhead cost</li></ul>	<ul style="list-style-type: none"><li>• Final strategic investments substantially complete</li><li>• Capex targeted at c.£50m per year</li><li>• New global supply chain team optimising inventory</li><li>• Resetting customer terms where needed</li></ul>

**Driving at least £4bn of cash under our range of scenarios in the coming 10 years**

# Efficient Natural Resources: strongly positioned to win in net zero world

## Acceleration of the drive towards sustainable solutions post COVID-19

### Strong foundations today



Leading positions,  
established customer  
relationships and  
strong technology

### Near-term growth



Growth driven by  
existing technologies

### Growth in a net zero world



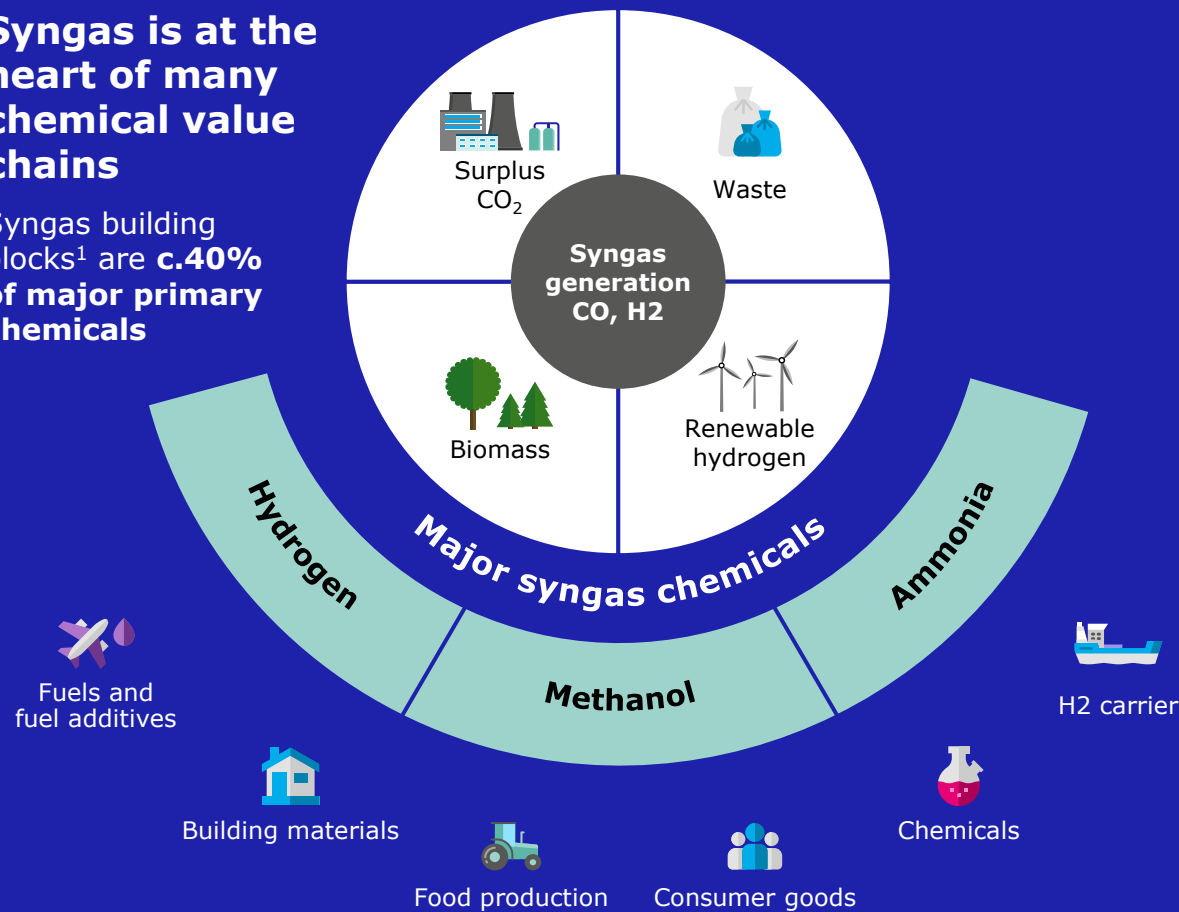
Decarbonisation and  
circularity solutions



# Growth from decarbonisation of chemical value chains

Syngas is at the heart of many chemical value chains

Syngas building blocks<sup>1</sup> are **c.40%** of major primary chemicals



Growth driven by decarbonisation of syngas and production of green chemicals

Targeting high single digit growth in Catalyst Technologies over the medium term

Leading positions

#1

methanol  
hydrogen  
formaldehyde



Trusted, longstanding partners



# A net zero world requires circularity of scarce critical materials

## Enabling circularity

### **World leader in recycling of scarce pgms**

Twice the size of next largest player

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### **Deep metals expertise**

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### **Supply of scarce critical materials for pgm based technologies, e.g. fuel cells**

## Growth driven by the needs of tomorrow

### **Expertise in designing new materials**

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### **Design to recycle solutions**

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### **Applying expertise to new materials**

Examples:

- Fuel cells recycling
- Lithium, nickel and cobalt for battery materials recycling

# Well positioned today and in a net zero world

## Already launched

Commercialising our  
**blue hydrogen technology**  
Pipeline of c.15 projects

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**e-methanol project**  
with Siemens and Porsche

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**Sustainable aviation fuel**

## Actively developing further solutions

**Fuel cells recycling**

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**Battery materials recycling**  
with Stena Recycling

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Further **commercialisation**  
of pipeline of solutions

# Battery Materials: creating a leading, sustainable ecosystem

Significant and growing global market reaching 1,800kT by 2030<sup>1</sup>  
European supply of cathode materials forecast to be in deficit over the medium term  
European market focused on sustainability

## eLNO commercialisation timeline



1. Automotive market for high energy cathode materials. IHS and Johnson Matthey estimates.



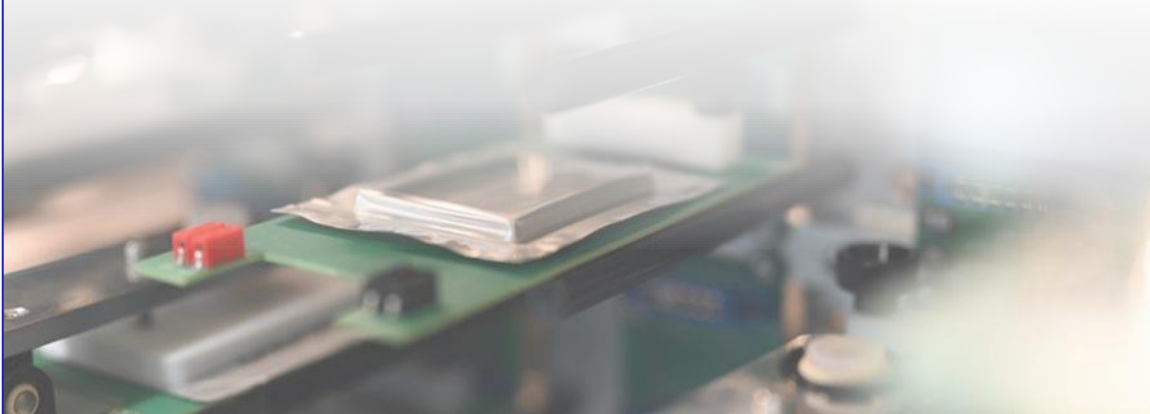
# Advancing customer testing towards contract wins

## Further confidence in eLNO

Customers moving through development funnel

Auto OEM moving to next stage of full cell testing

Independent testing by Wildcat Discovery Technologies confirms eLNO meets or exceeds key auto targets



## Second battery technology centre open

Enables closer customer collaboration

More advanced eLNO testing to support customer validation

Increased capacity for in-house full cell testing



# Advancing commercialisation through partnerships

Poland plant to commence commissioning in 2022

Evaluating strategic partnerships as we scale up

Finland plant beginning construction later this year

Using renewable energy and developing innovative effluent solution

eLNO production carbon neutral by 2035

New long term supply of critical materials





# Hydrogen: profitable and fast growing

**Fuel Cells**



**Green hydrogen**



**Blue hydrogen**



**Grey hydrogen**



**Hydrogen sales of c.£100m in the year<sup>1</sup>**

# Fuel cells: strong technology and customer wins



**Growing at pace:  
35% 5 year CAGR**



**Customers include Doosan,  
SFC Energy, REFIRE/Unilia,  
SinoHytech/Sino Fuel Cell**



**Strong technology enabling  
high performance fuel cells**



**Pipeline of c.10 major truck  
and auto OEM platforms due  
to launch from 2022 to 2025**




**Proprietary membrane  
technology with strong  
durability and stability**



**Capacity doubled to 2GW  
and planning major  
expansion**





# Blue and green hydrogen are critical in the transition to net zero

## Green hydrogen

Positive test results with leading electrolyser manufacturers and recent MoU with Plug Power

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Existing capacity today

Ability to rapidly scale to multi-GW capacity

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Commercial sales expected in 2022

## Blue hydrogen

First engineering revenues from HyNet and Acorn

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Global pipeline of c.15 projects

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Significant international interest

**Significant opportunity driving strong growth over the next decade**





# Exciting growth opportunities driven by demand for sustainable solutions

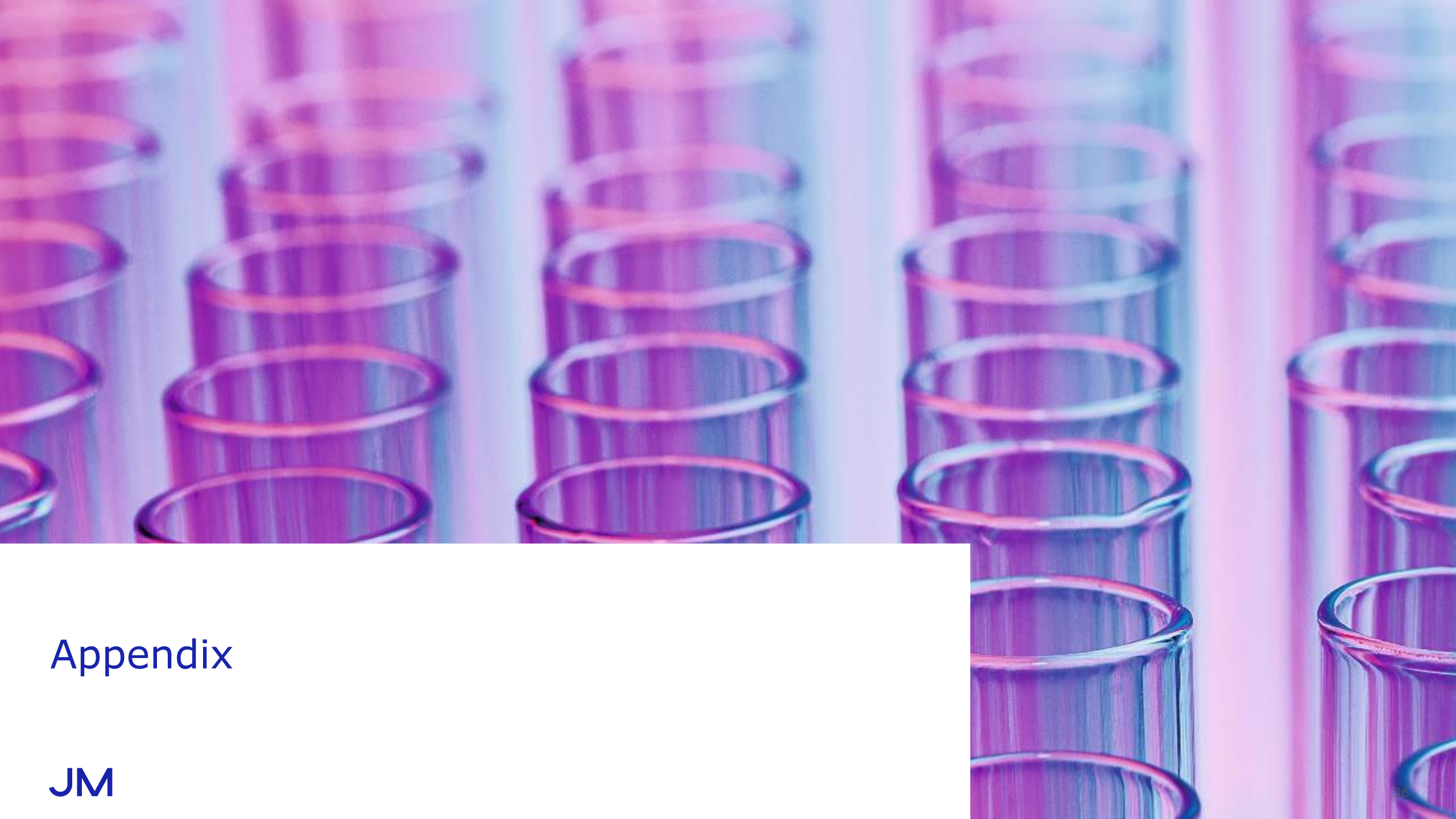
Enabling the transition to  
**net zero**

**Focusing** our portfolio and  
**investing at pace**

Delivered a  
**robust performance**

**Strong momentum**  
into current year



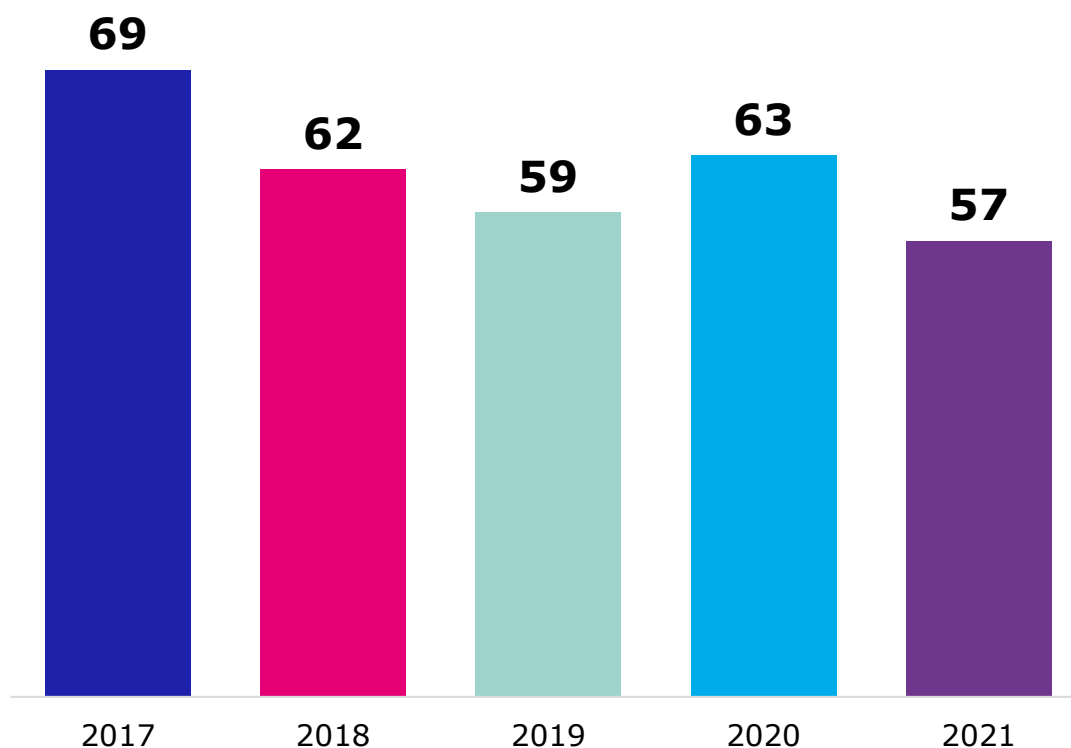


# Appendix

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# Average non precious metal working capital days

Average working capital days excluding precious metals, year ended 31<sup>st</sup> March



Average working capital days reduced to **57 days**

Targeting average non precious metal working capital of **50 to 60 days**

# Improved free cash flow

## Free cash flow (£m)

Year ended 31 <sup>st</sup> March	2021	2020
Underlying operating profit	504	539
Depreciation and amortisation <sup>1</sup>	184	171
Precious metal working capital inflow / (outflow)	-	(5)
Non precious metal working capital inflow	196	4
Net working capital inflow / (outflow)	196	(1)
Net interest paid	(93)	(98)
Tax paid	(65)	(109)
Capex spend	(376)	(435)
Other <sup>2</sup>	(45)	(15)
<b>Free cash flow</b>	<b>305</b>	<b>52</b>



# Net debt to EBITDA 1.2 times<sup>1</sup>

	£m	£m
<b>Net debt at the beginning of the year</b>		<b>(1,094)</b>
Free cash flow	305	
Dividends	99	
Movement in net debt		206
Lease adjustments <sup>2</sup>		12
<b>Net debt before FX and other movements</b>		<b>(876)</b>
FX and other movements <sup>3</sup>		101
<b>Net debt at the end of the period</b>		<b>(775)</b>

# Light duty emissions control legislation roadmap

2019      2020      2021      2022      2023      2024      2025      2026      2027      2028 →

Europe	Euro 6d temp	EU6d			EU7 (2025-27 estimated start)			
North America EPA	Tier 3 Phase In: NMOG + NOx, PM Tightening					'Tier 4' (est.)		
North America CARB	LEV III Phase In: NMOG + NOx, PM Tightening				PM = 1mg/mi		'LEV 4' (est.)	
Japan	JP 18 (WLTP)							
South Korea (Gasoline)	LEV III	LEV III (97g/km CO <sub>2</sub> , 2020)						
South Korea (Diesel)	EU6c (RDE Phase I)		EU6d (RDE Phase II, 97g/km CO <sub>2</sub> )			EU7 (estimated)		
China (Main economic areas)	CN6b non PN or RDE		CN6b non RDE		CN6b / RDE		CN7 (estimated)	
China (Nationwide)	CN5 (EU5)		CN6a					
Brazil	PL6			PL7		L8		
India	BSIV	BSVI Stage I (EU6b)			BSVI Stage II (RDE)			BSVII (est.)
Indonesia (Gasoline)	EU4							
Indonesia (Diesel)	EU2			EU4				
Thailand	EU4				EU5 (estimated)			

# Heavy duty emissions control legislation roadmap

## On Road

On Road	2020	2021	2022	2023	2024	2025	2026	2027	2028+
Europe	EU VI					EU VII (2025-27 est start)			
North America	US 2010							US 2027 (est)	
North America (CARB)	US 2010				CARB 2024			CARB 2027	
Japan	JP 16								
South Korea	EU VI						EU VII (est)		
Brazil	P7		P8						
Russia	EE 5					EE 6 (est)			
India	BS VI			BS VI RDE					BSVIII est
China	CN VIa			CN VIb				CN VII (est)	

## Non Road

Europe	Stage V (adoption date is engine power rating and application dependent)								
North America	Tier 4f								
Japan	MLIT 2014								
Brazil	Stage IIIa								
South Korea	Tier 4f	Stage V (est)							
China	Stage III		Stage IV (<560kw); timing not yet set for >560kw						
India	BT III	BT IV (Stage IV)			BT V				

# Average pgm prices

## US\$ per troy oz



Price (US\$ per troy oz)	2019/20 average	2020/21 average	Current (25 <sup>th</sup> May 2021)
Platinum	890	958	1,192
Palladium	1,770	2,255	2,771
Rhodium	5,798	14,521	24,000