



Johnson Matthey
Inspiring science, enhancing life

Presentation of results for the six months ended 30th September 2020

19th November 2020

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

Successfully navigating a challenging period and well positioned for the future



Recovering strongly and performance ahead of market expectations



Creating a more simple, agile and efficient group



Investing in climate change solutions to drive medium term growth

Highlights

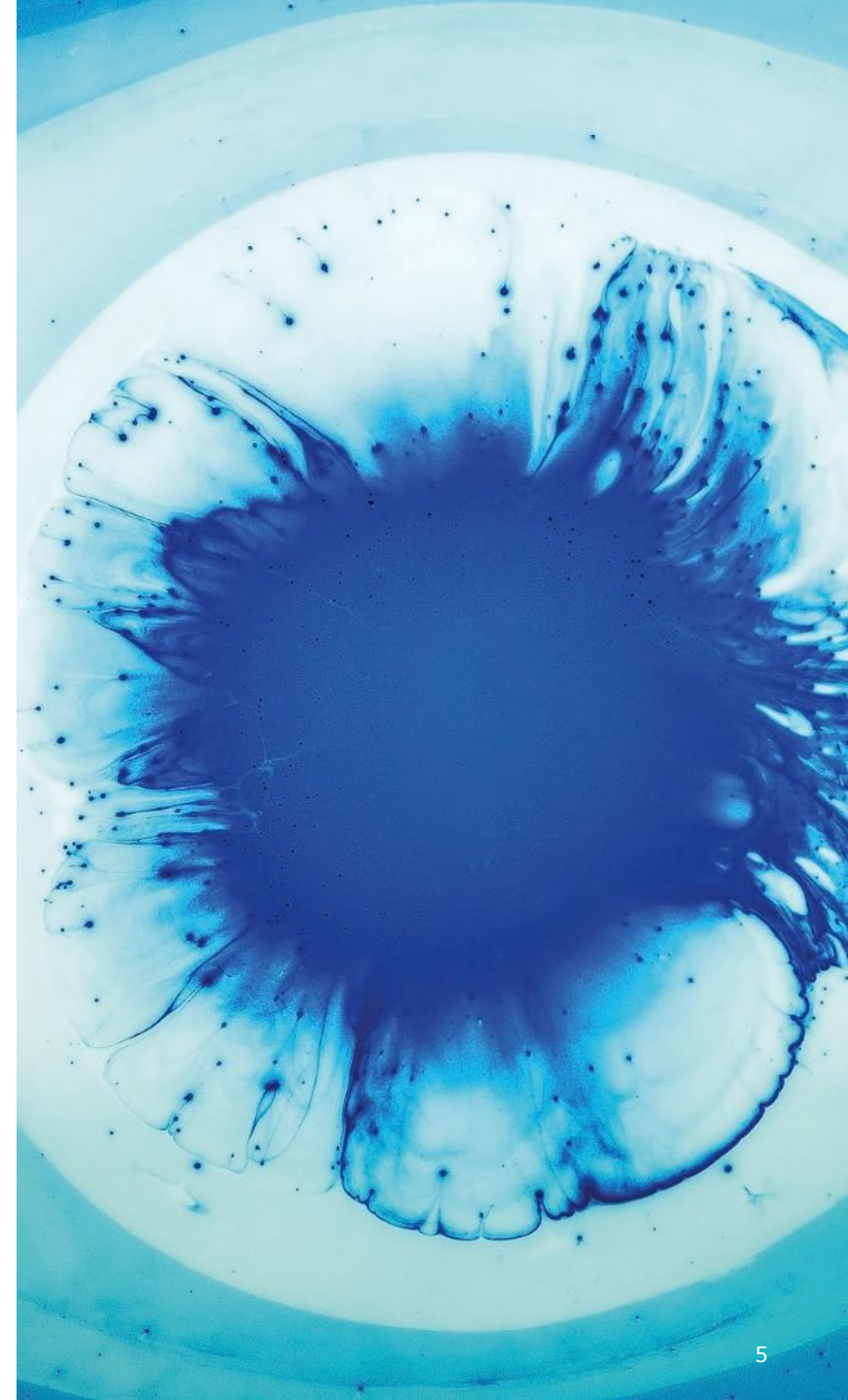
Good **performance** in a challenging period

Structural improvements to our operating model

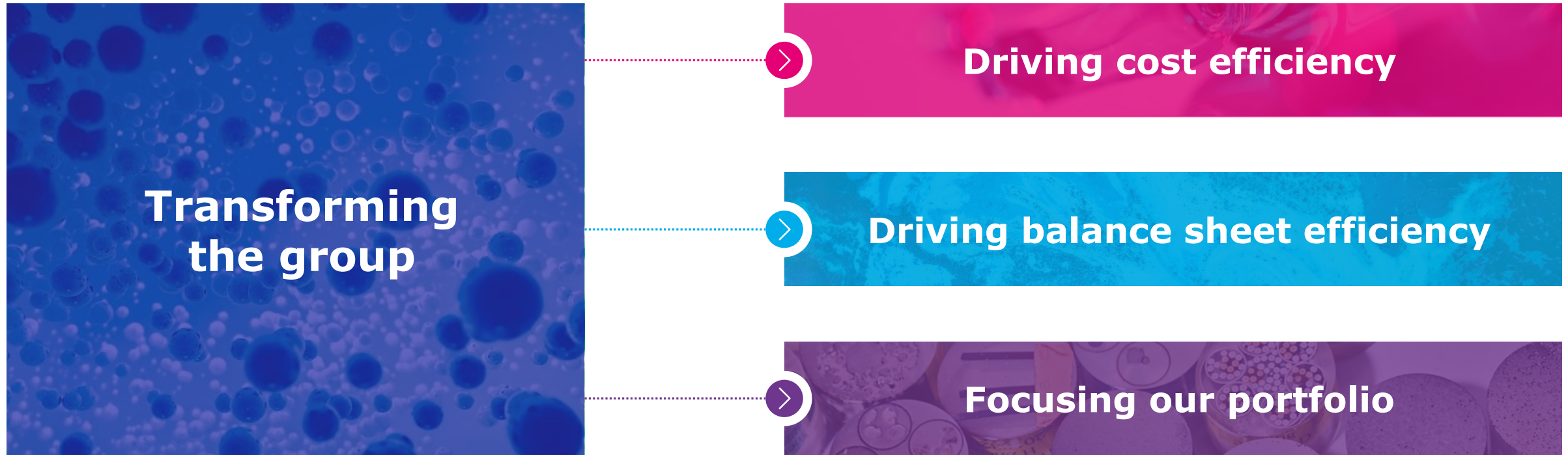
- Delivering on **efficiencies**
 - Reducing **precious metal working capital**
-

Executing on growth opportunities

- **Battery Materials** progress with customers
- **Fuel Cells** progress with customers and capacity



Creating a more simple, agile and efficient group



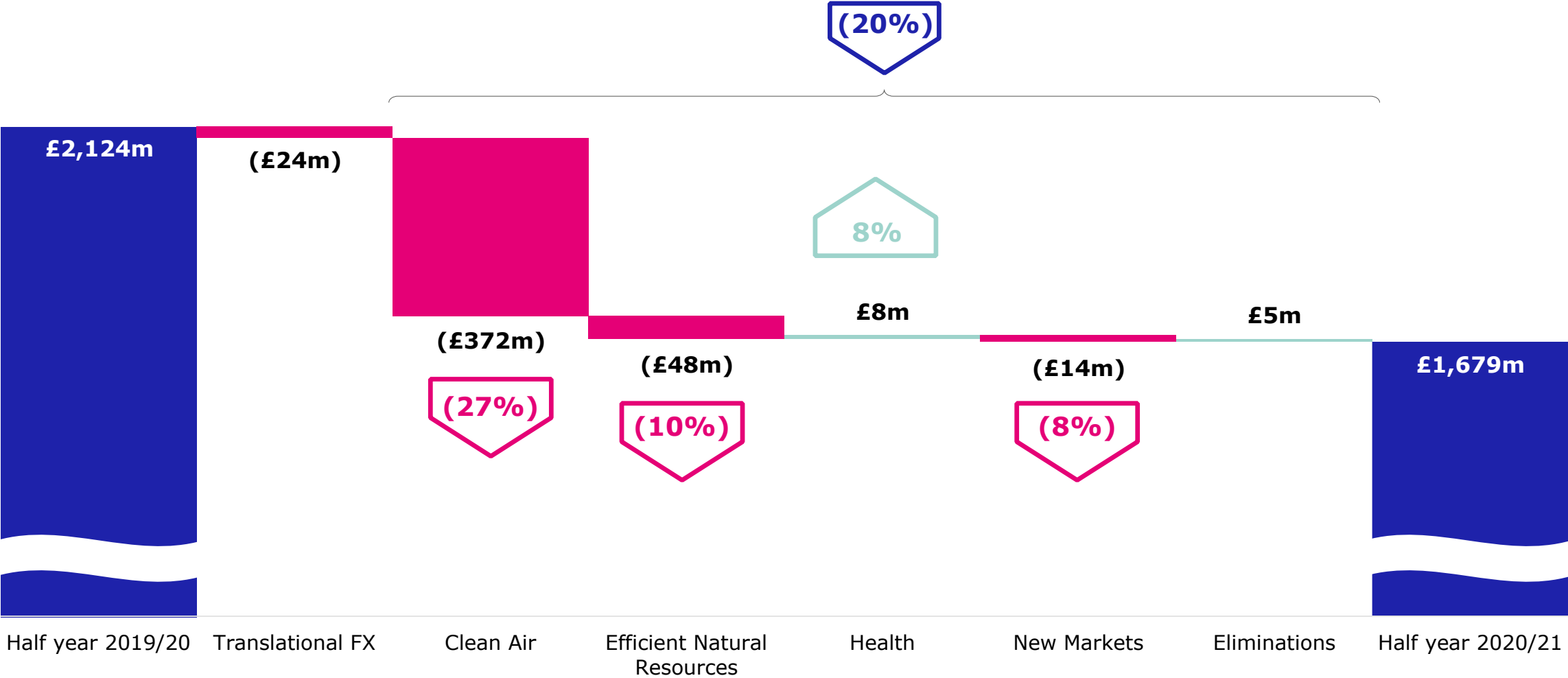
Structurally improving our business



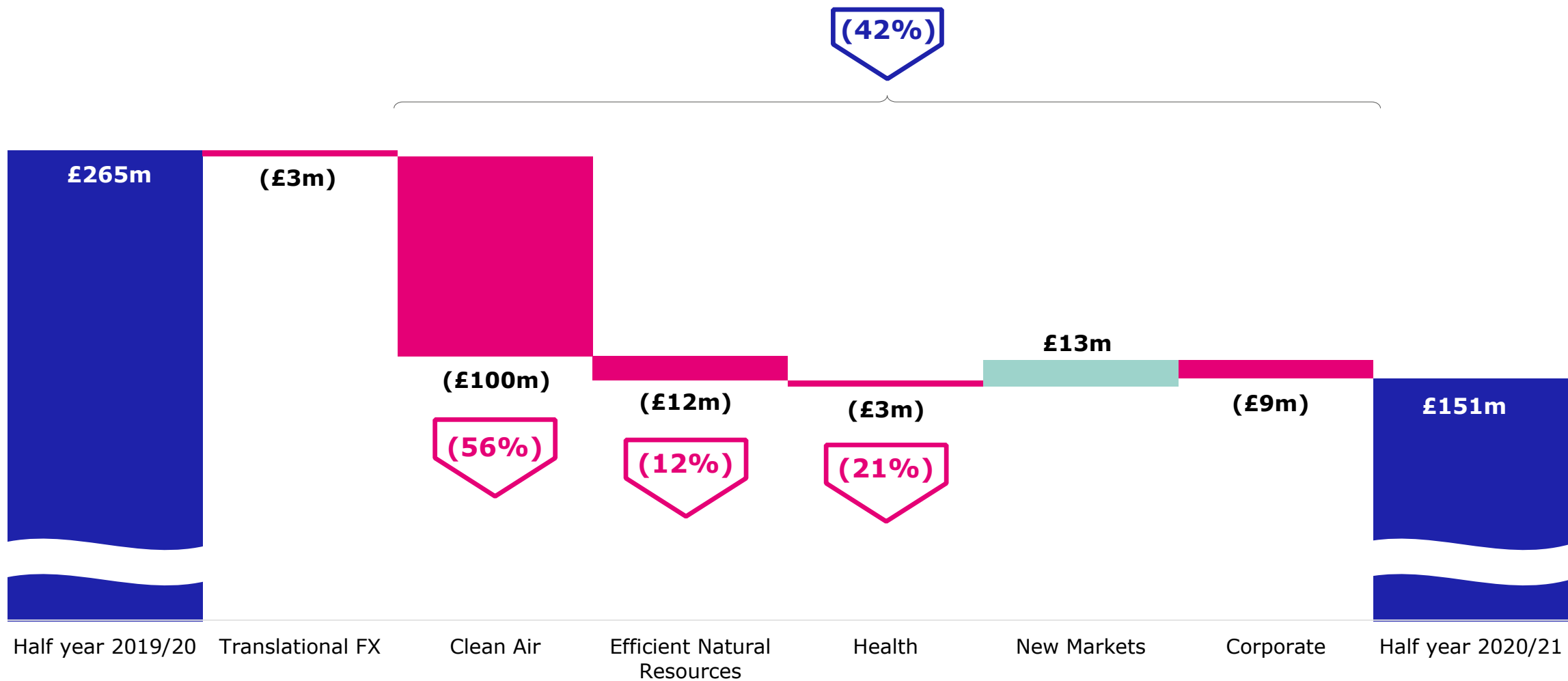
Anna Manz
Chief Financial Officer

JM

Group sales down in a challenging environment

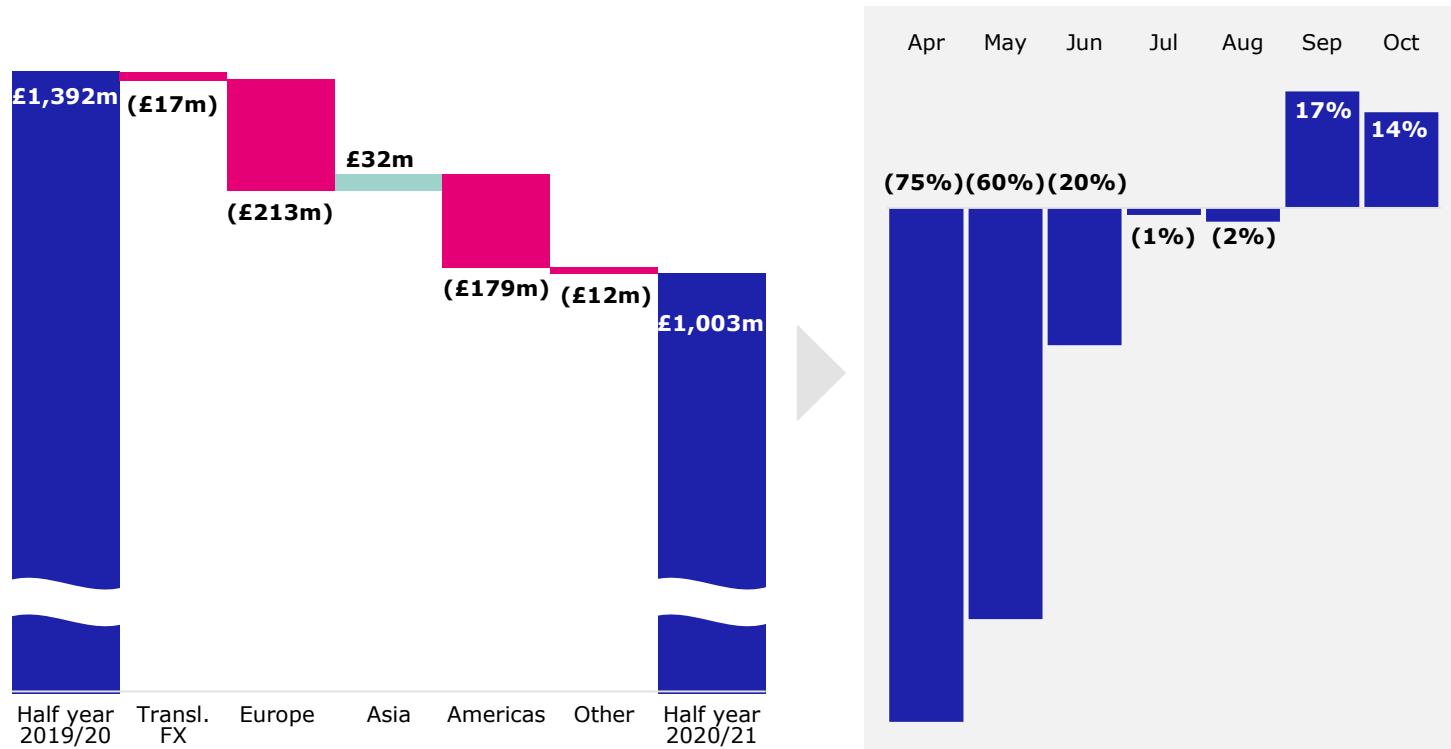


Group underlying operating profit largely driven by Clean Air



Clean Air: recovering strongly

Sales down 27%



Sales impacted by COVID-19

- Strong recovery in demand
- China above prior year
- OEMs rebuilding inventory

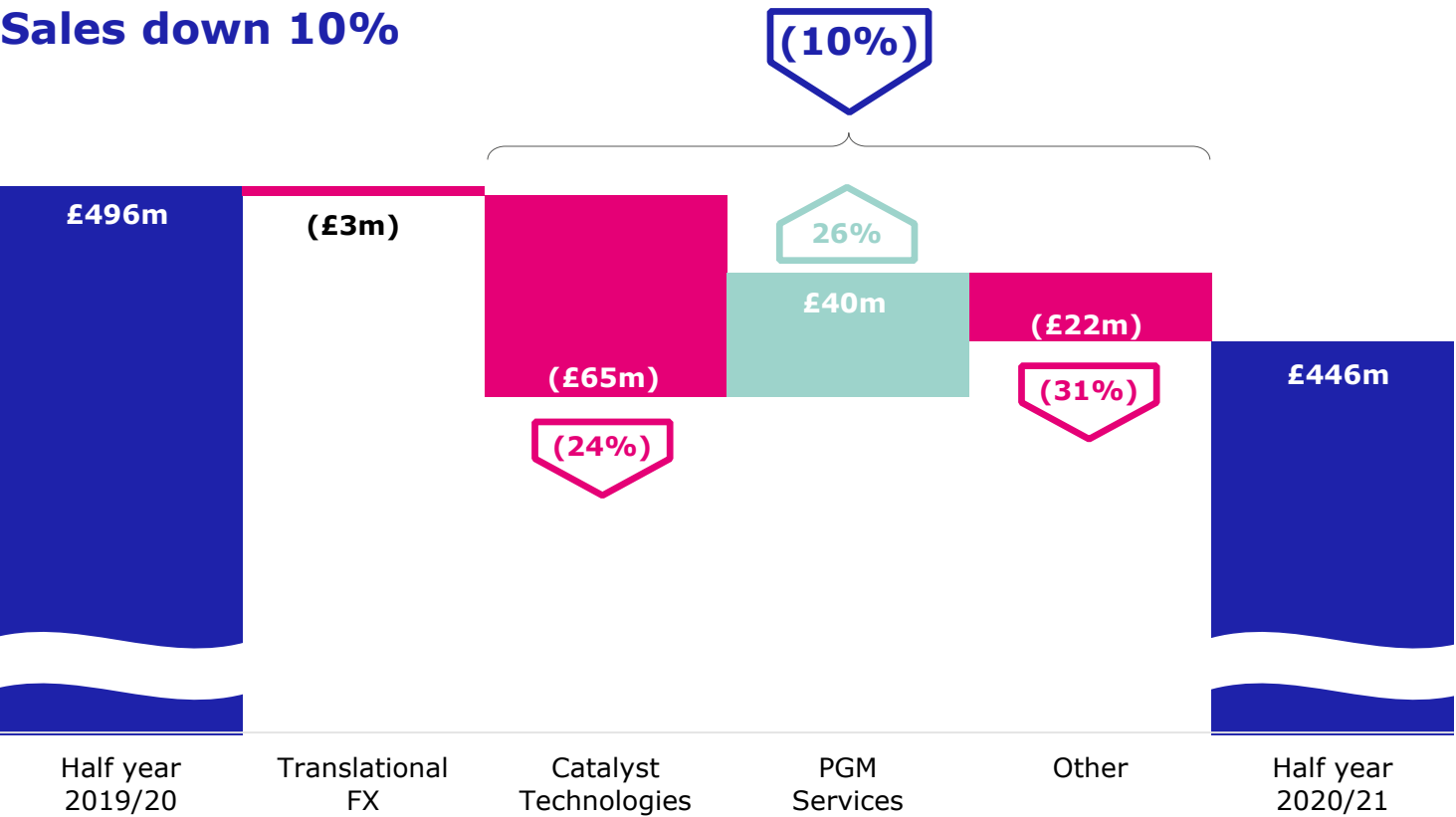
Operating profit down 56%

- Flexible cost base: c.75% variable
- Driving efficiency by:
 - Consolidating our footprint
 - Transforming operating model

2020/21 outlook: European/US auto and heavy duty production could be down c.20% and c.30%; China above prior year for both

Efficient Natural Resources: weaker demand in Catalyst Technologies

Sales down 10%



2020/21 outlook: operating performance expected to be below prior year although we currently expect usual seasonality and a stronger second half

Sales down 10%

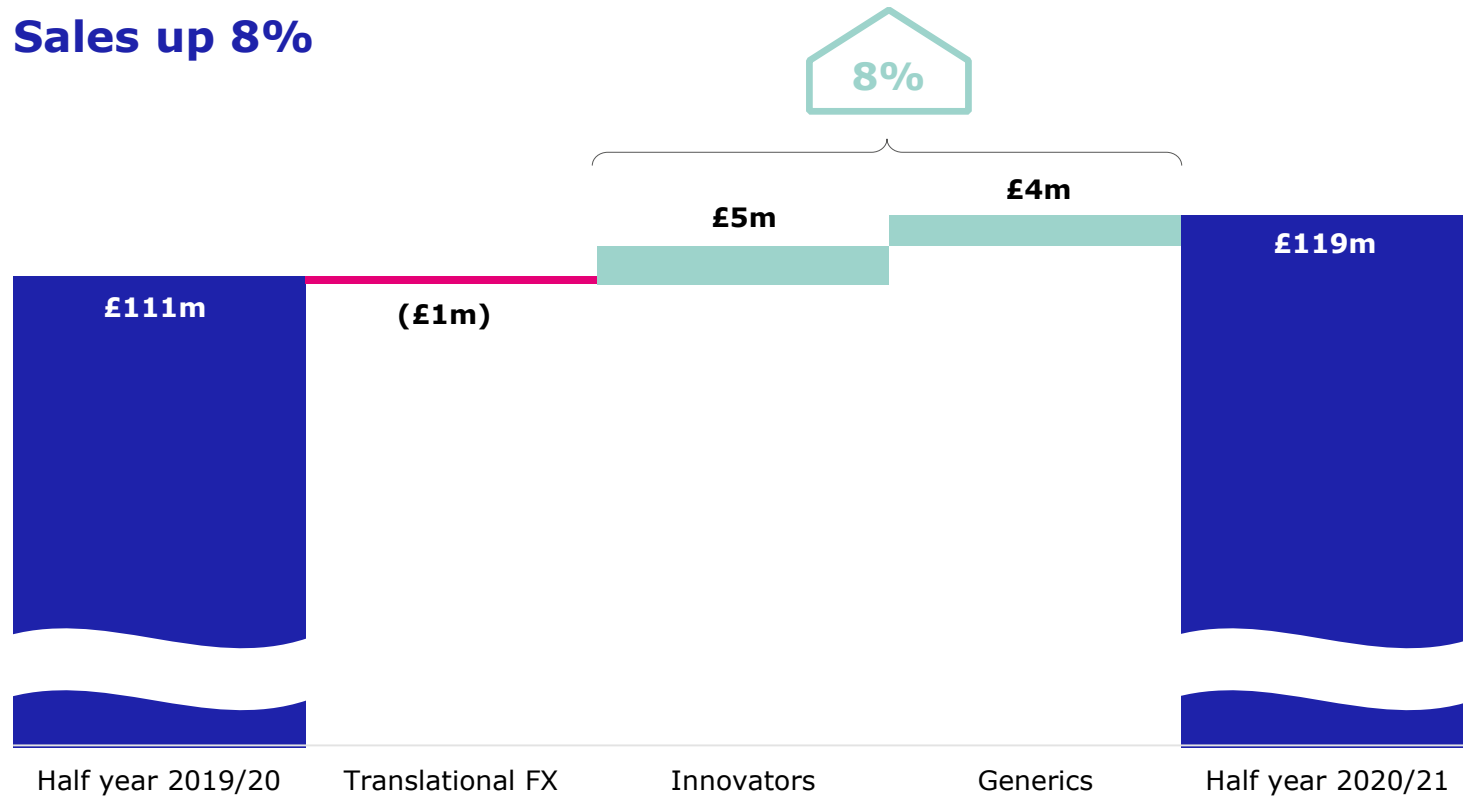
- Weaker demand and usual cyclical of orders in Catalyst Technologies
- Licensing down but strong pipeline
- PGM Services benefited from higher and more volatile average pgm prices

Operating profit down 12%

- Catalyst Technologies and Diagnostic Services lower
- Higher average pgm prices (+£24m) and strength in trading business

Health: benefiting from new supply agreements

Sales up 8%



Sales up 8%

- Immunomedics developing well
- Benefits from customer contracts in opioid addiction therapies
- Loss of innovator drug in prior year
- New generic and innovator supply agreements drive future growth

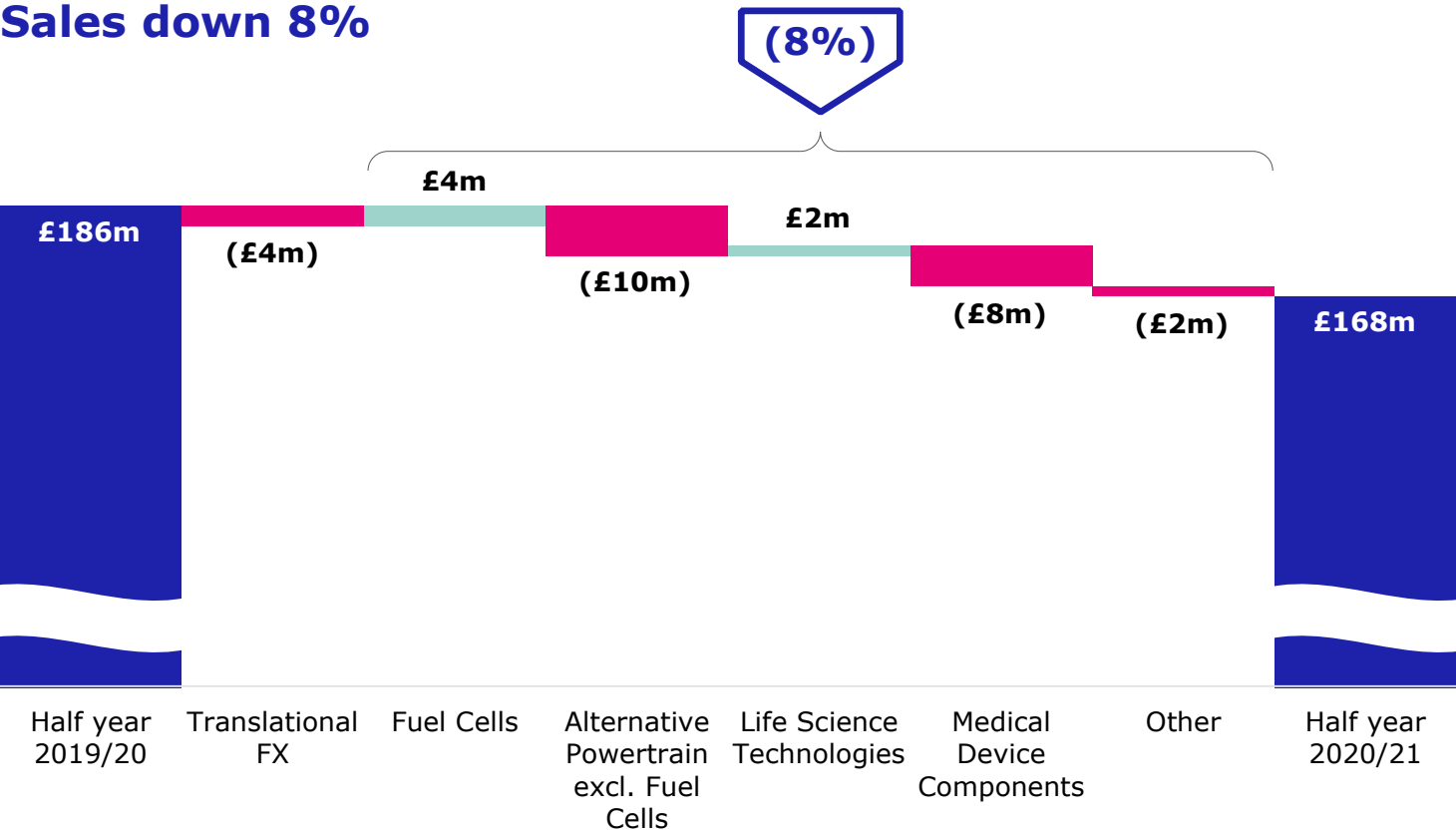
Operating profit down 21%

- Weaker business mix
- Loss of high margin innovator drug in prior year

2020/21 outlook:
operating performance expected to be above prior year

New Markets: strong Fuel Cells sales growth of 30%

Sales down 8%



Sales down 8%

- Fuel Cells grew strongly, up 30%
- Battery Systems and Medical Device Components affected by COVID-19

Operating profit of £5 million

- Better mix in Life Science Technologies
- £8m impairment to demo plant in prior period
- Continue to invest in the commercialisation of eLNO

2020/21 outlook:
operating performance expected to be above prior year

Operating performance

Underlying results for half year ended 30th September¹	2020 £m	2019 £m	% change	% change, constant rates
Sales excluding precious metals (sales)	1,679	2,124	-21	-20
Operating profit	151	265	-43	-42
Finance charges	(41)	(36)		
Share of profit of joint venture and associate	(1)	2		
Profit before tax	109	231	-53	-52
Taxation	(17)	(47)		
Profit after tax	92	184	-50	-50
Earnings per share	47.7p	95.8p	-50	
Interim dividend per share	20.0p	24.5p	-18	

Reported results impacted by one-offs

Half year ended 30 th September	2020 £m	2019 £m
Underlying operating profit	151	265
Amortisation of acquired intangibles	(5)	(6)
Major impairment and restructuring charges ¹	(78)	-
Reported operating profit	68	259

Delivering on efficiency initiatives

£m	Delivered to date	Annualised benefits by 2022/23
Restructuring (2017)	25	25
Health footprint optimisation	20	20
Procurement ¹	84	100
Clean Air footprint	3	30
Group wide organisational efficiency	8	50
Total	140	225

On track to deliver total annualised cost savings of c.£225 million by 2022/23



Fundamentally changing our metal operating model

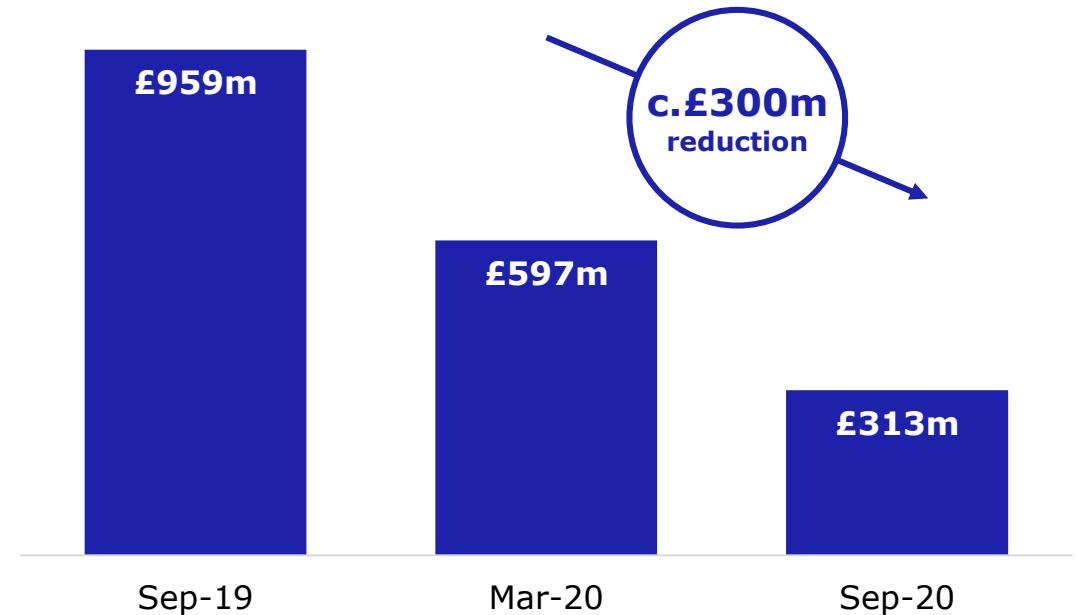
Structural improvements to reduce precious metal working capital:

- Optimising metal across our businesses
- Contracting more effectively with customers
- Improving refinery efficiency



Backlog reduced by c.£400m¹ since 2019/20 against £300m¹ target
In total, £1bn in volume removed since mid-2018

Precious metal working capital



Group more resilient with balance sheet less impacted by pgm prices

Strong balance sheet maintained

Good access to **liquidity of c.£1.8bn**

Net debt improved to £878m from £1.1bn in March 2020

Robust balance sheet with net debt to EBITDA of 1.6 times

Net debt to EBITDA at **bottom end of target range**

- Despite impact of COVID-19 on EBITDA and Clean Air recovery



Improved free cash flow

Free cash flow (£m)

Half year ended 30 th September	2020	2019
Underlying operating profit	151	265
Depreciation and amortisation ¹	85	85
Impairments	-	8
Precious metal working capital inflow / (outflow)	297	(352)
Non precious metal working capital inflow (outflow)	19	(115)
Net working capital inflow / (outflow)	316	(467)
Net interest paid	(44)	(42)
Tax paid	(20)	(32)
Capex spend	(175)	(184)
Other ²	(57)	(15)
Free cash flow	256	(382)

Outlook for year ended 31st March 2021

Group	Not providing quantitative guidance although expect materially stronger second half
Efficiencies	Efficiency initiatives will deliver £59m by 31 st March 2021 ¹
Capex	Committed to strategic growth investments; capex expected to be up to £400m



Robert MacLeod
Chief Executive

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Driving growth from our established businesses

Clean Air

- Legislation driving value uplift, especially in Asia
- Driving efficiency with new operating model and global manufacturing footprint

Efficient Natural Resources

- Accelerating development of new products focused on the energy transition
- Positive momentum in licensing
- Strong position in growing pgm refining market

Health

- Growth driven by supply contracts with generic and innovator customers
- Further launches from API product pipeline

New operating model in Clean Air

Poland and China ramping up

Global manufacturing footprint focused on 5 standardised world class plants

Transforming our model from local to global with greater agility and efficiency

Delivering a better service to our customers

Gliwice, Poland



Zhangjiagang, China



Executing now to capture medium term growth

Move to net zero is accelerating

JM is enabling the move with our portfolio of sustainable technologies

Investing in areas where we have a competitive advantage



**Battery
Materials**

Fuel Cells

**Blue
hydrogen**

**Green
hydrogen**

Battery Materials: substantial customer progress

Significant market – c.1.7m tonnes by 2030¹

Demand for highly customised product

Progressing customers through development pipeline

Two non-auto customers in cell prototyping

Second UK application centre open and supporting customer testing



Battery Materials: accelerating scale up plans

Commercialisation

- First plant on track to be operational in 2022; commercial auto production in 2024
- All in cost to commercial production expected to be c.£550m
- Cost increase allows for flexibility and speed to market

Scaling up

- Starting engineering design for second commercial plant with 30kT capacity
- Second plant expected to be near competitor levels of capital intensity¹
- At scale returns at upper end of industry average of 10-15%²

Commercial plant in Poland



We are strongly positioned in hydrogen

01

Fuel cell
technologies

02

Blue
hydrogen production

03

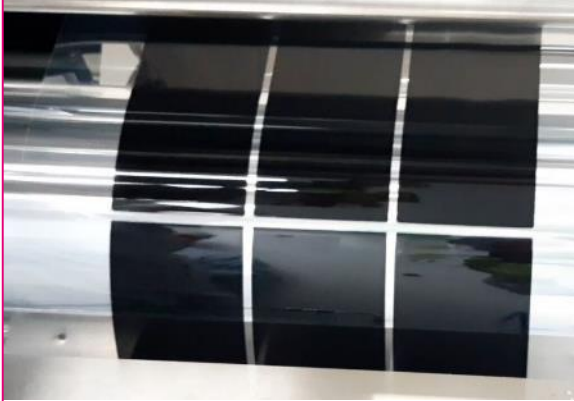
Green
hydrogen production

Use of hydrogen

Hydrogen production technologies

Fuel cells: strong growth supported by customers and new capacity

Performance



Sales grew strongly, up 30% to £19m

Capacity



Expanding capacity

- China complete
- UK online by end of 2020/21

Customers



Progress with leading Chinese OEMs

Development projects



Development projects with **major global truck and auto OEMs for platforms** planned over next few years

A significant opportunity in hydrogen production



Blue hydrogen

JM has leading technology

Already being commercialised in world scale HyNet and Acorn projects

Working with customers on a strong pipeline of projects globally



Green hydrogen

PEM (proton exchange membrane) technology is comparable to fuel cells

Strong competitive advantage in pgm catalysis

Testing with leading electrolyser players

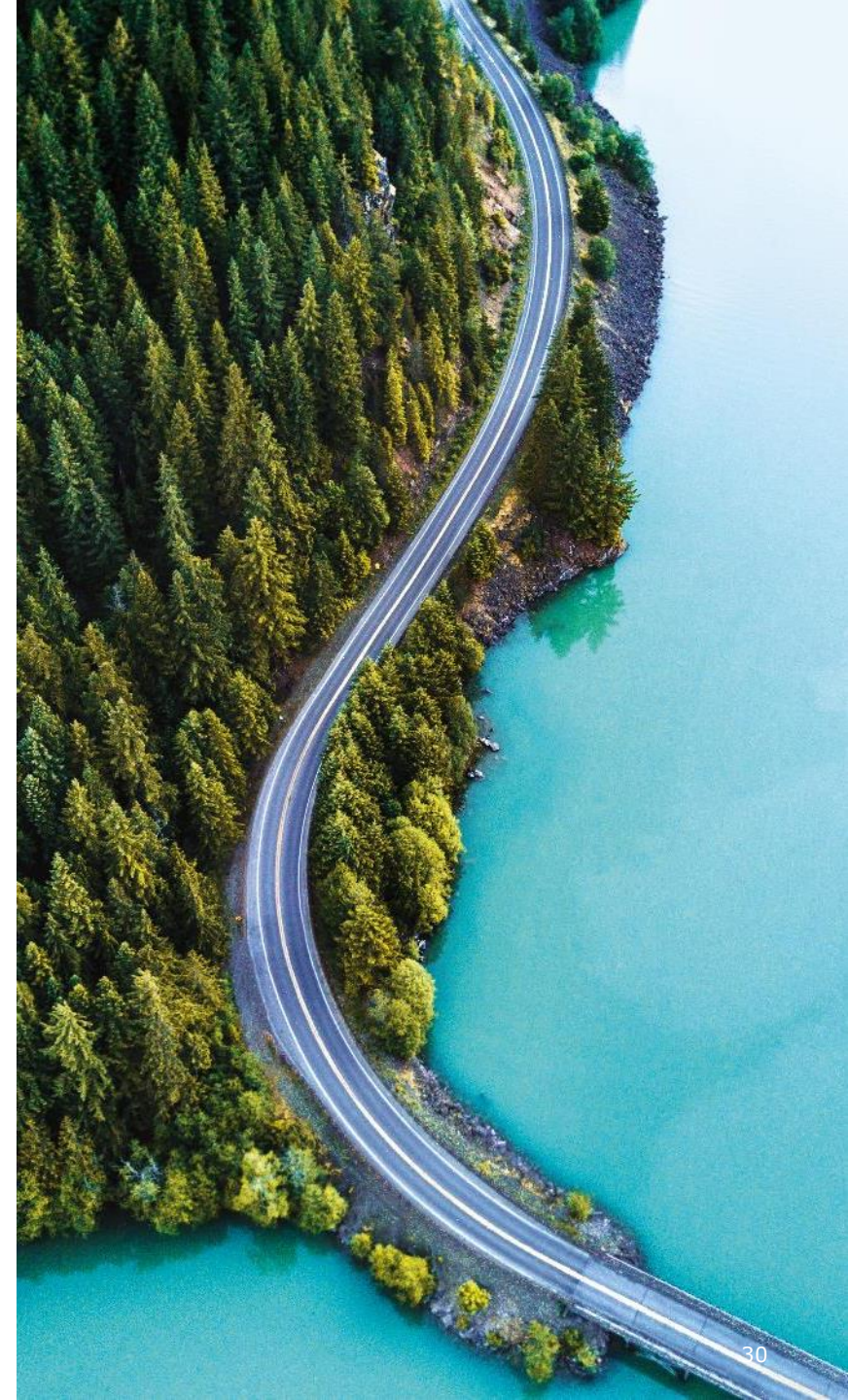
Well positioned for the future

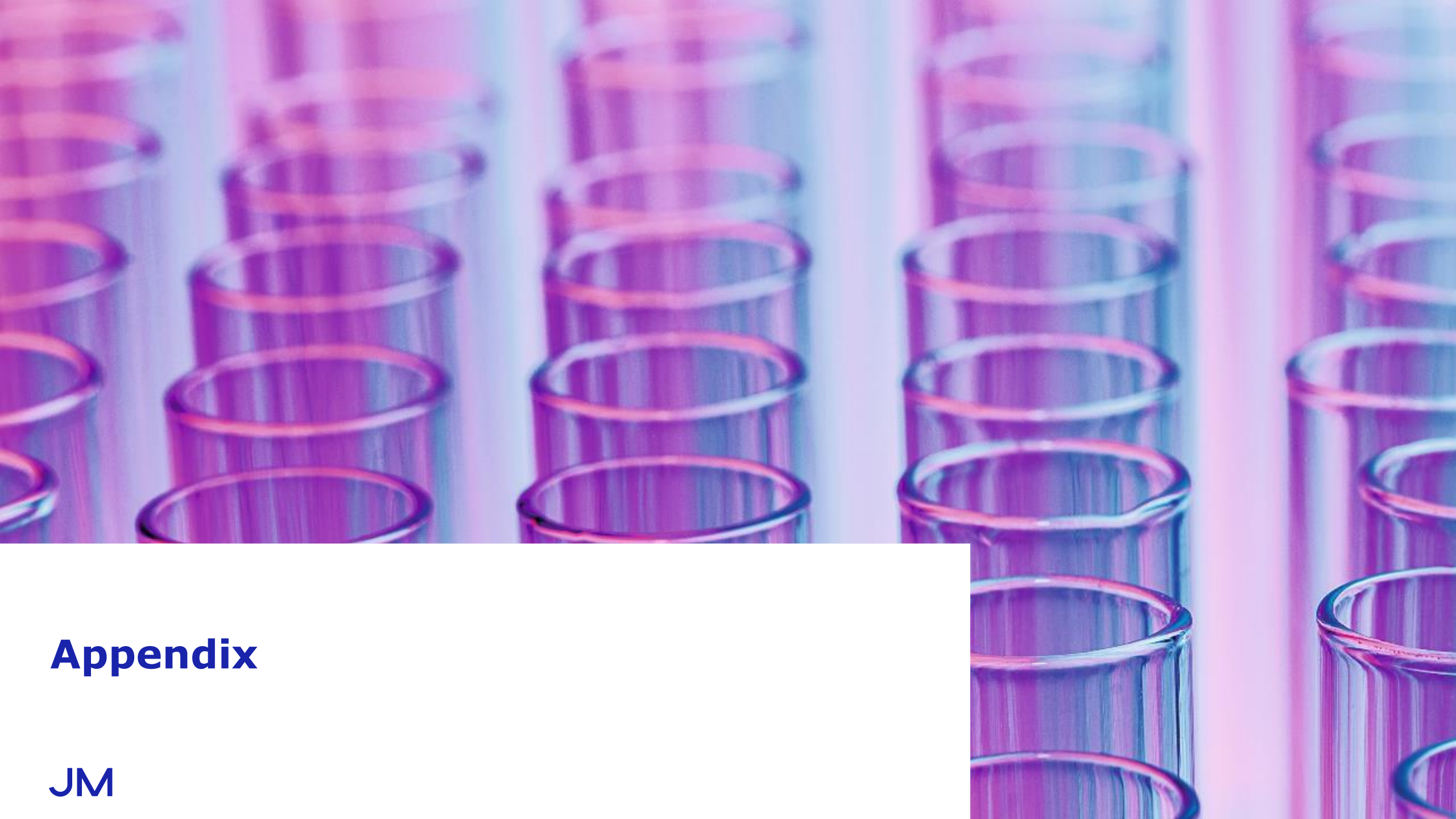
Strong recovery in performance through the half

Creating a more simple, agile and efficient group

Driving growth from our established businesses

Climate change solutions driving medium term growth





Appendix

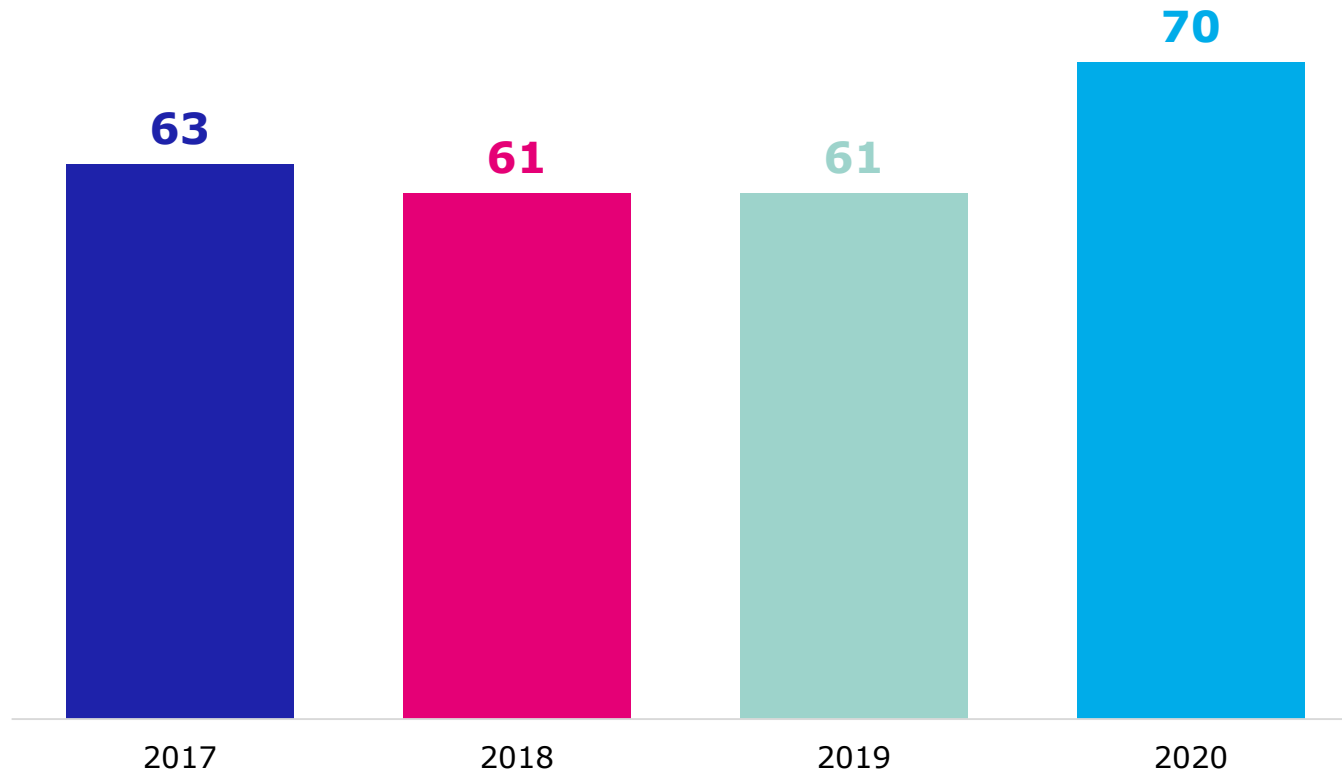
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Net debt to EBITDA 1.6 times¹

	£m	£m
Net debt at the beginning of the year		(1,094)
Free cash flow	256	
Dividends	(60)	
Movement in net debt		196
Lease adjustments		6
Net debt before FX		(892)
FX ²		14
Net debt at the end of the period		(878)

Average non precious metal working capital days

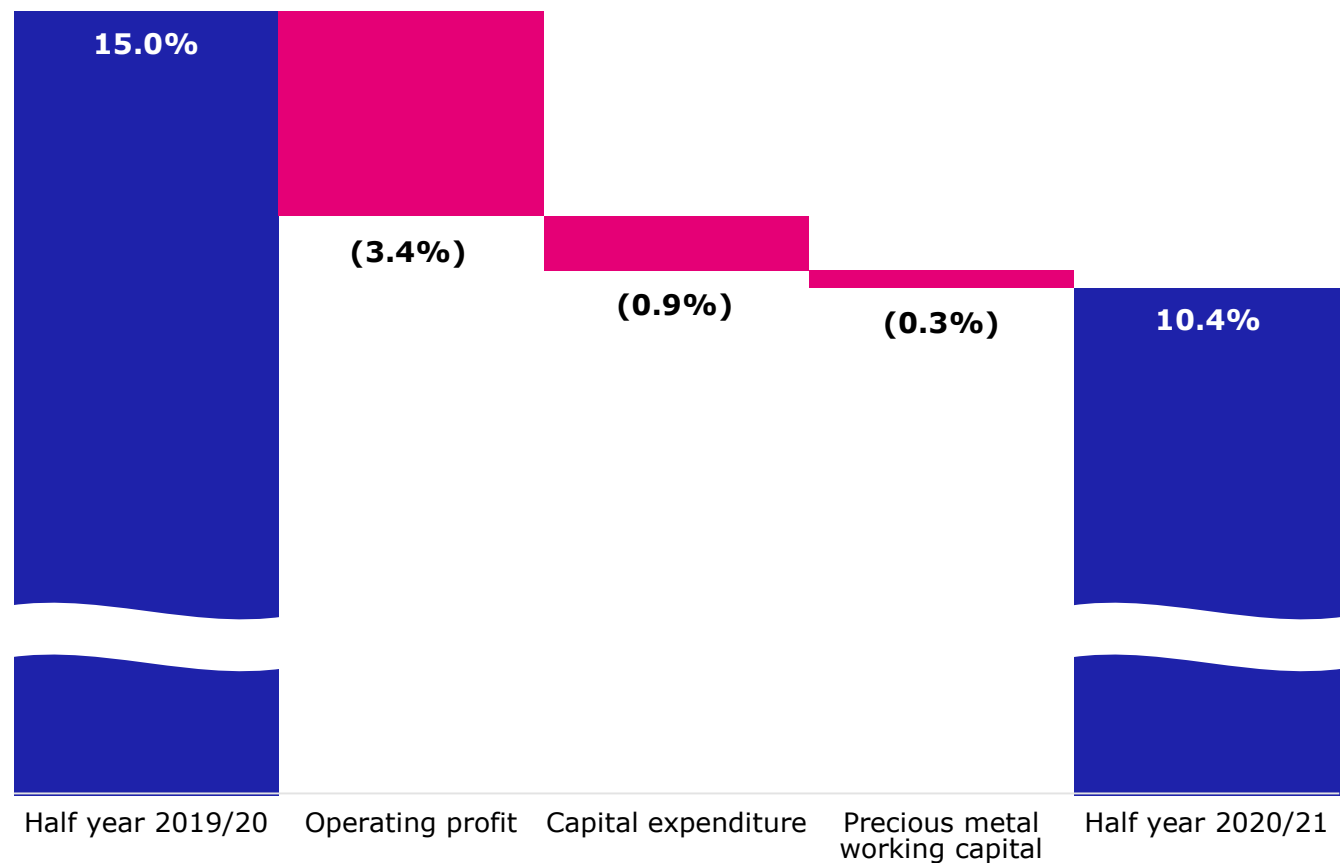
**Average working capital days excluding precious metals,
half year ended 30th September**



Average working capital days increased to 70 days

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

Return on invested capital



ROIC of 10.4%, down 4.6ppt

Primarily driven by lower group operating profit

Light duty emissions control legislation roadmap

	2017	2018	2019	2020	2021	2022	2023	2024	2025 →
Europe	EU6c / Euro 6d temp			EU6d (95 g/km CO ₂ , 2021)					EU7 (est.)
North America EPA	Tier 3 Phase In: NMOG + NOx, PM Tightening								
North America CARB	LEV III Phase In: NMOG + NOx, PM Tightening				LEV III Further Tightening				PM = 1mg/mi
Japan	JP 18 (WLTP)								
South Korea (Gasoline)	LEV III			LEV III (97g/km CO ₂ , 2020)					
South Korea (Diesel)	EU6c (RDE Phase I)				EU6c (RDE Phase II, 97g/km CO ₂)				EU7(est.)
China (Main economic areas)	BJ5 (EU5)		CN6b non PN or RDE	CN6b non RDE			CN6b / RDE		
China (Nationwide)	CN5 (EU5)			CN6a					
India	BSIV			BSVI Stage I (EU6)			BSVI Stage II (RDE)		
Brazil	PL6					PL7			PL8
Indonesia (Gasoline)	EU2		EU4						
Indonesia (Diesel)	EU2				EU4				
Thailand	EU4							EU5	

Heavy duty emissions control legislation roadmap

On road

On road	2017	2018	2019	2020	2021	2022	2023	2024	2025 →
Europe	EU VI								EU VII (est.)
North America	GHG Phase 1				GHG Phase 2				
North America (CARB)	GHG Phase 1				GHG Phase 2			CARB 24 (est.)	
Japan	JP 16								
South Korea	EU VI								EU VII (est.)
Brazil	P7 (EU V)					P8			
Russia	ECC 5								ECC 6 (est.)
India	BS IV			BS VI Stage I			BS VI Stage II (PEMS)		
China (Main economic areas)	China V		'Blue Sky'		China VIa			China VIb	
China (Nationwide)	China IV	China V			China VIa			China VIb	

Non road

Non road	2017	2018	2019	2020	2021	2022	2023	2024	2025 →	
Europe	Stage IV	Stage V								
North America	Tier 4f									
Japan	MLIT 2014 standards									
South Korea	Tier 4b					Stage V (est.)				
Brazil	Tier 3						Tier 4a (est.)			
China	Tier 3					Tier 4a (TBD)				Tier 4b (est.)
India	BT III (Stage III)				BT IV (Stage IV)				BT V (Stage V)	