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.
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

Note: All growth rates in this presentation are at constant rates unless otherwise stated. Vara consensus for underlying operating profit in the first half 2020/21 was £142 million (range: £122 million to £158 million) as at 18th November 2020.
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

Transforming the group

Driving cost efficiency

Driving balance sheet efficiency

Focusing our portfolio

Structurally improving our business
Anna Manz
Chief Financial Officer
Group sales down in a challenging environment
Group underlying operating profit largely driven by Clean Air

Note: In 1H 2019/20 there was a £10m pension credit, allocated across the sectors.
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%

- Sales down 10%
- Weaker demand and usual cyclicality 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

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

Note: Other includes Advanced Glass Technologies (AGT) and Diagnostic Services.
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%

- 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

Note: Alternative Powertrain excluding Fuel Cells includes Battery Systems and Battery Materials (LFP and eLNO). Other includes Atmosphere Control Technologies and Water Technologies.
## Operating performance

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

\textsuperscript{1} All figures are before profit or loss on disposal of businesses, gain or loss on significant legal proceedings, together with associated legal costs, amortisation of acquired intangibles, major impairment and restructuring charges and, where relevant, related tax effects.
Reported results impacted by one-offs

<table>
<thead>
<tr>
<th>Half year ended 30th September</th>
<th>2020 £m</th>
<th>2019 £m</th>
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</thead>
<tbody>
<tr>
<td>Underlying operating profit</td>
<td>151</td>
<td>265</td>
</tr>
<tr>
<td>Amortisation of acquired intangibles</td>
<td>(5)</td>
<td>(6)</td>
</tr>
<tr>
<td>Major impairment and restructuring charges&lt;sup&gt;1&lt;/sup&gt;</td>
<td>(78)</td>
<td>-</td>
</tr>
<tr>
<td>Reported operating profit</td>
<td>68</td>
<td>259</td>
</tr>
</tbody>
</table>

1. £78m major impairment and restructuring charges incurred in relation to organisational efficiency initiatives. Includes £62 million of restructuring costs, of which £16 million was a cash cost in the half and the remaining £46 million will be a future cash cost, and £16 million of impairments.
Delivering on efficiency initiatives

<table>
<thead>
<tr>
<th>£m</th>
<th>Delivered to date</th>
<th>Annualised benefits by 2022/23</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restructuring (2017)</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>Health footprint optimisation</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Procurement¹</td>
<td>84</td>
<td>100</td>
</tr>
<tr>
<td>Clean Air footprint</td>
<td>3</td>
<td>30</td>
</tr>
<tr>
<td>Group wide organisational efficiency</td>
<td>8</td>
<td>50</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>140</strong></td>
<td><strong>225</strong></td>
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</tbody>
</table>

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

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1. Around three quarters of procurement initiatives will benefit the income statement, of which around two thirds will be reinvested to drive growth.
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.£400m\(^1\) since 2019/20 against £300m\(^1\) target
In total, £1bn in volume removed since mid-2018

Group more resilient with balance sheet less impacted by pgm prices

1. Precious metal prices as at 31\(^{st}\) March 2020.
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)

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

^1 Excluding amortisation of acquired intangibles, including loss on sale of non-current assets.

^2 Includes restructuring cash costs, lease payments and movements in pensions and provisions.
## Outlook for year ended 31st March 2021

<table>
<thead>
<tr>
<th>Group</th>
<th>Not providing quantitative guidance although expect materially stronger second half</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficiencies</td>
<td>Efficiency initiatives will deliver £59m by 31&lt;sup&gt;st&lt;/sup&gt; March 2021&lt;sup&gt;1&lt;/sup&gt;</td>
</tr>
<tr>
<td>Capex</td>
<td>Committed to strategic growth investments; capex expected to be up to £400m</td>
</tr>
</tbody>
</table>

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1. £59m includes £30m relating to the Clean Air footprint and driving group organisational efficiency, and £29m of procurement savings.
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

Note: API – active pharmaceutical ingredients
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

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

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¹ Based on Bain benchmarking of competitors’ European plants, giving average costs of c.$15k per tonne.
² Bain estimates.
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
Net debt to EBITDA 1.6 times

<table>
<thead>
<tr>
<th></th>
<th>£m</th>
<th>£m</th>
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<tbody>
<tr>
<td><strong>Net debt at the beginning of the year</strong></td>
<td></td>
<td>(1,094)</td>
</tr>
<tr>
<td>Free cash flow</td>
<td>256</td>
<td></td>
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<tr>
<td>Dividends</td>
<td>(60)</td>
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<tr>
<td><strong>Movement in net debt</strong></td>
<td></td>
<td>196</td>
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<tr>
<td>Lease adjustments</td>
<td></td>
<td>6</td>
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<tr>
<td><strong>Net debt before FX</strong></td>
<td></td>
<td>(892)</td>
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<tr>
<td>FX²</td>
<td></td>
<td>14</td>
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<tr>
<td><strong>Net debt at the end of the period</strong></td>
<td></td>
<td>(878)</td>
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</tbody>
</table>

1. Net debt including post tax pension deficits.
2. £19m FX and (£5m) other non-cash movements.
Average non precious metal working capital days

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

- 2017: 63
- 2018: 61
- 2019: 61
- 2020: 70

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

Europe
- EU6c / Euro 6d temp
- EU6d (95 g/km CO₂, 2021) → EU7 (est.)
- Tier 3 Phase In: NMOG + NOx, PM Tightening
- LEV III Phase In: NMOG + NOx, PM Tightening
- LEV III Further Tightening
- PM = 1mg/mi
- LEV III
- LEV III (97g/km CO₂, 2020)
- EU6c (RDE Phase I)
- EU6c (RDE Phase II, 97g/km CO₂) → EU7 (est.)
- BJ5 (EU5)
- CN6b non PN or RDE
- CN6b non RDE
- CN6b / RDE
- CN5 (EU5)
- CN6a
- JP 18 (WLTP)
- China (Main economic areas)
- BJ5 (EU5)
- CN6b non PN or RDE
- CN6b non RDE
- CN6b / RDE
- CN5 (EU5)
- CN6a
- BSIV
- BSVI Stage I (EU6)
- BSVI Stage II (RDE)
- Brazil
- PL6
- PL7
- PL8
- Indonesia (Gasoline)
- EU2
- EU4
- Indonesia (Diesel)
- EU2
- EU4
- Thailand
- EU4
- EU5
- China (Nationwide)
- CN5 (EU5)
- CN6a
- India
- BSIV
- BSVI Stage I (EU6)
- Brazil
- PL6
- PL7
- PL8
- Indonesia (Gasoline)
- EU2
- EU4
- Indonesia (Diesel)
- EU2
- EU4
- Thailand
- EU4
- EU5
## Heavy duty emissions control legislation roadmap

### On road

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<td>EU VI</td>
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<td>EU VII (est.)</td>
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<td>North America</td>
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<td>GHG Phase 1</td>
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<td>GHG Phase 2</td>
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<td>China (Main economic areas)</td>
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### Non road

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