Presentation of results for the six months ended 30th September 2019

21st November 2019
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.
Delivered in line with expectations
Underlying operating profit down 5%
ROIC of 15.0%
Dividend up 5%

Expect to deliver full year group operating performance in line with market expectations

Good sales growth and confident in delivering our strategy

Note: All growth rates in this presentation are at constant rates unless otherwise stated.
Anna Manz
Chief Financial Officer
Sales growth driven by Clean Air

Half year 2018/19
- Translational FX: £2,009m, +4%
- Clean Air: £47m, +4%
- Efficient Natural Resources: £51m
- Health: £21m
- New Markets: (£11m), -9%
- Eliminations: £10m, +5%

Half year 2019/20
- Total: £2,124m, +3%
Underlying operating profit slightly down

- Half year 2018/19: £271m
  - Translational FX: £8m
  - Clean Air: (£17m)
  - Efficient Natural Resources: £6m
  - Health: £3m
  - New Markets: (£11m)
  - Corporate: £5m

- Half year 2019/20: £265m

Includes c.£15m one-off costs due to manufacturing inefficiencies

Includes c.£8m impairment on demo as we proceed directly to eLNO commercial plant
Clean Air: good sales growth; margin impacted by one-off costs

Sales up 4%

Operating profit down 9%

Impacted by c.£15m one-off costs due to manufacturing inefficiencies

Margin declined 1.7ppt to 12.9%

Full year outlook

Full year operating performance to be below prior year, weighted to second half

Benefit from absence of one-off costs in the first half

Note: Other includes stationary.
Efficient Natural Resources: sales and operating profit growth

Sales up 4%

Operating profit up 6%

Higher average pgm prices (+c. £14m)
Margin improved 0.3ppt to 18.8%

Full year outlook
Sales growth
Operating profit growth ahead of sales
Second half to benefit from seasonality within Catalyst Technologies and efficiency gains in Pgm Services

Note: Other includes Advanced Glass Technologies (AGT) and Diagnostic Services.
Health: sales down although operating profit grew double digit

Sales down 9%

Operating profit up 21%
Net benefits from footprint optimisation

Full year outlook
Second half operating performance broadly in line with the first half

Lower demand for one API due to opioid addiction therapy market uncertainty

c.£100m additional operating profit from pipeline by 2025
New Markets: good sales growth; progressing eLNO commercialisation

Sales up 5%

- £173m
- +5%
- £12m
- Flat
- £3m
- (£1m)
- (£1m)
- £186m

Operating profit down

Increased costs as we invest in eLNO

Includes £8m impairment of demo plant

Full year outlook

Sales growth

Operating profit growth

Note: Alternative Powertrain includes battery systems, fuel cells and battery materials (LFP and eLNO). Other includes Atmosphere Control Technologies and Water Technologies
Delivered operating performance in line with expectations

<table>
<thead>
<tr>
<th>Underlying results for half year ended 30th September(^1)</th>
<th>2019 £m</th>
<th>2018 £m</th>
<th>% change</th>
<th>% change, constant rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales excluding precious metals (sales)</td>
<td>2,124</td>
<td>2,009</td>
<td>+6</td>
<td>+3</td>
</tr>
<tr>
<td>Operating profit</td>
<td>265</td>
<td>271</td>
<td>-2</td>
<td>-5</td>
</tr>
<tr>
<td>Finance charges</td>
<td>(36)</td>
<td>(20)</td>
<td>+75</td>
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<tr>
<td>Share of profit of joint venture and associate</td>
<td>2</td>
<td>-</td>
<td>n/a</td>
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<tr>
<td>Profit before tax</td>
<td>231</td>
<td>251</td>
<td>-8</td>
<td>-10</td>
</tr>
<tr>
<td>Taxation(^2)</td>
<td>(47)</td>
<td>(41)</td>
<td>+14</td>
<td></td>
</tr>
<tr>
<td>Profit after tax</td>
<td>184</td>
<td>210</td>
<td>-12</td>
<td></td>
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<tr>
<td><strong>Earnings per share</strong></td>
<td><strong>95.8p</strong></td>
<td><strong>109.0p</strong></td>
<td><strong>-12</strong></td>
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</tr>
<tr>
<td><strong>Interim dividend per share</strong></td>
<td><strong>24.50p</strong></td>
<td><strong>23.25p</strong></td>
<td><strong>+5</strong></td>
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</tr>
</tbody>
</table>

1. All figures are before loss on disposal of businesses, loss on significant legal proceedings, amortisation of acquired intangibles, major impairment and restructuring charges and, where relevant, related tax effects.

2. The increase in first half 2019/20 tax charge includes a provision for uncertain tax positions, £12 million of which relates to reassessments of prior years.
Progressing my three focus areas

- Drive increasing business wide efficiency
- Disciplined management of working capital
- Rigorous and transparent resource allocation
Good progress against efficiency initiatives

<table>
<thead>
<tr>
<th>£m</th>
<th>Achieved in the half</th>
<th>Cumulative achieved to date</th>
<th>Annualised benefits to 2022/23</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procurement</td>
<td>15</td>
<td>43</td>
<td>100</td>
</tr>
<tr>
<td>Restructuring</td>
<td>1</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>Riverside closure</td>
<td>5</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Total</td>
<td>21(^1)</td>
<td>88</td>
<td>145</td>
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</tbody>
</table>

Three quarters of procurement initiatives will benefit the income statement. Around two thirds being reinvested in the business to drive growth.

1. Total savings of £21 million in the period includes £15 million procurement savings, of which £13 million benefited the income statement and £2 million benefited capex.
Free cash flow impacted by working capital

### Free cash flow (£m)

<table>
<thead>
<tr>
<th>Half year ended 30th September</th>
<th>2019</th>
<th>2018</th>
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</thead>
<tbody>
<tr>
<td>Underlying operating profit</td>
<td>265</td>
<td>271</td>
</tr>
<tr>
<td>Depreciation and amortisation¹</td>
<td>85</td>
<td>79</td>
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<tr>
<td>Precious metal working capital outflow</td>
<td>(352)</td>
<td>(283)</td>
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<tr>
<td>Non precious metal working capital outflow</td>
<td>(115)</td>
<td>(76)</td>
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<tr>
<td>Net working capital outflow</td>
<td>(467)</td>
<td>(359)</td>
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<tr>
<td>Net interest paid</td>
<td>(42)</td>
<td>(23)</td>
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<tr>
<td>Tax paid</td>
<td>(32)</td>
<td>(48)</td>
</tr>
<tr>
<td>Capex spend</td>
<td>(184)</td>
<td>(96)</td>
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<tr>
<td>Other²</td>
<td>(7)</td>
<td>(30)</td>
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<tr>
<td><strong>Free cash flow</strong></td>
<td><strong>(382)</strong></td>
<td><strong>(206)</strong></td>
</tr>
</tbody>
</table>

¹ Excluding amortisation of acquired intangibles and impairments.
² Includes movements in pensions, provisions, impairments and asset disposals.
Precious metal working capital impacted by prices and volumes

Precious metal working capital movement (£m)

- £250m backlog
- £100m refinery investment

Precious metal working capital to improve by £350m
  - £250m backlog
  - £100m refinery investment

Note: Precious metal working capital improvement of £350 million based on today’s prices.
Stable average non precious metal working capital days

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

Average working capital days were stable at 61 days

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

Continue to drive improvement in working capital
## Investing for growth, efficiency and returns

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<tr>
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<th>FY19/20</th>
<th>FY20/21</th>
<th>FY21/22</th>
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<tr>
<td><strong>Maintenance capex</strong></td>
<td>Maintenance capex of 0.8-0.9 depreciation includes maintenance capex plus smaller growth projects</td>
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<td><strong>Clean Air</strong></td>
<td>Clean Air plants in Poland, China and India (£200m remaining)</td>
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<td><strong>Efficient Natural Resources</strong></td>
<td>Update our pgm refineries (£70m remaining)</td>
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<td><strong>Battery Materials</strong></td>
<td>Commercialisation of battery materials to commercial 1 plant (£280m$^1$ remaining)</td>
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<tr>
<td><strong>Corporate</strong></td>
<td>Upgrade of our IT systems (£100m remaining)</td>
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</table>

1. Includes capex and capitalised development.

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1. High ROIC business
2. ROIC neutral
3. Investing for breakout growth
4. Driving efficiency and cost savings
<table>
<thead>
<tr>
<th>Description</th>
<th>£m</th>
<th>£m</th>
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</thead>
<tbody>
<tr>
<td><strong>Net debt at the beginning of the year</strong></td>
<td>(866)</td>
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</tr>
<tr>
<td>Free cash flow</td>
<td>(382)</td>
<td></td>
</tr>
<tr>
<td>Dividends</td>
<td>(120)</td>
<td></td>
</tr>
<tr>
<td><strong>movement in net debt</strong></td>
<td>(502)</td>
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<tr>
<td>Lease adjustments(^2)</td>
<td>1</td>
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</tr>
<tr>
<td><strong>Net debt before FX and IFRS 16 transition</strong></td>
<td>(1,367)</td>
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<tr>
<td>FX and IFRS 16 transition adjustment(^3)</td>
<td>(121)</td>
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<tr>
<td><strong>Net debt at the end of the period</strong></td>
<td>(1,488)</td>
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</table>

1. Net debt including post tax pension deficits.
2. New leases, remeasurements and modifications less principal element of lease payments.
3. (£77m) IFRS 16 transition adjustment, (£47m) FX and £3m other non-cash movements.
Return on invested capital

ROIC is 15.0%, down 1.7ppt from the prior year

Investing for growth in near term

Precious metal working capital increased

Clear path to achieve 20% ROIC in medium term
2019/20 outlook

Expect to deliver full year group operating performance in line with current market expectations.

Second half benefiting from absence of one-off costs, seasonality in Catalyst Technologies and efficiency gains in Pgm Services.

Targeting average working capital days (excluding precious metals) between 50 and 60 days.

Capex up to £500 million.
Delivering sustained growth and value

Sustained growth in **Clean Air** over the next decade

Mid to high single digit growth in **Efficient Natural Resources**

Breakout growth in **Health**

Strong progress in **Battery Materials** to build a leading position

**Efficiencies** remain a strong focus

*A world that’s cleaner and healthier; today and for future generations*
Building our senior team

Joan Braca,
Chief Executive, Clean Air

Christian Günther,
Chief Executive, Battery Materials

Maurits van Tol,
Chief Technology Officer
Clean Air: growth for the next decade driven mainly by legislation

2025 outcomes

- Asia more than doubles in size
- Europe maintains size despite diesel decline
- Americas driven by GDP growth
- Margins maintained through focus on efficiency

Early benefits from China 6
New gasoline platform wins
R&D investment increased
Managing Class 8 truck cycle
Global, efficient manufacturing footprint with three new plants

Mid single digit growth in operating performance to 2025
Efficient Natural Resources: market leading growth

2025 outcomes

- Positioned in higher growth segments
- Continue to evolve our existing strengths
- New technologies
- Increased efficiency of operations

Our markets growing in line with expectations

- Good growth in formaldehyde, particularly in China
- Won three new licenses
- Advancing new technologies
- Expansion of two plants in next 12 months
  - Additives in US
  - Pgm catalysts in Germany

Mid to high single digit growth in operating performance to 2025
Health: breakout growth

2025 outcomes

Enhancing performance of our base business

Delivering growth from new product pipeline

Building capabilities to support our customers

Developments in opioid addiction therapy market impacting second half performance

Focused on delivering growth from 75 molecules in new product pipeline

- 3 launched
- 10 generics awaiting approval
- 4 late stage innovator programmes

Delivering c.£100m additional operating profit from product pipeline by 2025
Battery Materials: breakout growth

2025 outcomes

Maintained our technology leadership

Qualified on customer platforms

Commercial scale capacity

Well positioned for breakout growth

Fitting out second UK application centre

Progressed to full cell testing with two customers

First commercial plant on track

Further expansion likely to be phased
Confident in our future

Delivered in line with expectations

Fundamentally changing the organisation as we execute our strategy

Strengthening our platform for growth

Creating a cleaner, healthier world

Mid to high single digit EPS CAGR

Expanding ROIC to 20%

Progressive dividend
Appendix
Financial guidance

**Net interest expense** – significantly higher in 2019/20 due to higher average net debt as we invest for future growth, higher precious metal funding costs and the impact of IFRS 16

**Underlying tax rate** – tax rate on underlying profit for the year ending 31st March 2020 expected to be around 16% (excluding the one-off tax provision) and 18% (including the one-off tax provision)

**Corporate costs** are now expected to be below the prior year in 2019/20

**Capex** up to £500 million
## Clean Air: Growth for the next decade driven mainly by legislation

<table>
<thead>
<tr>
<th>Region</th>
<th>2019/20</th>
<th>2020/21 to 2024/25</th>
<th>2025/26 to 2028/29</th>
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</thead>
<tbody>
<tr>
<td><strong>Europe</strong></td>
<td>GPF fitment increases</td>
<td>Diesel decline and continued BEV penetration</td>
<td>Further value expected from Euro 7</td>
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<tr>
<td></td>
<td>Diesel share of the market continues to fall</td>
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<tr>
<td><strong>Americas</strong></td>
<td>Declining Class 8 heavy duty cycle</td>
<td>Class 8 heavy duty cycle</td>
<td>GPF adoption (LEV III)</td>
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<tr>
<td></td>
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<td>Additional unit per HD vehicle (CARB 2024)</td>
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<tr>
<td><strong>Asia</strong></td>
<td>Additional units per HD vehicle</td>
<td>Value per LD vehicle doubled</td>
<td>Further value expected from China 7, Japan Post JP18 and Thailand Euro 6</td>
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<tr>
<td></td>
<td>(China VI and India VI)</td>
<td>(China 6)</td>
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<td></td>
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<td>Thailand (Euro 5)</td>
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**Note:** Growth 2018/19 to 2028/29 refers to operating performance. BEV: battery electric vehicle; GPF: gasoline particulate filter; CARB: California Air Resources Board; LEV: Low emission vehicle.
## Light duty emissions control legislation roadmap

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<tbody>
<tr>
<td><strong>Europe</strong></td>
<td>EU 6b</td>
<td></td>
<td>EU 6c / Euro 6d temp</td>
<td>Euro 6d final / 95 g/km CO₂</td>
<td>EU 7?</td>
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<tr>
<td><strong>North America EPA</strong></td>
<td>Tier 2</td>
<td></td>
<td>Tier 3 Phase In: NMOG + NOx, PM Tightening</td>
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<tr>
<td><strong>North America CARB</strong></td>
<td>LEV III Phase In: NMOG + NOx, PM Tightening</td>
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<td>LEV III Further Tightening</td>
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<td><strong>Japan</strong></td>
<td>JP09</td>
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<td><strong>South Korea (Gasoline)</strong></td>
<td>K-ULEV</td>
<td>K-ULEV 70</td>
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<td><strong>South Korea (Diesel)</strong></td>
<td>EU 6b</td>
<td>EU 6c / Euro 6d temp</td>
<td>Euro 6d final / 97g/km CO₂</td>
<td>EU 7?</td>
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<tr>
<td><strong>China (Beijing &amp; big cities)</strong></td>
<td>BJ5 (EU 5)</td>
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<td>China 6b non PN/ non RDE</td>
<td>China 6b non RDE</td>
<td>China 6b / RDE</td>
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<td><strong>China (Nationwide)</strong></td>
<td>China 4 (EU 4)</td>
<td>China 5 (EU 5)</td>
<td>China 6a</td>
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<td><strong>India</strong></td>
<td>BS3 (EU 3)</td>
<td>BS4 (EU 4)</td>
<td>BS6 (EU 6)</td>
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<td>EU 2</td>
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<td><strong>Indonesia (Diesel)</strong></td>
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<td><strong>Thailand</strong></td>
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<td>EU 5</td>
<td>EU 6</td>
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Global growth in vehicle production

Light duty vehicle production outlook (million)
Calendar years

Source: LMC Automotive (2019).
### Heavy duty diesel emissions control legislation roadmap

#### On Road

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<td>North America (CARB)</td>
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Heavy duty diesel vehicle production (regulated engines)

Heavy duty diesel vehicle (regulated engines) production outlook (thousands)
Calendar years

Health: generics and innovators pipeline to deliver an additional c.£100m operating profit per year by 2025

Number of generic and innovator products by expected launch date and value¹ (Total products: 75)

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1. Size of bubbles proportional to number of products.
2. Current pipeline as at September 2019.
3. New applications already launched are part of base and therefore not included in £100m operating profit by 2025.
Battery Materials: bringing a viable product to market

Achievements

Today
- Pilot plant operational
- First UK application centre operational
- First commercial plant progressing

£50m spend to date

On track to deliver

2020
- Further application and testing capacity

2022
- Commercial plant, up to 10kt
  Sufficient for c.100k pure battery electric vehicles

£300m¹ spend remaining

2024
- Supplying platforms

Ongoing work as we consider options to scale up

Note: Includes capex and capitalised development of £280m and operating expenditure of £20m.