Sector call - Efficient Natural Resources
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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.
My background and the creation of the Efficient Natural Resources sector

- Joined JM in February 2016 as Divisional Director, Precious Metal Products
- Sector Chief Executive, Efficient Natural Resources from April 2017
- Efficient Natural Resources formed from Process Technologies and Precious Metal Products businesses combined
A key part of the JM group

Sales, 2016/17

• We help our customers make more efficient use of scarce natural resources across a range of industries

• Using JM’s core chemistry and technology expertise to solve complex and variable problems through close collaboration with customers

• Technical expertise and competences support growth across JM
Structure of the sector

Efficient Natural Resources
2016/17 sales by sub-business

£861m(*) excl. pms

Catalyst Technologies
Chemicals
Chemical catalysts and process technology
40% of Sector sales

Oil & Gas
Refinery catalysts and gas purification
23% of Sector sales

PGM Services
Precious metal products, recycling and business solutions
Providing metal and metal products to the JM Group
27% of Sector sales

Advanced Glass Technologies
Advanced glass materials and conductive inks for use in automotive glass and other industries
10% of Sector sales

(*) Excludes £58m Diagnostics Services sales
Our core strengths underpin #1 or #2 market positions in almost all our key segments

**Catalyst Technologies**

**Chemicals - £343m**
- Chemical catalysts $5.4 billion\(^{(2)}\)
- (highly fragmented, ~ 40 segments)
- JM present in ~ 30% of overall market
- JM #1 or #2 in almost all key markets

**Oil & Gas\(^{(1)}\) – £199m**
- Refinery Catalysts $7.6 billion\(^{(2)}\)
- (mix of large and small segments)
- JM present in ~ 37% of overall market
- JM has narrow position in $2.7 billion\(^{(2)}\) FCC market
- JM #1 or #2 in all key markets

**PGM Services - £234m**
- Largest single refiner of pgms
- JM #1 in all PGM services markets
- JM #1 position in global refining
- Focus on serving internal customers

**Advanced Glass Technologies - £85m**
- Advanced Glass materials £200m
- JM present in ~ 44% of overall market
- Automotive largest segment
- JM #1 or #2 in all markets

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\(^{(1)}\) Excludes Diagnostic Services sales
\(^{(2)}\) Data from The Catalyst Group resources
Our strategy to deliver consistent market outperformance

01
Maximise growth through differentiated investment by segment and region and focus on margin retention in lower growth markets

02
Focused investment in R&D to maintain & extend technology leadership

03
Deliver additional value through focus on efficiency

04
Explore long term growth opportunities by extending our capabilities into adjacent markets, geographies and technologies
1. Maximise growth through differentiated investment by segment and region

% of sales\(^{(1)}\) in each growth area\(^{(2)}\)

<table>
<thead>
<tr>
<th>Growth Rate</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 1%</td>
<td>4.8</td>
</tr>
<tr>
<td>1.1 - 2%</td>
<td>25.2</td>
</tr>
<tr>
<td>2.1 - 3%</td>
<td>34</td>
</tr>
<tr>
<td>3.1 - 4%</td>
<td>27.2</td>
</tr>
<tr>
<td>4.1%+</td>
<td>8.8</td>
</tr>
</tbody>
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Increasing investment

(1) 2017/18 budget sales
(2) 10 year growth rate
2. Focused investment in R&D to maintain and extend technology leadership

**Unique set of materials science and scale up capabilities**

Maintain R&D spend at consistent level

R&D closely aligned to value creating sector positions and growth areas

Working closely with leading edge partners and customers to deliver step change innovation

Add value to our customers’ operations through new data driven insights
3. Deliver additional value by focus on efficiency

Enablers for Efficient Natural Resources

- Operational improvements
- Complexity reduction
- Organisational efficiencies

Examples

- PGM refinery optimisation
- Product portfolio optimisation
- Spans & layers

Deliver operational improvement
- Operating profit 1% ahead of sales growth
4. Explore long term growth opportunities by extending our capabilities into adjacent markets, geographies and technologies

**New natural resource landscape**
Exploring new market spaces

**Alternative feedstocks**
Gas to chemicals
Biorenewables

**Customer and circular economies**
Recycling
New customer solutions
The future for Efficient Natural Resources means:

- A wider scope building on JM core competences and leadership in chemistry and technology
- Performance improvement by focused investment and efficiency
- Sales growth at 1% above the market (excl. PGMS) and operating profit 1% above sales growth
- Creating value for customers today and in the future by efficient transformation of critical natural resources